
Administrator's Guide

Servers Alive

5.0



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bvba Woodstone
Schrieksebaan 146
3140 Keerbergen
Belgium
<http://www.woodstone.nu>
general@woodstone.nu

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CHAPTER 1

What's New?

General

- The **Display Priority** column now appears in the Main window.
- You can use high encryption for passwords. For more information, see *Startup Settings (Setup Dialog Box)* (on page 99).
- You can define settings for how Servers Alive stores IP addresses in cache. For more information, see *Startup Settings (Setup Dialog Box)* (on page 99).
- Custom scripts and custom fields are available to use in Visual Basic® scripts. For more information, see *Custom Fields (Setup Dialog Box)* (on page 105) and *Custom Scripts (Setup Dialog Box)* (on page 106).
- You can select an entry in the Main window and click a check box to disable or enable the entry. For more information, see *Getting Started in the Main Window* (on page 5).
- You can now choose case-sensitive for search strings for the **Find** dialog box. For more information, see *Edit > Find (Find Dialog Box)* (on page 129).
- Team and people names cannot contain a semi-colon or comma. Servers Alive automatically removes them from the name. For more information, see *Person Tab (People Dialog Box)* (on page 243) or *Edit > Teams (Teams Dialog Box)* (on page 257).
- New default host names are available. For more information, see *Default Host Names* (on page 12).
- Checks are case sensitive. You can change this by editing a registry entry. For more information, see *Check Tab (Entries Dialog Box)* (on page 134).
- A new command is available for Telnet and SSH that shows if Servers Alive is in the middle of a check cycle. For more information, see *Commands* .

Alerts

- You can change the limit of characters in an SMS message. See *Alpha Paging - SMS (Setup Dialog Box)* (on page 31).
- You can use an HTTPS (POST) alert and use HTTP(S) GET actions as an alert. You can also create executive alerts using HTTP(S) GET/POST actions. For more information, see *What Tab: Send HTTP(S) GET/POST POST (Add/Edit Alert Dialog Box)* (on page 206).
- You can change the number of redials for SMS alerts. For more information, see *What Tab: Alpha Page/SMS (Add/Edit Alert Dialog Box)* (on page 189).
- You can change the order of alerts on the **Alert** tab of the **Entries** dialog box. For more information, see *Alert Tab (Entries Dialog Box)* (on page 178).
- Many of the alerts count the number of messages sent. The alert settings on the **Setup** dialog box display a **Reset** button which resets the counter that keeps track of how many pages, mails, and so forth, that the alert sends when completing a check. For more information, see *Numeric Paging (Setup Dialog Box)* (on page 29).
- You can create executive alerts and also receive a status summary message. For more information, see *Executive Alerts (Setup Dialog Box)* (on page 53) and *Status Summary (Setup Dialog Box)* (on page 96).
- The default SMTP message can contain several lines. For more information, see *What Tab: Send SMTP Mail (Primary)* (on page 182).
- The software now has internal commands that can force an entry into active or maintenance mode. For more information, see *What Tab: Execute Command (Add/Edit Alert Dialog Box)* (on page 198).
- Servers Alive supports NotePager by PageNote. For more information, see *What Tab: Generic NotePager-PageGate Message File (Add/Edit Alert Dialog Box)* (on page 195) and *NotePager - PageGate (Setup Dialog Box)* (on page 52).
- When implementing the **Send Direct** option, SMTP alerts use the second DNS address to get the MX record for the recipient domain if the first DNS address does not respond correctly. For more information, see *Primary (Setup Dialog Box)* (on page 18).
- The software supports Wake on LAN (WOL) alerts. For more information, see *What Tab: Execute Command (Add/Edit Alert Dialog Box)* (on page 198).
- ICQ, MSN, and AIM have failure settings. For more information, see *Failure Settings* (on page 40).
- Alerts for shutting down or rebooting can shut down and restart the computer or just shut it down. For more information, see *What Tab: Execute Command (Add/Edit Alert Dialog Box)* (on page 198).

SNMP Checks

- SNMP traps can perform lookups for OIDs within a MIBs database. The SNMP check can also interpret the results. You can add or remove MIB files and do other maintenance. For more information, see *MIB Database (SNMP) (Setup Dialog Box)* (on page 108).
- The SNMP check allows you to use two rules. SNMP checks can use a formula and a non-standard port. SNMP checks can complete a SET before performing the GET. For more information, see *Advanced Settings for SNMP Checks* (on page 172).
- The SNMP check can convert the received result to a hexadecimal value. For more information, see *Check Tab: SNMP Option (Entries Dialog Box)* (on page 169).

Enhancements to Other Checks

- The proxy for HTTP(S) checks can now perform a check using Socks 4, 4a, 5, and relay proxy. For more information, see *Proxy Settings (Setup Dialog Box)* (on page 98).
- The NT Perfmon check now uses a formula. For more information, see *Check Tab: NT Perfmon Option (Entries Dialog Box)* (on page 156).
- The URL (HTTP/HTTPS) check has been enhanced. For both the HTTP and the HTTPS check, Servers Alive can also check whether the content of the retrieved page is correct or not. The URL (HTTP/HTTPS) check can use the Head command to check what is received. The check can also perform a CRC check. You can log all communication during an HTTP/HTTPS check to a file so that you can debug the process by editing a registry entry. For more information, see *Check Tab: URL (HTTP/HTTPS) Option (Entries Dialog Box)* (on page 143).
- An **Invert Status** option is available for checks. For more information about this option, you can refer to any of the topics that describe the check options on the **Entries** dialog box. For example, you can refer to *Check Tab: Database (Microsoft SQL) Option (Entries Dialog Box)* (on page 164).
- Servers Alive supports Oracle 10g. For more information, see *Check Tab: Database (Oracle) Option (Entries Dialog Box)* (on page 166).

Protocols

- A **Linger** option for the TCP protocol ensures the connection is active until all data is sent. For more information, see *TCP (Protocols Dialog Box)* (on page 263).
- The DNS protocol has options for querying an item that does not contain a specified string. The DNS protocol can now use SOA or SRV records. For more *information, see DNS Query (Protocols Dialog Box)* (on page 271).

Output

- You can change the delimiter
 for the <sa_alerts> tag in the HTML output by editing a registry value. For more information, see *HTML Page (Setup Dialog Box)* (on page 78).
- In the HTML template, SAIF can compare using sa_checkresponse. The template can sort using OnStatusTime so that the more recent up/down entries are listed before the older entries. For more information, see *HTML Page (Setup Dialog Box)* (on page 78).
- Several new HTML tags have been added to HTML page outputs. Several tags show the first numeric value for a returned string. New HTML tags display the name of the RRD graph if the RRD feature is enabled. See *HTML Page (Setup Dialog Box)* (on page 78).

Logging

- You can set logging options on the **Logging** tab of the **Entries** dialog box. For more information, see *Logging Tab (Entries Dialog Box)* (on page 224).
- RRD logging can show the check results. For more information, see *Check Result RRD Logging (Round Robin Database) (Setup Dialog Box)* (on page 77).
- You can include the **Remark** field in interchange database logging. For more information, see *To File (Interchange Data) (Setup Dialog Box)* (on page 68) or *To Database (Interchange Data) (Setup Dialog Box)* (on page 71).

CHAPTER 2

Quick Start Guide

Welcome to Servers Alive, the award winning monitoring tool from Woodstone bvba. Servers Alive is designed to monitor many different types of servers and services from a central location and report their status. Servers Alive supports many generalized tests applicable to servers of all types, along with specialized tests for certain types of services. When Servers Alive detects that a server or service has become unavailable, Servers Alive can report this condition in a variety of ways. The software can even take care of the problem without any human interaction.

Servers Alive is used all over the world by companies in all types of businesses, from computer to legal, military to government. The companies rely on the software to monitor their mission critical servers.

Servers Alive is a compact and inexpensive tool, but it packs a lot of punch. It has a feature set that compares favorably with the most popular monitoring packages available, but sells for a fraction of the cost. You can register the product and then you can check up to 1000 entries with the Standard edition and up to 5000 with the Enterprise edition.

We're sure you'll enjoy your experience with Servers Alive. As such, we offer the product free to those who only wish to monitor ten or less servers or services. We're confident you'll see the incredible worth you can get out of this amazing product!

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Installation

Servers Alive has the following requirements for installation:

- 1 Microsoft® Windows® 2000 (Professional or Server edition), NT® (Workstation or Server edition), ME, 98, XP, and 2003.
- 2 Network interface card.
- 3 TCP/IP.
- 4 Telephony service.

For more information about these requirements, see the online Help for Windows.

You can purchase two different editions of Servers Alive: Standard and Enterprise. To find out more, see the *Woodstone web site* (<http://www.woodstone.nu/salive/purchasev5.asp>).

The following table shows the differences between the editions and free version.

	<u>Free version</u>	<u>Standard edition</u>	<u>Enterprise edition</u>
Entries	10	1000	5000
Logging to ODBC-compliant database	Yes	No	Yes
Alert schedules	Yes	No	Yes
On-call schedules	Yes	No	Yes
RRD Tools	Yes	No	Yes
Custom fields and Visual Basic scripts	Yes	No	Yes
MIBs database	Yes	No	Yes

Before Installing Servers Alive

Please note that you must be an administrative user on the computer before you can install Servers Alive. Also note that, on Windows 2000 or newer, you must have the telephony service running or the CPU goes to 100% utilization.

Make sure that Windows has been updated to include the most recent patches provided by Microsoft®. This ensures the best possible compatibility. If you plan to use Servers Alive to check Oracle® or Microsoft SQL® databases, you must install the corresponding client software provided by the database manufacturer, as Servers Alive uses the client to perform its checks. If you check any Novell®-specific servers, you must install the Client for Novell Networks provided by

Novell. The Novell client provided by Microsoft is not sufficient for the Netware® checks.

Downloading Servers Alive

Servers Alive is obtained primarily through an Internet download at the *Woodstone web site* (<http://www.woodstone.nu/salive/purchasev5.asp>).

You can find the download link on that page, or you can choose from any of the worldwide mirrors.

Woodstone bvba can ship a CD to you when you purchase the full version of the software. Only one version of the software exists, regardless of whether you use it for ten or less entries or whether you have purchased a full license.

Installing Servers Alive

Make a backup of your Servers Alive installation file (.exe). Woodstone is not responsible for backups of this file.

Once you have downloaded the software package and saved it to a convenient location, launch the Setup program.

Note that you cannot install Servers Alive through a Terminal Server session, and, when running Servers Alive as a service through Terminal Server, you cannot see the tray icon.

The Setup program asks you for a location where it can install the software. You can install the software in any location. The install program extracts all program files to the location you specify and creates entries for Servers Alive on your Start Menu under the heading Alive.

Servers Alive can be run as a service if the computer for installation is running Windows NT, 2000, XP, or 2003. The Setup process detects your operating system and the service automatically installed. For Servers Alive to start automatically when you turn on your computer, you must go to the Services control panel and set the service called Servers Alive to automatic startup.

Extending Servers Alive

When the Setup program installs Servers Alive, the Setup program also installs a few companion applications that you can use to extend the functionality of Servers Alive. A subdirectory called **External** includes sample external check applications that you can use. Woodstone bvba creates and maintains the applications that are included in the external directory, but there are other applications, made by other authors, provided free, that you can download from the Woodstone bvba web site. There are also applications in the main Servers Alive directory that you can use to create your own external checks. For more information, see *External Checks* (on page 283).

Configuring Servers Alive

Before adding any monitored entries to Servers Alive, you need to configure its various options and features. Servers Alive has many powerful features that you can use to tweak the monitoring process. You should configure these before adding any entries, as you cannot use most of the alerting or monitoring features without globally configuring them first.

The first thing to do is enter your registration code if you purchased the product. You can do this by selecting the Register menu option from the Main window. This menu option is visible only in the unregistered product. Woodstone bvba sends an email with the required name, company, and registration Code when you purchase the software. If you have purchased the product, but do not have a registration code, please send an email to ***Servers Alive support*** (<mailto:support@woodstone.nu>).

Next, you can click the **Setup** button on the Main window. You can configure how Servers Alive monitors and alerts you by setting various options in the tree.

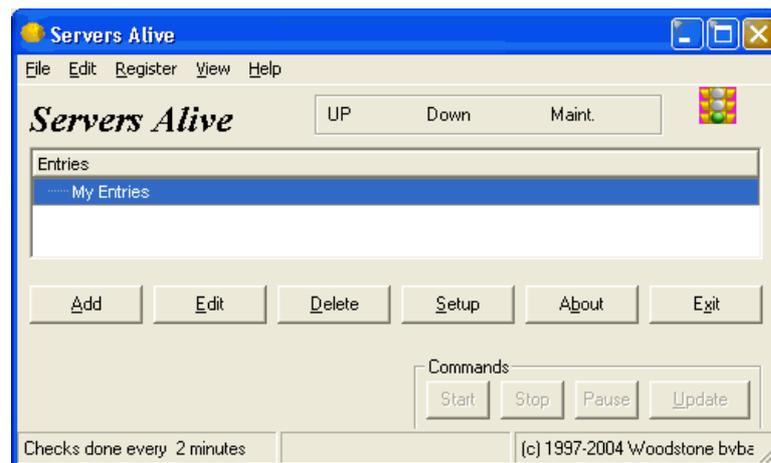
Getting Started in the Main Window

The Main window includes a listing of all entries that have been created. Each row in the entry list displays an entry item. The entry list shows the last detected condition, and, when a check cycle is in progress, displays the item that is currently being checked. You can use the Main window to control the check cycle, work with dependencies, and make global changes to all entries.

To get additional information about a dialog box or command, select the menu command and press F1 on the keyboard. Or, you can open a dialog box and press F1.

Moving, Displaying, Hiding Columns

When you first open Servers Alive, the Main window does not display columns.



You can display the columns by clicking any of the following commands on the **View** menu:

- **Host ID Column**
- **Last Checktime Column**
- **Roundtrip Column**
- **Response Column**
- **Status Column**
- **Pretty Name Column**
- **Host Name Column**
- **Check Description Column**

- **Priority Column**



You can customize your own view of the item entries by doing one of the following:

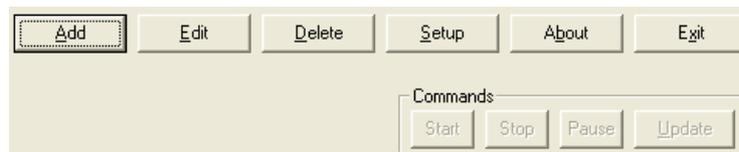
- Click the column heading to re-sort the list.

If you resort, this affects the order in which Servers Alive checks the entries; but the software tracks the correct checking order for the dependencies.

- Drag the column heading to the place you want to change the order of the columns.
- You can hide different columns by selecting the name of the column on the View menu.
- You can also display or hide the status icons by selecting **View > Status Icons within Tree**.

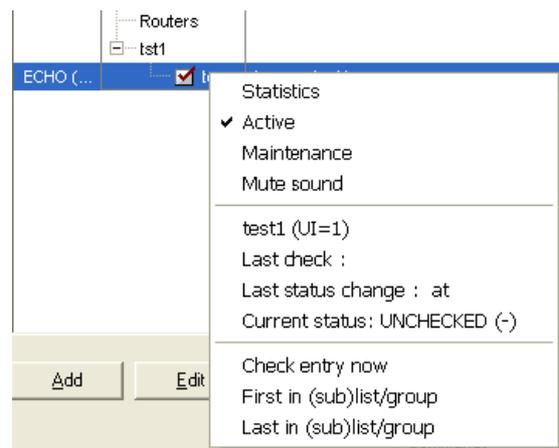
Adding and Editing Entry Items

You can add an entry item by clicking the **Add** button on the Main window. If you want to change the configuration and global settings of Servers Alive while adding entries, click the **Setup** button. If you want to delete an item, select the row for the item and click the **Delete** button.



To copy an entry, select the entry and press **Ctrl + D** on the keyboard. The new entry appears in the window as **Copy of <pretty name>** or **Copy of <host name>**, in cases where the entry has no pretty name.

To view information about an entry, select the entry and right-click. You can view the statistics, status, and maintenance information on the shortcut menu.



To change the font size and font type, such as Arial, for entries in the Main window, you can enter the following registry entries:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers
Alive\StartUp\Tree_Font_Name      (string)
```

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers
Alive\StartUp\Tree_Font_Size  (string)
```

When you add an entry, you can enable the individual alert entry in the Main window by clicking the check box that appears next to the entry. You can disable the alert entry by clearing the check box.

By default, the software asks you to confirm if you want to drag and drop an entry on the Main window. To turn this off, you must add the following registry key and then assign a value of 1:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers
Alive\StartUp\No_confirmation_for_Drag_and_Drop (dword)
```

Organizing Entries with Groups

You can organize your entries in the Main window by grouping them together. In the list in the Main window, select one of the existing groups, such as **Firewalls**, **Webservers**, and so forth, and right-click. Select **Add Group** on the shortcut menu. You can add a group to an existing group by clicking **Add Sub Group** on the shortcut menu.

You can also rename a group by selecting an existing group and then clicking **Rename Group** on the shortcut menu. When you want to delete a group, select the group, right-click, and click **Delete Group**.

You can also drag groups to re-organize them:

- If you drag an entry to a group, the item becomes a part of that group. However, if the item depended on other items in the original group, those dependencies are lost when the item is dragged to the target group.

- If you drag a group to another group, the item becomes part of the target group.

If you want to move a sub group to the top level of the tree, so that the sub group is not part of another group, select the sub group and right-click. On the shortcut menu, click **Group to Top Level**.

Changing the Order of Entries

You can change the order of entries in a subgroup with the following two commands:

- **First in (sub)list/group**
- **Last in (sub)list/group**

In the Main window, you select an entry and right-click to use the commands.

For example, if you have the following entry list in Main window: GROUP 1 contains SUBGROUP 1, which contains the following groups in the following order:

- Entry_A
- Entry_B
- Entry_C

If you select Entry_C, and select **First in (sub)list/group**, the order in the Main window changes to the following:

- Entry_C
- Entry_A
- Entry_B

Check Cycles

Servers Alive performs a check cycle starting from the top of the entry list working to the bottom of the list. The software auto-arranges the list of entries by host in the correct order for the dependencies to work properly.

You can see how often the software checks the servers in the lower left corner of the Main window. If you want to change how often the servers are checked, click the **Setup** button and click **Setup > Misc Settings** in the **Setup** tree. You must edit one of the boxes according to the time you want in the **Check Times** area. You can set whether the checks occur in minutes or seconds. To do this, click **File > Setup**. In the **Setup** tree, click **General > Startup Settings**.

If you want the view to scroll during checks, click the **Setup** button. In the tree on the **Setup** dialog box, click **General > Interface Settings**. You can then click the **Scroll Interface While Checking** check box.

Start, Stop, Pause, and Update Buttons

There are four command buttons in the lower right-hand corner of the Servers Alive window called **Start**, **Stop**, **Pause** and **Update**. Use these buttons to control the check cycle. If you pause the check cycle, it stops where it is and allows you to resume when ready. Note, however, that it only pauses until the next schedule check cycle, at which time the software checks entries again automatically. If you need to stop the check cycle for a long period of time, click the **Stop** button instead. When you are ready to resume, use the **Start** button. When you click the **Update** button, the software immediately begins a new check cycle.

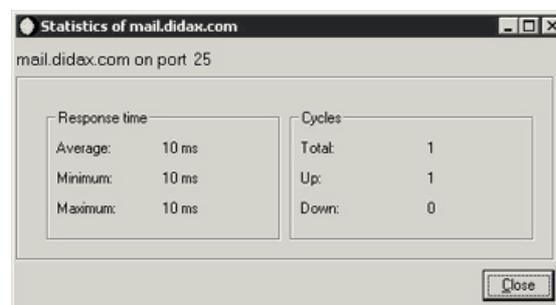
To display the status for entries in a group in the **Status** column of the Main window, you can click the **Setup** button and then click **General > Interface Settings** in the tree. Click the **Show Group Statistics in Tree Interface** check box. The status displayed in the Main window applies only to the entries in the group—and not subgroups.

Rechecking an Active Entry

You can recheck a single entry that has gone down to verify its condition. You do this by first clicking the **Stop** button to stop any check cycle currently in progress. Select an entry and right-click to select **Check Now**. Servers Alive checks that single entry and displays the status in the left-most column.

Statistics

Servers Alive maintains statistics on the availability of the servers that you monitor. You can access these statistics by first selecting an entry. You then right-click and select the **Statistics** command on the shortcut menu. The **Statistics** box displays response time statistics, showing the minimum, maximum, and average response times. The dialog box also shows how many times the server was detected as up and down. Currently, there is no process to produce reports based on this information.



Servers Alive does not keep previous statistics when you stop and then restart the software.

Active and Maintenance Modes

An entry can be in one of two modes: **Active** or **Maintenance**. Hosts are only included in the check cycle if they are active. Most entries stay in active mode all the time and only can be switched to maintenance mode when work is being performed on them. If you have regularly scheduled maintenance periods for a server, you should click the **Add** button and use the **Schedule** tab in the host entry to schedule periods when the item is switched to maintenance mode.

You can change an entry from active to maintenance states quickly and easily. Select an entry in the Main window and right-click. You can then select **Active** or **Maintenance** from the shortcut menu.

You can also change all the entries in a group with one click. Select a group and right-click. On the shortcut menu, click **Set All Entries to Active** or **Set All Entries to Maintenance**.

Sound

If you want to turn off the sound, select an entry and right-click. Select **Mute Sound** on the shortcut menu.

Running Servers Alive as a Service

When running Servers Alive as a service using the **Microsoft Management Console**, you can select the **Local System Account** option on the **Properties** dialog box and click the **Allow Service to Interact with Desktop** setting. To run Servers Alive under the system account with desktop interaction, you should carefully consider an important security issue: Any process started from within Servers Alive has the same access rights as the system administrator.

You must protect the system running Servers Alive by ensuring that only users with a correct security clearance are allowed to log on to the local system.

For example, an administrator installs Servers Alive on a workstation and configures the software to run as a service, using the system account with desktop interaction. A non-administrative user can log on to the workstation and see Servers Alive as an icon in the system tray. The user can open the Servers Alive Help file and click the **View Source** command in the Windows Help viewer. Subsequently, in the **Open** dialog box, the user can open and run `CMD.exe`. The non-administrative user can now run the command line with all the access rights as the system administrator.

Default Host Names

Servers Alive has certain default host names that are replaced by the current values in the operating system (OS).

- @DNS1 which refers to the first DNS server as defined within the OS.
- @DNS2 which refers to the second DNS server as defined within the OS.
- @WINS1 which refers to the first WINS server as defined within the OS.
- @WINS2 which refers to the second WINS server as defined within the OS.
- @GATEWAY which refers to the default gateway as defined by the OS.

If the result that the OS gives back is blank, or none, the software executes the command with a blank host name. Some of the checks, such as the ping check, use your own local Internet protocol (IP) address.

Following are various statements that detail the proper use of Servers Alive. If you have any questions regarding the following sections, please contact *Woodstone bvba* (<mailto:legal@woodstone.nu>).

The freeware version is limited to checking 10 entries. You can register the product and then you can check up to 1000 entries, for the Standard edition, or 5000 entries, for the Enterprise edition.

License Agreement

This license agreement covers your use of the Woodstone bvba Servers Alive, its executable files and documentation, hereinafter referred to as the Product.

The Product is copyright © 1997-2005 Woodstone bvba. You may use it and distribute it according to this following License Agreement. If you do not agree with these terms you must remove the Product from your system.

By incorporating the Product in your work or distributing the Product to others you implicitly agree to these license terms.

This License Agreement covers the current version of the product. Woodstone bvba reserves the right to modify the terms of this License Agreement at any time, and without prior notification, in future releases of the product.

Conditions of Use

The Product is provided in one form: as a ready-to-run installation kit consisting of executable programs, release notes, and so forth (the Product Executable).

You may freely use and distribute the Product Executable so long as you provide the complete and unmodified original Product Executable installation kit as supplied by Woodstone bvba.

Disclaimer of Warranty

The Product is provided as free software, in the hope that it will be useful. It is provided "as-is", without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of the Product is with you. Should the Product prove defective, the full cost of repair, servicing, or correction lies with you. The freeware version is limited to checking 10 hosts. You can register the product and then you can check up to 1000 entries, for the Standard edition, or 5000 entries, for the Enterprise Edition.

Conditions

For commercial distributors, other licensing conditions may be negotiated with respect to technical support and redistribution rights. Before reselling Servers Alive, you must contact Woodstone bvba to negotiate a redistribution license.

Technical Support

Email

Limited email support is available from *Woodstone support* (<mailto:support@woodstone.nu>).

Full guaranteed technical support is subject to a Woodstone bvba support license. For current prices and conditions, please send email to *Woodstone support* (<mailto:support@woodstone.nu>).

Mailing List

You can obtain technical information quickly by signing up for our mailing list. To sign up for the list, see the *subscriber page* (<http://www.woodstone.nu/salive/subscribe.html>).

You can also search the *mail archives* (<http://archive.serversalive.com>) for useful information.

CHAPTER 3

File Menu

The **File** menu has many commands that help you manage your information:

- **File** - Open a new list of entries.
- **Import Old Hostfile** - Open a host file saved in earlier versions of Servers Alive.
- **Print Tree** - Preview and print a picture of entries in the Main window as shown on your computer screen. In the print preview window, click to zoom in to the view.
- **Save** - Save your settings and list of entries. The **Save** command prompts you for a location and name to save the list of entries. Select a location and name that is easy to remember.
- **Save As** - Save your list of entries as a text file with a .txt extension.
- **Exit** - Close Servers Alive.
- **Setup** - Edit the global settings for Servers Alive. You can also click the **Setup** button in the Main window.
- **Most Recently Used List** - Displays the list of most recently used host files.

If you want Servers Alive to load a listing by default, you can set that by clicking the **File > Setup** command and then entering the information on the **Startup** tab.

In This Chapter

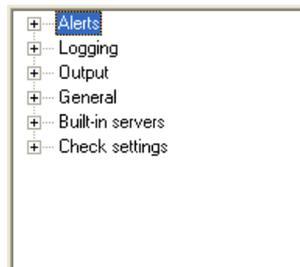
File > Setup (Setup Dialog Box)..... 16

File > Setup (Setup Dialog Box)

The **Setup** dialog box allows you to enter global settings for Servers Alive with the following branches in the **Setup** tree:

- **Alerts**
- **Logging**
- **Output**
- **General**
- **Built-in Servers**
- **Check Settings**

When you select a branch in the tree, different setup options appear on the right side of the dialog box.



Alerts (Setup Dialog Box)

The **Alerts** section of the **Setup** tree specifies the alerts that are sent when a server malfunctions. When Servers Alive detects a down condition, it can respond with a wide array of notifications and alerts, depending on the settings that you choose, including the following:

- Sending an email using SMTP, indicating what server is down.
- Paging you with a numeric or alphanumeric warning.
- Executing a program.
- Playing a sound.
- Restarting an NT service.

Mail alerting is one of the most common types of alerting used. Servers Alive supports two different methods of sending mail: **SMTP** and **Other Mail**. Usually, you should choose settings on the **SMTP** tree unless your mail server does not support SMTP or you have special mailing needs. In these cases, you should examine the **Other Mail** options in the tree.

When you add an entry, you can enable the individual alert entry in the Main window by clicking the check box that appears next to the entry. You can disable the alert entry by clearing the check box.

SMTP (Setup Dialog Box)

Mail alerting is one of the most common types of alerting used. Servers Alive supports two different methods of sending mail: **SMTP** and **Other Mail**. Usually, you should choose settings on the **SMTP** tree unless your mail server does not support SMTP or you have special mailing needs. In these cases, you should examine the **Other Mail** options in the tree.

Primary (Setup Dialog Box)

Enable primary SMTP mail

Mail host: Send direct

From:

Default to:

Default subject:

Default message:

Priority of mail: ▼

Don't ping the SMTP servers before sending mail

Fall back to alternate when primary not responding correctly

Enable Primary SMTP Mail

Enables this feature and allows you to enter values on the dialog box. If you do not click this box, the software sends mail through both the primary and alternate SMTP servers.

Mail Host

Enter the mail host as a NetBIOS name, DNS name or IP address; for example, HERMES, mail.domain.com, or 123.45.67.89.

Send Direct

Click this check box to send the alert message directly to the mail server that is responsible for the domain in the **To** box of the message.

When you click the **Send Direct** check box, with certain versions of the IPHLPAPI.DLL file, you must specify the DNS servers to use when querying for the MX records in the following registry key. If you do not specify the DNS servers, Servers Alive attempts to determine which DNS servers to use.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\Primary_DNS_to_use (string)

If the first DNS server does not respond correctly, the software uses the second DNS server, if specified, to get the MX record for the recipient domain.

From

Enter a name or a fully-qualified domain name; for example, serversalive@company.com. Your entries depend on the way your SMTP server is configured; most SMTP servers require a FROM name that looks like a valid email address, such as salive@domain.com. If you have trouble, please contact your mail server administrator for the appropriate settings.

If you do not enter correct information in the **From** box, you might receive a message from the mail server indicating that relaying has been denied.

Default To

Enter an email address, such as person@company.com. To send the message to several email addresses, separate the addresses with a comma, as in the following example:
user1@company.com,user2@company.com.

Default Subject

Enter the information that you want to appear in the Subject line of every SMTP alert message. The default message displays the following tokens:

- %p for the pretty name.
- %s for the status.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Default Message

Enter the message for the body of every SMTP alert message. You can enter multiple lines by pressing Shift + Enter on the keyboard.

The default message displays the following tokens:

- %p for the pretty name.
- %s for the status.

You can also use the parameters in the previous description.

Priority of Mail

Select one of several different levels of priority for sending the message.

Don't Ping the SMTP Servers Before Sending Mail

Prevents Servers Alive from pinging the server before sending the alert message. If the check box is clear, Servers Alive pings the SMTP server to see if it is responding before the software sends the email.

Fall Back to Alternate When Primary Not Responding Correctly

Check so that the alternate server is used only when the primary server is down or not responding correctly.

Test It

Sends a test message to the specified users. Remember to click the **APPLY** button first; otherwise, Servers Alive uses the previous values for the test mail. Any error messages that result from the test display on the dialog box next to the **Test It** button.

Advanced Settings for the SMTP Primary Tree: DUN and ESMTP

Servers Alive also supports ESMTP and POP3 authentication.

The screenshot shows a configuration dialog box with two main sections. The top section is for DUN (Dial Up Networking) settings. It includes a dropdown menu for 'DUN entry to use:' with 'LAN__' selected, and three text input fields for 'Username:', 'Password:', and 'Domain:'. The bottom section is for ESMTP settings. It includes a dropdown menu for 'Use authentication:' with 'no' selected, and three text input fields for 'Username:', 'Password:', and 'POP3 server:'. At the bottom left, there is a status indicator '0 mails send since last reset' and a 'Reset' button at the bottom right.

Servers Alive uses your LAN (network) connection to send the mail to your SMTP server. Servers Alive can also do this using DUN (Dial Up Networking).

Servers Alive sends SMTP mail through your usual LAN connection (LAN__). You can, however, force Servers Alive to dial into a remote network before sending mail to an SMTP server. To do this, you first must configure the correct Dial-up Networking settings in Windows. You can then select them using the appropriate dropdown boxes on the **DUN-SMTP** branch of the tree. If you need to provide a user name, password, and domain to establish the connection, you can enter them in the appropriate text boxes.

Many organizations do not allow standard SMTP connections for outgoing mail, as outside spammers use them to send unsolicited mail. Most have an option to use ESMTP, which forces a person to log in to the SMTP mail server before allowing that person to send any mail. If your company uses ESMTP, you must supply a use name and password combination for your primary and/or alternate mail settings to allow Servers Alive to send mail.

To use this, select **ESMTP** or **POP3** in **Use Authentication**, and then type the user name and password.

DUN Entry to Use

Select whether to use the local area network or dial-up network. By default, Servers Alive connects to the host using the normal LAN connection (**_LAN_**). Additionally, Servers Alive can also create a dial-up network (DUN) connection to an external network before completing the check. After the check, Servers Alive disconnects from the external network. If you have created dial-up network connections on your computer, those connections appear on the **DUN Entry to Use** dropdown list.

The DUN feature is available only if a dial-up network connection is installed on the computer running Servers Alive. See the online Help for Windows for more information on how to create a dial-up network connection. To use this feature effectively, Servers Alive must make the connection completely unattended. For that reason, you must configure the dial-up entry to save passwords.

Username

Enter the user name required to log in to the network.

Password

Enter the password required to log in to the network.

Domain

Enter the name of the domain.

Use authentication

Select to use ESMTP or POP3 authentication. You can also select to not use authentication.

Username

Enter the user name required for authentication.

Password

Enter the password required for authentication.

POP3 Server

Type the name of the POP3 server.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

Registry Settings for SMTP

Registry Entries for Ping Settings

Before sending a mail, Servers Alive pings the SMTP server to see if it is responding. You can use the following SMTP\PingTimeout parameter to determine the amount of time Servers Alive should wait for a response (max. 32 sec).

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\pingtimeout (dword)

Servers Alive can send you an email every few minutes, based on the interval that you choose, to show that the software is still running. The mail is sent using the default settings of the primary SMTP server. When Servers Alive starts or stops checking, it can also send an email, using the settings of the primary SMTP server. Before sending email to an SMTP server, Servers Alive pings the server and only sends email to the server if it gets a response. If your server is not responding to pings, because a router or fire wall filters out the ICMP packages, the email is not sent. You can disable this ping-before-send feature to get around this. All email sent by Servers Alive is by default sent as URGENT email (high priority).

By default, the keep-alive mailings are sent to the default primary Mailto parameter. This can be altered with the following registry key.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\KeepAliveTo (string)

Registry Settings for SMTP Timeout

Another parameter called SMTP\Timeout controls how long Servers Alive waits for the SMTP server to respond. The default is 15 seconds, and the maximum is 60 seconds.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\timeout (dword)

If SMTP/ResolveAtStart equals 1, then Servers Alive attempts to resolve the SMTP, and alternate SMTP, server name to its IP address when Servers Alive starts and uses that from then on.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\ResolveAtStart (dword) 1 or 0.

If ExcludeDateTimeInMail is 1, the generated SMTP mailings do not include the last line (Mail generated by ... date/time).

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\ExcludeDateTimeInMail (dword) 1 or 0

Registry Settings for Alternate Ports and Servers

You can specify an alternate port, although not 25, for the primary and alternate SMTP server by modifying the following keys:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\PrimarySMTPPort (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\AlternateSMTPPort (string)

Registry Settings for Custom Mail Headers and Footers

You can use the following keys to add custom headers to any SMTP mail Servers Alive sends:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\PrimaryXHeader (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\AlternateXHeader (string)

You can use the following keys to add custom footers to any SMTP mail Servers Alive sends:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\PrimaryFooter (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\AlternateFooter (string)

You can use the following variables in the PrimaryFooter entry:

- {time} hh:mm:ss format
- {date} dd:mm:yy format
- {sdate} dd:mm:yy format
- {stime} hh:mm format
- {saversion} Servers Alive version number
- {0d} Carriage return character
- {0a} New line character
- {25} Colon

Registry Settings for Custom Date and Time Formats

You can specify a custom date and time format for the customer headers and footers in SMTP mail:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\CustomDateFormat (string)

{cdate} custom date format

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\CustomTimeFormat (string)

{ctime} custom time format

Create or Edit HELO/EHLO Commands

The HELO/EHLO command is used to identify the client sender to the SMTP server. The sending server identifies itself and the receiving server accepts any given name, per request. EHLO is the Enhanced SMTP (ESMTP) version of HELO. To create or edit an HELO/EHLO command, you can edit the following registry entries:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\PrimaryHELO (string)

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\AlternateHELO (string)

You can use the following variables in the entry:

- A value of 0 uses the name of the SMTP server as defined in the Setup dialog box for the HELO/EHLO command (default)
- A value of 1 uses the name of the system that runs Servers Alive for the HELO/EHLO command.
- A value of 2 uses the domain name of the system running Servers Alive for the HELO/EHLO command. If no domain name is defined, Servers Alive uses NO.DOMAIN.NAME for the command.
- A value of 3 uses machinename.Domainname; for the HELO/EHLO command. If no domain name is defined, Servers Alive uses machinename.NO.DOMAIN.NAME.
- A value of 4 uses the IP address of the system running Servers Alive for the command.
- A value of 5 uses the machinename.domainname for the command. If no domain name is added, Servers Alive uses the IP address for the command.

If no numeric value is used, Servers Alive uses whatever string is defined for the HELO/EHLO command.

Alternate (Setup Dialog Box)

The dialog box is titled "Alternate (Setup Dialog Box)" and contains the following fields and options:

- Enable alternate SMTP mail
- Mail host: Send direct
- From:
- Default to:
- Default subject:
- Default message: (with up/down arrows)
- Priority of mail: (with a dropdown arrow)
- Don't ping the SMTP servers before sending mail
- Fall back to primary when alternate not responding correctly
-

For more information about the advanced settings, see *Advanced Settings for the SMTP Primary Tree: DUN and ESMTP* (on page 21).

Enable Alternate SMTP Mail

Enables this feature and allows you to enter values on the dialog box. If you do not click this box, the software sends mail through both the primary and alternate SMTP servers.

Mail Host

Enter the **Mail Host** as a NetBIOS name, DNS name or IP address; for example, HERMES, mail.domain.com, or 123.45.67.89.

Send Direct

Click this check box to send the alert message directly to the mail server that is responsible for the address in the **To** box of the message.

When you click the **Send Direct** check box, with certain versions of the IPHLPAPI.DLL file, you must specify the DNS servers to use when querying for the MX records in the following registry key. If you do not specify the DNS servers, Servers Alive attempts to determine which DNS servers to use.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\Primary_DNS_to_use (string)

If the first DNS server does not respond correctly, the software uses the second DNS server, if specified, to get the MX record for the recipient domain.

From

Enter a name or a fully-qualified domain name; for example, **Servers Alive** or **serversalive@company.com**. Your entries depend on the way your SMTP server is configured; most SMTP servers require a FROM name that looks like a valid email address, such as **salive@domain.com**. If you have trouble, please contact your mail server administrator for the appropriate settings.

If you do not enter correct information in the **From** box, you might receive a message from the mail server indicating that relaying has been denied.

Default To

Enter an email address, such as **person@company.com**. To send the message to several email addresses, separate the addresses with a comma. For example, **user1@company.com,user2@company.com**.

Default Subject

Enter the information that you want to appear in the Subject line of every SMTP alert message. The default message displays the following tokens:

- %p for the pretty name.
- %s for the status.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.

- {25} for a : (colon).

Default Message

Enter the message for the body of every SMTP alert message. You can enter multiple lines by pressing Shift + Enter on the keyboard.

The default message displays the following tokens:

- %p for the pretty name.
- %s for the status.

You can also use the variables described in the previous description.

Priority of Mail

Select one of several different levels of priority for sending the message.

Don't Ping the SMTP Servers Before Sending Mail

Prevents Servers Alive from pinging the server before sending the alert message. If the check box is clear, Servers Alive pings the SMTP server to see if it is responding before the software sends the email.

Fall Back to Primary When Alternate Not Responding Correctly

Check so that the primary server is used only when the alternate server is down or not responding correctly.

Test It

Sends a test message to the specified users. Remember to click the **Apply** button first; otherwise, Servers Alive uses the previous values for the test mail. Any error messages that result from the test display on the dialog box next to the **Test It** button.

You can enter registry settings for SMTP. See *Registry Settings for SMTP* (on page 23).

Numeric Paging (Setup Dialog Box)

You must install a modem in Windows to use this feature.

Enable Pager

Enables Servers Alive to send you alerts through an attached modem to a numeric pager.

Phone Number

Specify a phone number of your numeric pager to which Servers Alive can send a message.

End Message Indicator

After a numeric message has been entered, specify an end-of-message indicator. Generally paging providers use # as the indicator.

Wait String

Specifies the wait time for Servers Alive. In most cases, after dialing the phone number of your pager, Servers Alive must wait several seconds before sending out the numeric information. You can enter a time in the **Wait** box as a number of commas. Every “,” represents about 2 seconds.

Add 0 When Down and 1 When Back Up to Host-id

Check this option to receive extended information on your page. Servers Alive adds a -0 for a down host to the host ID and a -1 for an up host to the host ID. Numeric paging is unreliable because it is not based on any standard protocol.

The message that you get on your pager displays a number. This number is the Host ID, which you can change when creating or editing a host.

If you select the **Add 0 When Down and 1 When Back Up to Host-id** option, Servers Alive sends a "-" (dash) between the host ID and the 0/1 (down/up). You can change this if you add or edit the following registry value:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBUConsulting\Servers  
Alive\Pager\Separatorstring (string)
```

Port to Use

Specifies the COM port to which your modem is attached. In most cases, you can enter TAPI. When using TAPI, Servers Alive uses only the TAPI modem that you installed first.

Remember that you must enable paging on a host-by-host basis. By default, you are not paged by any hosts when a DOWN condition is detected. Note that, because numeric paging is not based on a standard protocol, numeric paging is not as reliable as alphanumeric paging.

Test It

Tests the pager. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

Alpha Paging - SMS (Setup Dialog Box)

The alpha paging feature sends a text-based message to a cell phone or paging device. You must install a modem in Windows to use alpha paging. Alpha paging works only with hardware modems and not GSM modems. Support for GSM modems is planned for a future release of Servers Alive.

One of the most common methods of alerting is alphanumeric paging, which sends a text-based message to a cell phone or pager device. You can send small alerts to your alphanumeric pager detailing exactly which server is down, often with collaborating information. To do this, you must provide a modem device that allows you to send alphanumeric pages. The actual paged device or number is added on a host-by-host basis.

Enable Alpha Paging and SMS Messaging

To turn on this feature, click the **Enable Alpha Paging & SMS Messaging** box.

Devices

Configure the device that Servers Alive uses to send the message. Click the **Devices** list to choose a modem. This drop down box displays any modems that you have installed in Windows.

Comm Settings

Enter the communication settings in the **Comm Settings** box. Contact your paging/SMS provider for these settings, along with the protocol and SMSC.

In general, you can try entering **7E1**, **7N1**, or **8N1**. Woodstone bvba maintains an informal list with settings reported by users of Servers Alive for providers around the world. You can find this list at the *Woodstone web site* (<http://www.woodstone.nu/salive/pagersettings.asp>). Woodstone bvba takes no responsibility for the accuracy of the supplied information.

Baud rate

Choose a setting that is appropriate for your service provider.

Devices

SMSC No

Enter the phone number for the modem of your service provider. You can enter an international format as +1 bbbccccc, such as +1 812123456.

When using an international format, make sure that you include the space between the country number and the rest of the number. In the previous example, +1 is the country number. You must also set the country and area code correctly in the software that comes with your modem.

Protocol to Use

Select the protocol used by your provider. This is either TAP or UCP.

UCP Operation

If your provider uses UCP, you must also specify settings for the **UCP Operation** box.

You can view the list at the *pager settings page at the Woodstone web site* (<http://www.woodstone.nu/salive/pagersettings.asp>), but the information might not be listed for your provider or contain up-to-date settings. Please contact your provider for the correct information.

Message

In the **Message** section, you must provide authentication information. This information is available from your provider and is required in order to send a message.

Sender

Enter the name of the sender for authentication purposes. In most cases, this can be left blank.

Legitimization Code

Enter the code, if required by your provider.

Authentication Code

Enter the authentication, if required by your provider.

Send Multiple Messages Per Call

Allows the software to send multiple messages per call.

Max. Number of Messages per Call

Specifies the maximum number of messages allowed.

Format

Enter ALPHA NUMERIC, in most cases.

Receipt Type

Enter GSM, in most cases.

Test It

Tests the settings to receive a test page. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Sending SMS Messages

Note that, in some rare cases, the SMS message must be sent twice before it is received. To enable this feature, you must add or edit the following registry entry.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Paging\DoubleMessage (dword) 1 or 0

By default, the SMS feature tries to send the message twice, using one re-dial. You can change the number of re-dials to a maximum of ten re-dials by editing the following registry entry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Paging\MaxRedials

Most SMS providers limit the number of characters within a message. Servers Alive provides a default limit of 160 characters. You can change this limit in Servers Alive by editing the following registry entries:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Paging\MaxMessageSize (string)
Enter a number to define the maximum size of the message. 160 characters is the default if you do not edit this registry entry.
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Paging\SpliLongMessage (string)

If you enter a value of 1, Servers Alive splits messages that exceed the number of characters that you enter in the MaxMessageSize registry entry. If you enter a value of 0, Servers Alive truncates the message at the number of characters that you enter in the MaxMessageSize entry. Any characters after that point are not sent.

SNMP Trap Sending (Setup Dialog Box)

Enable SNMP traps

Receiver: port:

Community:

Sender OID:

Sender IP:

SNMP Version:

Log trap sending to logfile

SNMP Trap

Enables this feature and allows you to enter settings on the dialog box.

Receiver

Indicates the name of the destination host.

Port

Indicates the destination port for sending traps. The default standard port number is 161. However, for security purposes, you can enter a different, non-standard port number.

Community

Enter a community string to use in the traps that the software sends. The default string is public.

Sender OID

Controls which varbinds to include in the trap; all varbinds are included by default.

Sender IP

Specifies the destination host name or IP address for sending traps.

SNMP Version

Select from either SNMP Version 1 or Version 2.

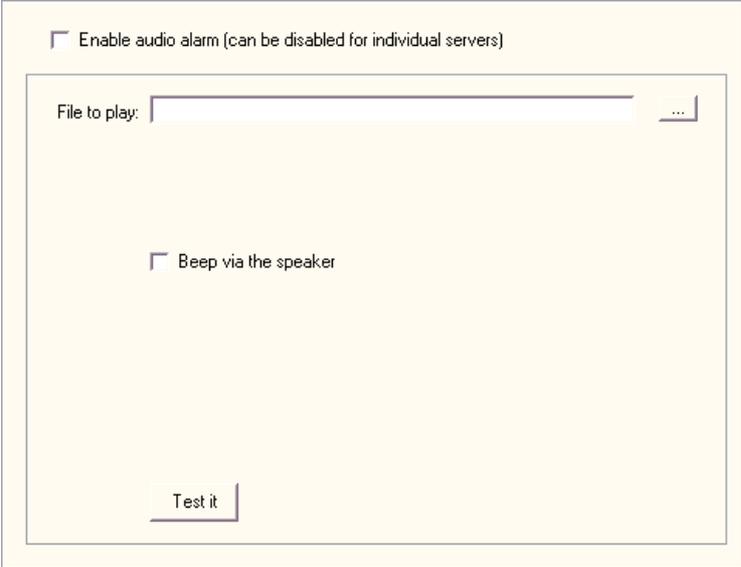
Log Trap Sending to Logfile

Writes the event to a file.

Test It

Tests the settings. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Audio (Setup Dialog Box)



Enable audio alarm (can be disabled for individual servers)

File to play: ...

Beep via the speaker

Test it

If you have the Servers Alive monitoring server near your operations staff, you can use audible alerts to tell them that something is down.

Enable Audio Alarm

If you want Servers Alive to warn you of a failure with a sound, click the **Enable Audio Alarm** box. If no WAV-capable device is available, you cannot check the **Enable Audio Alarm** check box. However, you can still use sounds as alarms by enabling the **Beep via Speaker** option.

File to Play

Select a WAV file on the computer. The file name you enter is the default that Servers Alive uses. You can set a different file name for every host.

Beep Via the Speaker

Select this if you do not have a device on your computer that is capable of playing WAV files.

Test It

Tests the settings. You should receive a test page. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

Registry Settings for Sounds

Servers Alive plays a sound when starting or stopping as a proof that it is still alive. You must add or edit the following registry keys:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\KeepAlive\StartSound (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\KeepAlive\StopSound (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\KeepAlive\KeepAliveSound (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\KeepAlive\KeepAliveSoundMinutes (dword)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\KeepAlive\KeepAlivewithSound (dword) 1 to enable

Other Mail (Setup Dialog Box)

Enable other mail

Command line:

Insert "%m" where the text of the message is expected

Example : c:\mapi\mapisend -u "mapisend" -p "" -r touser -s "subject" -m "%m"

Test it

Servers Alive can natively send mail using an SMTP server. If you are not using an SMTP server, Servers Alive can still send mail using your mail server, if you define a command line mailer for your mail system.

For each entry, you can define an alert that sends a message using Other Mail. This alert has its own message and uses the send options defined within the alert. For more information, see *Send Other Mail* (on page 188).

Enable Other Mail

Click the check box to allow Servers Alive to send mail using the command line mailer you specify.

Command Line

Defines the command line that the software uses. You can define an alert for each entry that sends a message using these settings. The entry has its own message. In the command line, you enter the command that Servers Alive issues when sending mail with your command line mailer. Within the command line, the **%m** is replaced with the actual message that Servers Alive generates.

Test It

Tests the settings. You should receive a test message. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Registry Settings for Verifying Messages

You can modify the message that Servers Alive sends by adding or editing the following registry value:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\OtherMail\OtherMessage (string)

You can use the following variables:

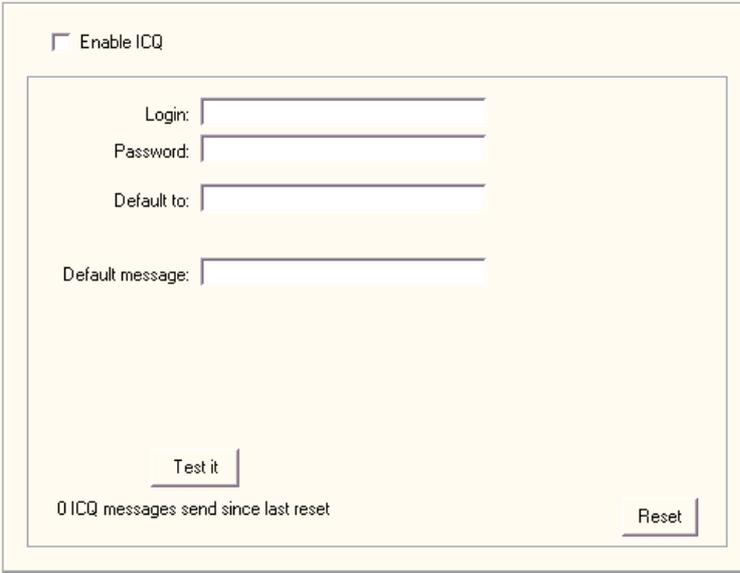
- **%a** for additional information. For a ping check, this is the round trip time.
- **%c** for the complete host/check description.
- **%d** for the date.
- **%e** for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- **%h** for the host name.
- **%i** for hostID; used for numeric paging.
- **%p** for the pretty name.
- **%r** for the remark.
- **%s** for the status.
- **%t** for the last check time.
- **%u** for the unique ID of the host.
- **%w** for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.

- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

If you want to force the case of the message to uppercase or lowercase only, you must add or edit the following registry key.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Othermail\ForceCase (string) U or L

ICQ (Setup Dialog Box)



Enable ICQ

Login:

Password:

Default to:

Default message:

Test it

0 ICQ messages send since last reset

Reset

When Servers Alive sends an ICQ™ alert, it sends an ICQ page by direct connection to the ICQ server, on port 5190 by default. When your ICQ software detects the incoming page, the software announces this with a sound. The software does not flash the minimized ICQ icon that is displayed in the Windows system tray.

For each alert, Servers Alive logs on and logs off of the ICQ network. The software does not stay connected to the network for multiple ICQ alerts.

If sending an ICQ alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection. For more information, see *Failure Settings* (on page 40).

In order to send an ICQ message, Servers Alive must log on to the ICQ network. Because an ICQ user can have only one concurrent log-in, you should use a different user account for sending the ICQ alerts than the user account that you use to receive the alerts.

Enable ICQ

Click this check box to enable this feature and enter information in the dialog box.

Login

Enter the appropriate name for logging in to the ICQ network.

Password

Enter the appropriate password for logging in to the ICQ network.

Default To

Enter an ICQ number to which the alert message is sent. This is the ICQ number for your account.

Default Message

Enter text for the body of the message. This is the default text for the alert message. You can use the parameters listed in the previous description.

Test It

Tests the settings. You should receive a test message. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

Failure Settings

Use DUN connection when LAN connection fails

DUN entry to use:

Username:

Password:

Domain:

To display these settings, click the **Setup** button and then, in the tree, click **Alerts > ICQ, MSN Messenger, AIM (AOL Instant Messenger), SNPP (Network Paging) or SMPP (Network Paging)**.

You can then click **Failure Settings**.

Use DUN Connection When LAN Connection Fails

Click the check box to allow Servers Alive to use the DUN connection when the SNPP or SMPP network paging connection fails.

DUN Entry to Use

Select the current DUN entry or **_LAN_**. If you have created dial-up network connections on your computer, those connections appear on the dropdown list.

The DUN feature is available only if a dial-up network connection is installed on the computer running Servers Alive. See the online Help for Windows for more information on how to create a dial-up network connection. To use this feature effectively, Servers Alive must make the connection completely unattended. For that reason, you must configure the dial-up entry to save passwords.

Username

Enter the user name.

Password

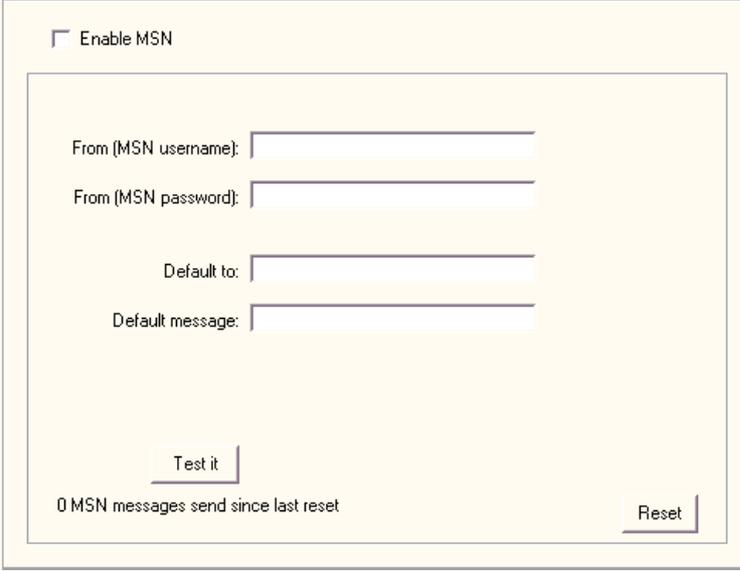
Enter the user password.

Domain

Enter the domain.

MSN Messenger (Setup Dialog Box)

To use MSN® Messenger, you must install the high encryption pack from Microsoft. To ensure that you have installed the pack, click **Help > About Internet Explorer** in Internet Explorer. The **About** box should display **Cipher Bits** as **128 bits** or higher.



Enable MSN

From (MSN username):

From (MSN password):

Default to:

Default message:

Test it

0 MSN messages send since last reset

Reset

In order to send a Microsoft Network (MSN) message, Servers Alive must log on to the MSN network. Because an MSN user can have only one concurrent log-in, you should use a different user account for sending the MSN alerts than the user account that you use to receive the alerts.

If sending an MSN alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection. For more information, see *Failure Settings* (on page 40).

Enable MSN®

Click this check box to send messages over the Microsoft Network (MSN) messenger service and enter information on the dialog box.

From (MSN Username)

Enter the name for your MSN account.

From (MSN Password)

Enter the password for your MSN account.

Default To

Enter the default name to appear in the To line of the message.

Default Message

Enter text that you want to appear in the message each time it is sent.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Test It

Tests the settings. You should receive a test message. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

AIM (AOL Instant Messenger) (Setup Dialog Box)

Enable AIM

AIM alert is still within Servers Alive although in most cases it will NOT work correctly.

From (AIM username):

From (AIM password):

Default to:

Default message:

0 AIM messages send since last reset

In order to send an AIM message, Servers Alive must log on to the AIM network. Because an AIM user can have only one concurrent login, you should use a different user account for sending the AIM alerts than the user account that you use to receive the alerts.

In most cases, an AIM alert does not work correctly. If sending an AIM alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection. For more information, see *Failure Settings* (on page 40).

Enable AIM

Click this check box to enable this feature and enter information on the dialog box.

From (AIM Username)

Enter the AIM name that you want to appear on the alert message as the sender.

From (AIM Password)

Enter the appropriate AIM password for the sender name.

Default To

Enter the AIM name to which the alert is sent.

Default Message

Enter text for the body of the message. This is the default text for the alert message.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

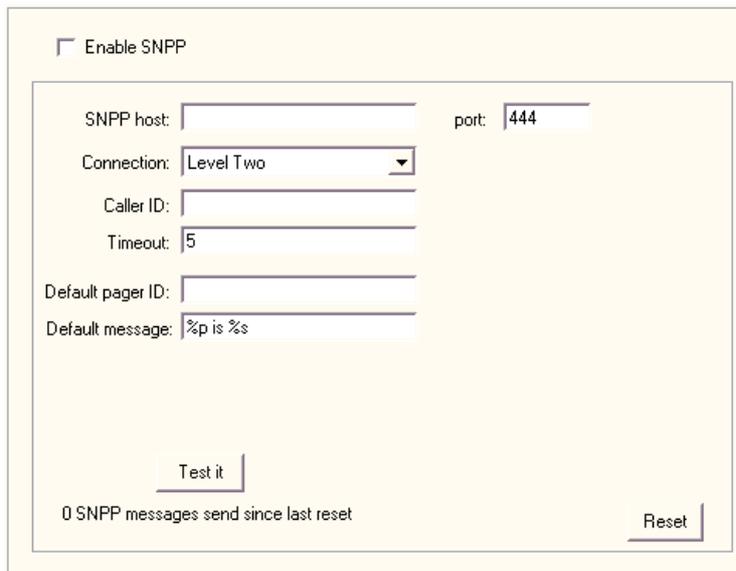
Test It

Tests the settings. You should receive a test message. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

SNPP (Network Paging) (Setup Dialog Box)



The dialog box is titled "SNPP (Network Paging) (Setup Dialog Box)". It features a yellow background and a white border. At the top left, there is a checkbox labeled "Enable SNPP". Below this, there is a large white rectangular area containing several input fields and a dropdown menu. The fields are: "SNPP host:" (text input), "port:" (text input with "444" entered), "Connection:" (dropdown menu with "Level Two" selected), "Caller ID:" (text input), "Timeout:" (text input with "5" entered), "Default pager ID:" (text input), and "Default message:" (text input with "%p is %s" entered). At the bottom of the dialog, there is a "Test it" button, a status indicator "0 SNPP messages send since last reset", and a "Reset" button.

If sending an SNPP alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection. For more information, see *Failure Settings* (on page 40).

Enable SNPP

Allows you to send messages over the Simple Network Paging Protocol (SNPP). Click the check box to enable the feature and enter values on the dialog box.

SNPP Host

Enter the name of the host.

Port

Enter the port that you want to use.

Connection

Click to select the level of the connection that you prefer. **Level Two** allows you to enter information about caller ID in the **Caller ID** box.

Caller ID

Enter the caller ID of your SNPP account.

Timeout

Enter the time that you want Servers Alive to keep trying to send you a message.

Default Pager ID

Enter the pager ID.

Default Message

Enter the text that you want to appear in the body of the message. The default message displays the following tokens:

- %p for the pretty name.
- %s for the status.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Test It

Tests the settings. You should receive a test message. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

SMPP (Network Paging) (Setup Dialog Box)

If sending an SMPP alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection. For more information, see *Failure Settings* (on page 40).

Enable SMPP

Allows you to send messages over the Short Message Peer to Peer (SMPP) protocol. Click the check box to enable the feature and enter values on the dialog box.

SMPP Host

Enter the name of the host.

Port

Enter the port that you want to use. This option specifies the TCP/IP port on the SMPP server that the gateway should connect to.

Encoding Schema

Select from a list of options for encoding the message including: **SMSC Default**, **IA 5 ASCII**, **Cyrillic**, **8 bit binary B**, and so forth.

System Type

Specifies an optional parameter for logging in. This parameter should be set only if required by the SMPP server. The system administrator provides this value, which is usually a short text string.

System ID

Enter the user name, or system ID, for the gateway to use when connecting to the SMPP server.

Password

Indicates the password for the gateway to use when connecting to the SMPP server.

Many SMPP SMSC providers require specific parameters for SMPP. Servers Alive uses automatic defaults for the TON and NPI values that work for most SMPP connections. For more information about the parameters you should use, contact your SMPP provider.

Bind TON

Select from several options including **Unknown**, **International**, **National**, **Net Specific**, and so forth.

Bind NPI

Select from several options including **ISDN**, **Data**, **Telex**, and so forth.

If one of the following options is set, the values are used in place of the automatic values determined by the software: **SSource TON**, **SDestination TON**, **SSource NPI**, **SDestination NPI**.

SSource TON

Applies to the sender address that is associated with messages that are submitted to the SMSC. Select from several options including **Unknown**, **International**, **National**, **Net Specific**, and so forth.

Servers Alive automatically sets the **SSource TON** to 1 if the sender address is in international format, or, rather, starts with a + character. If the sender address is not in international format, Servers Alive sets the **SSource TON** to 0. The software sets the **SSource NPI** to 1 in both cases. If the sender address contains alphabetic characters and is not a valid phone number, the software sets the **SSource TON** to 5 and the **SSource NPI** to 0.

SSource NPI

Applies to the sender address that is associated with messages that are submitted to the SMSC. Select from several options including: **ISDN**, **Data**, **Telex**, and so forth.

SDestination TON

Applies to the receiver addresses for messages that are submitted to the SMSC. Select from several options including **Unknown, International, National, Net Specific**, and so forth.

SDestination NPI

Applies to the receiver addresses for messages that are submitted to the SMSC. Select from several options including **ISDN, Data, Telex**, and so forth.

From

Enter a name or a fully-qualified domain name; for example, **Servers Alive** or **serversalive@company.com**. Your entries depend on the way your SMPP server is configured; most SMPP servers require a FROM name that looks like a valid email address, such as **salive@domain.com**. If you have trouble, please contact your mail server administrator for the appropriate settings.

Test It

Tests the settings. You should receive a test message. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Default To

Enter the default name to appear in the To line of the message.

Message

Enter the text that you want to appear in the body of the message. The default message displays the following tokens:

- %p for the pretty name.
- %s for the status.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.

- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

Don't Use MULTI for Sending to Multiple Recipients

Select this check box if your host provider does not support the MULTI option. The SMPP alert uses the MULTI option by default when sending an alert to several recipients.

Include SMPP Debug Messages in the Log File

Set this option to include information about SMPP errors in the log file.

NotePager - PageGate (Setup Dialog Box)

To use NotePager and the protocols that it supports, including SNPP, WCTP, and SMTP, you must install the NotePager product from PageGate at the *NotePage web site* (<http://www.notepage.net/>).

Enable NotePager - PageGate

From:

Default to:

Default message:

Path to save to:



0 messages generated since last reset

Enable NotePager - PageGate

Allows you to send messages using NotePager. Click the check box to enable the feature and enter values on the dialog box.

Default To

Enter the default name to appear in the To line of the message.

Default Message

Enter text for the body of the message. This is the default text for the alert message.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Path to Save to

Enter the directory path to save the message to.

Test It

Tests the settings. You should receive a test message. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

Reset

Resets the counter that tracks the number of messages that the alert sends when completing a check. You can view the number of messages sent since the last time that you clicked the **Reset** button.

Executive Alerts (Setup Dialog Box)

The **Executive Alerts** branch of the **Setup** dialog box allows you to create a schedule of when certain alerts are sent based on the criteria that you select. The criteria include checking certain categories of entries, such as all the entries or entries in a certain group, or a certain percentage of a category. You can also select the type of protocol, such as SMTP, and condition of the server, such as down or in maintenance.

When you click the **Add** or **Edit** button, the **Add/Edit Executive Alert** dialog box appears.

Executive When Tab (Add/Edit Executive Alert Dialog Box)

Select one of the following options and enter the appropriate information for when you want to receive an alert.

An Entry of _____

Select an option to determine the type of entry that sends an alert when the alert check encounters the conditions that you enter.

- If you select **All**, then the executive alert is sent when all entries meet the criteria you enter in the boxes. All entries are included in the conditions.
- If you select **Check Type**, you can click the protocol you want in the dropdown list that appears. The executive alert is sent when all

entries of a certain type of check protocol meet the criteria you enter in the boxes.

- If you select **Group**, you can click a group of entries that you have created from the dropdown list. The executive alert is sent when all entries in the group meet the criteria you enter in the boxes.

Is _____ for More than _____ Minutes

Specify the condition and minimum number of minutes that the condition exists for the entry that you want an alert for:

- **Down,**
- **Possible Down,**
- **Unavailable,**
- **Maintenance,**
- **Up,**
- **Unchecked,**
- **Possibly Available.**

For example, you can enter the following conditions to send an alert when all entries are down for at least 30 minutes:

An Entry of __All__

Is __Down__ for More than __30__ Minutes

More than _____ % of _____

Enter a percentage of the number of entries to check a condition for. This is the percentage of servers in the selected category that meet the conditions you enter in the **Is** box.

- If you select **All Entries**, then the executive alert is sent when all entries meet the criteria you enter in the boxes.
- If you select **All Entries of Check Type**, you can click the protocol you want in the dropdown list that appears. The executive alert is sent when all entries of a certain type of check protocol meet the criteria you enter in the boxes.
- If you select **All Entries of Group**, you can click a group that you have created from the dropdown list that appears. The executive alert is sent when all entries in the group meet the criteria you enter in the boxes.

Are _____

Specify the condition to check before sending the alert message:

- **Down,**
- **Possible Down,**
- **Unavailable,**
- **Maintenance,**
- **Up,**

- **Unchecked,**
- **Possibly Available.**

For example, to check send an alert when 50% of all entries are in maintenance mode, you can enter the following:

More than 50 **% of** All Entries

Are Maintenance

Logging (Setup Dialog Box)

The two different editions of Servers Alive provide slightly different logging capabilities:

- The Standard edition accepts 1000 entries.
- The Enterprise edition accepts 5000 entries and provides logging capabilities to an ODBC-compliant database. The Enterprise edition also offers RRD Tools (Round Robin Database) for processing and displaying logs.

Logfile (Setup Dialog Box)

For more information about logging to a file or to a database, see one of the following sections.

To File (Logfile) (Setup Dialog Box)

Enable File Logging

Click the check box to enable Servers Alive to log all its activities to a log file.

Log File

Fixed Name

Select this box and enter the name of the log file, if you want Servers Alive to log events to a fixed log file. All new logging is appended to the end of the file.

Automatically Change the Name Every Month

Click this option to allow Servers Alive to rotate your log file every month. The file is written to the Servers Alive product directory.

Automatically Change the Name Every Day

Click this option to allow Servers Alive to rotate your log file every day. The file is written to the Servers Alive product directory.

Automatically Change the Name Every Hour

Click this option to allow Servers Alive to rotate your log file every hour. The file is written to the Servers Alive product directory.

Log Options

Advanced Options

Path Used for Auto-Generated Logfiles

Enter the path that you want for the log file that is automatically generated. By default, Servers Alive saves the log file, except for the fixed name log, in the same directory as Servers Alive. You can change this by entering the path that you want in the box.

Username

Enter the user name for the log file.

Password

Enter the password for the log file.

Registry Settings for Saving a Retrieved Web Page in the Log File

When performing a URL check with a “contains” clause, Servers Alive saves 150 bytes (by default) of the retrieved web page in the log file. You can change how much is saved or changed by adding or editing the following registry entry:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Log\HTTPBytesinLog (string)
```

A value of -1 means the full web page. Use this with care since your log file will grow very fast. A value of 0 defaults back to 150 bytes.

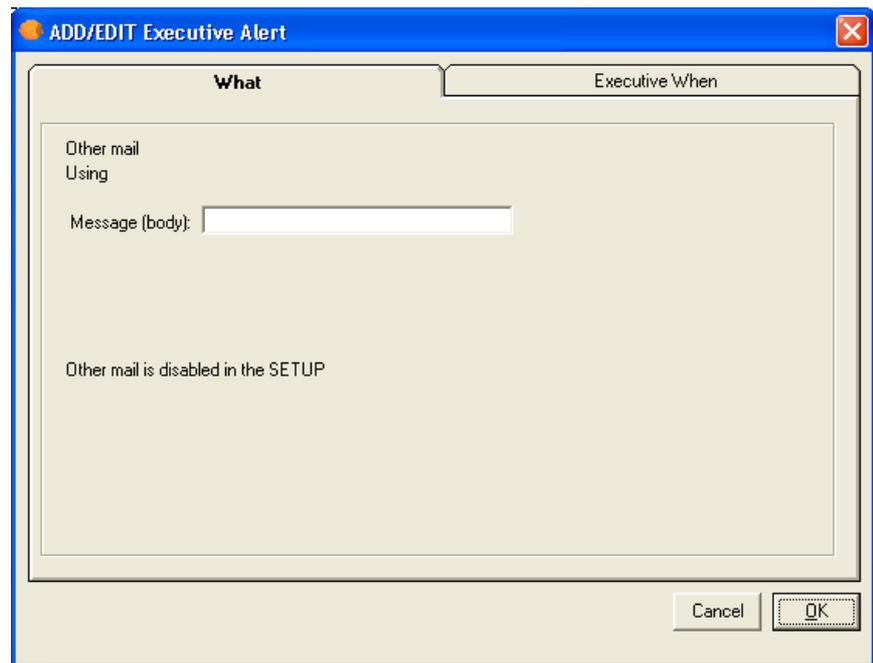
If you want to safeguard the Servers Alive logs against missing data due to power failures or critical operating system errors, you can request that Servers Alive close the log file each time the software writes to the log file with the following registry entry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Log\CloseEachTime (dword)

Value 1 forces Servers Alive to close the log file each time the software writes to the log file. This value changes the default action.

Add/Edit Executive Alert Dialog Box

You can display this dialog box when you click the **Add** or **Edit** button on the **Executive Alerts** branch of the **Alerts** tree on the **Setup** dialog box.



The options of the **What** tab of the **Add/Edit Executive Alert** dialog box are different, depending on the option you select when you click the **Add** button. The following list shows the different settings that appear on the **What** tab for each option:

What Tab: Send SMTP Mail (Primary) (on page 182)

What Tab: Send SMTP Mail (Alternate) (on page 185)

What Tab: Send Other Mail (on page 188)

What Tab: Alpha Page/SMS (on page 189)

What Tab: Send Network Page (SNPP) (on page 191)

What Tab: Send Network Page (SMPP) (on page 193)

What Tab: Generic NotePager-PageGate Message File (on page 195)

What Tab: Numeric Page (on page 196)

What Tab: Execute Command (on page 198)

What Tab: Sound (on page 205)

What Tab: HTTP(S) GET/POST (Add/Edit Alert Dialog Box) (on page 206)

What Tab: Send ICQ Message (on page 208)

What Tab: Send MSN Message (on page 210)

What Tab: Send WinPOPUP Message (on page 214)

What Tab: Send AIM Message (on page 212)

What Tab: Send SNMP Trap (on page 216)

What Tab: Do an SNMP SET (on page 217)

The dialog box also displays the following tab:

Executive When Tab (on page 54)

To Database (Logfile) (Setup Dialog Box)

Enable database logging

ODBC connection string: ...

Table:

Create table

This feature is only available in the ENTERPRISE version

This feature is available only in the Enterprise edition and free version of Servers Alive. It is not available in the Standard edition.

Enable Database Logging

Click the check box to enable this option.

ODBC Connection String

Enter the connection string for the Open Database Connectivity (ODBC) database. Click the browse button to open the **Create Database Connection String dialog box** (on page 61) and select a data source. The

browse button is not available until you click the **Enable Database Logging** check box.

You can also use UDL files for database logging. Because UDL files use OLEDB providers, the files use memory more efficiently than ODBC drivers. To create a UDL file, open Notepad and save an empty file as <your_filename>.UDL. Double-click the .UDL file to open the **Data Link Properties** dialog box and configure the UDL connection. To use the file, enter the path to the UDL file as a connection string in the **ODBC Connection String** box.

Table

Enter the name of the table for the database that you want to send information to.

Enter this name before you click the **Create Table** button.

Create Table

Click this button to create the database.

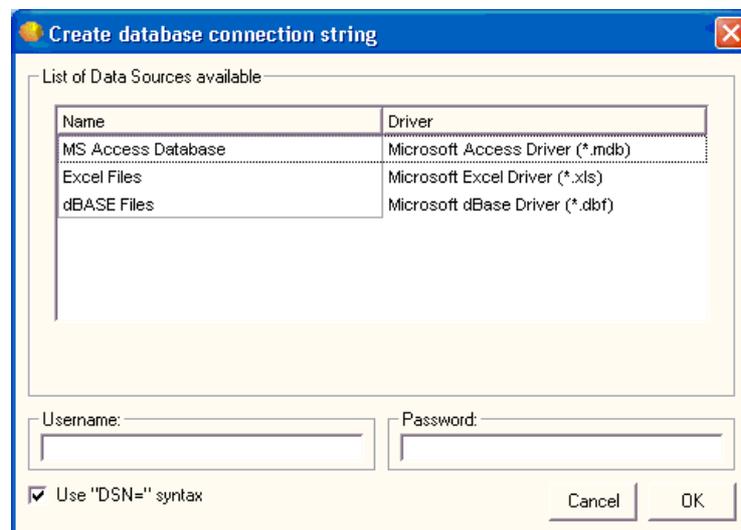
Registry Settings for Date and Time Format

You can define the date and time format for the database logging by specifying the following registry entry keys. When the registry keys are empty, the date and time format of the operating system are used.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Log\db_DateFormat

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Log\db_Timeformat

Create Database Connection String Dialog Box



List of Data Sources Available

Name

Lists the type of databases available on your computer.

Driver

Lists the application drivers used to create the corresponding database.

Username

Enter the user name for logging in to the database.

Use "DSN=" Syntax

Click this check box to create a connection string in the following syntax:

```
oConn.Open "DSN=mySystemDSN;" &"Uid=myUsername;" &
"Pwd=myPassword"
```

Password

Enter the password used to log in to the database.

Syslog (Setup Dialog Box)

Syslog is a standard method of centralizing various logs. You can use a syslog server to store your Servers Alive logs in a remote location for later perusal or long-term storage. If you want to use the Syslog feature, there are various freeware syslog servers on the Internet. Syslog is an established standard so Servers Alive works with any syslog servers.

For a Windows based syslog server, we recommend Kiwi Syslog Daemon, available from www.kiwisyslog.com (<http://www.kiwisyslog.com/>).

You must enable syslog logging for each particular entry that you want to log. It is not turned on for every entry by default. You should determine if you want to use this service before adding many entries so that you can turn it on as needed as you add entries.

Enable Syslog

Click to enable this feature and enter information on the dialog box.

Syslog Host (Name or IP)

Enter an IP address for your server.

Port

Enter the port for your server. The port number is usually 514 unless you are using a non-default port number on your syslog server. When you have entered the server and port, click the **Apply** button and then the **Test It** button. You can check the logs on your syslog server to verify that the server is correctly logging events from Servers Alive.

Priority to Use When Entry Is

Specifies which entries are logged and how often they are logged.

Down

Specifies how to log an entry when the server is down. You can choose from **Emergency, Error, Alert, Critical, Warning, Info, Notice, and Debug**.

Up

Specifies how to log an entry when the server is up.

Maintenance

Specifies how to log an entry when the server is in maintenance mode.

Unavailable

Specifies how to log an entry when the server is unavailable.

When to Send

Always

Specifies that the log message should be sent on every check cycle.

Status Change

Specifies to send the log message only when the log status changes.

Options

Include RFC header

Adds RFC compliancy. This RFC compliant header adds information to the message, such as date stamp of send, or who sent the message, and the name of the process that sent the message.

Use TCP

Sends the syslog message with TCP to the remote syslog server, usually on port 1468.

Test It

Click to verify your settings. After you have entered the server and port, click the **Apply** button and then the **Test It** button. You can check the logs on your syslog server to verify that the server is correctly logging events from Servers Alive.

Registry Settings for Process Name

By default, the syslog messages sent by Servers Alive include the process name “Servers Alive”. You can remove this by adding or editing the following registry entry:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SYSLog\WithoutProcess (dword)
```

Value of 1

Statistical Logging (Setup Dialog Box)

Servers Alive only writes entries to the statistical log when an entry changes state; for example, when an entry goes from up to down.

You can choose to export a statistical log file to either a file or, in the Enterprise edition, a database. You can set options to write the log to a file or a database.

Statistical logging is created only at the end of a check cycle. When you perform a manual check, the data is not written to the log. Thus, in the Main window, when you select an entry and right-click, you can select **Check Entry Now** on the shortcut menu. If a change of state occurs, no data is written to the database. The new status of the entry is not recorded to the log.

To File (Statistical Logging) (Setup Dialog Box)

You can export a statistical logging file in Servers Alive. The format of the log file is as follows:

```
<prettyname>,<UID>,<current status>,<previous status>,<current date>,<current time>,<date of previous status change>,<time of previous status change>,<time difference between previous and current in minutes>
```

The values for the status are as follows:

- Down = 1
- POSDOWN = 2
- Unavailable = 3
- Maintenance = 4
- Up = 5
- Unchecked = 6
- POSUNAVAILABLE = 7

The dates within the file are in the format `yyyymmdd`. The times are in the format `hhmm`, unless you select seconds as the unit, which makes the time format `hhmmss`.

The values you can get for the status are as follows:

- 1 down
- 3 unavailable
- 4 maintenance
- 5 up

Export Statistical Logging File

Click to activate this feature and enter settings on the dialog box.

Path

Enter the path to which you want to write the log file.

File Extension

Specify the file extension for the log file.

Separator

Specify the separator for entries in the log file.

Time Unit

Select the time unit used to indicate how long an entry was in a certain status before the status changed. The statistical logging creates an entry, in the log file, when the entry that is checked changes status; for example: from up to down. The logging includes the time the entry was in a previous status. So, for example, when the status goes from up to down, the record shows the time the entry was up before the server went down. The **Time Unit** box determines how the software indicates how long the entry was in that status: x minutes - x hours, and so forth.

Registry Settings for the Host Name

You can also edit the Windows registry to define whether to use the host name:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StatsLog\AlwaysHostName (regdword)

0 - use the host name if no pretty name is defined, otherwise use the pretty name.

1 - always use the host name.

To Database (Statistical Logging) (Setup Dialog Box)

Export statistical logging to database

ODBC connection string: ...

Table:

Create table

Time unit:

Include hostID

Include cycle start (yyyyMMddhhmmss)

This feature is only available in the ENTERPRISE edition

This feature is available in the free version of Servers Alive and in the Enterprise edition. This feature is not available in the Standard edition.

Export Statistical Logging to Database

Click the check box to enable this feature and enter settings on the dialog box.

ODBC Connection String

Enter the connection string for the Open Database Connectivity (ODBC) database. Click the browse button to open the **Create Database Connection String dialog box** (on page 61) and select a data source.

You can also use UDL files for database logging. Because UDL files use OLEDB providers, the files use memory more efficiently than ODBC drivers. To create a UDL file, open Notepad and save an empty file as <your_filename>.UDL. Double-click the .UDL file to open the **Data Link Properties** dialog box and configure the UDL connection. To use the file, enter the path to the UDL file as a connection string in the **ODBC Connection String** box.

Table

Enter the name of the table for the database that you want to send information to.

Enter this name before you click the **Create Table** button.

Create Table

Click this button to create the database.

Time Unit

Select the time unit used to indicate how long an entry has been in a certain status before the status changed. The statistical logging creates an entry, in the database, when the entry that is checked changes status; for example: from up to down.

The logging includes the time the entry was in a previous status. So, for example, when the status goes from up to down, the record shows the time the entry was up before the server went down. The **Time Unit** box determines how the software indicates how long the entry was in that status: x minutes - x hours, and so forth.

You can define the date and time format for the database logging by specifying the following registry entry keys. When the registry keys are empty, the date and time format of the operating system are used.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers
Alive\StatsLog\db_Dateformat

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers
Alive\StatsLog\db_Timeformat

Include Host ID

Click the check box to include the ID of the host server.

Include Cycle Start (yyyymmddhhmmss)

Select the check box to include the date and time for the start of the cycle. The format is yyyymmddhhmmss. For example, 20041206093035 would mean the cycle started at December 6, 2004 at 9:30:35 in the morning.

Registry Settings for Host Name

You can edit the Windows registry with the following registry key to define the size of the host name, also known as the pretty name, within the database for statistical logging:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers
Alive\StatsLog\db_prettyname_size (string)

You can also edit the Windows registry to define whether to use the host name:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers
Alive\StatsLog\db_AlwaysHostName (regdword)

0 - use the host name if no pretty name is defined, otherwise use the pretty name.

1 - always use the host name.

Interchange Data (Setup Dialog Box)

You can choose to export interchange data to either a file or, if you have the Enterprise edition, a database. You can set options for either of these two features.

To File (Interchange Data) (Setup Dialog Box)

This feature exports a result file after each check file that contains the status of all entries. You must specify the file name, including the full path, to which the export file is written.

The interchange log file is overwritten after each check cycle. You must get the data after each cycle.

Export Interchange Data to File

Click the check box to enable this feature and enter settings in the dialog box.

File Name

Enter the name of the file to write the information to. Click the browse button to select a file on the computer.

Command

Enter the command. Click the browse button to select a command file on the computer. The command is executed after the interchange log file is generated. You can use a command to insert the interchange data into a database. However, this process is easier if you have the Enterprise edition of Servers Alive.

Separator

Select the separator to use as a column delimiter in the log file. If the separator that you select appears within the data that should be logged, the software replaces that separator with an underscore `_`. For example, you might select a comma as a separator. The Extra Info field contains a comma, as follows:

Welcome, coming from IP 1.2.3.4

The software converts the comma in the Extra Info field to the following text:

Welcome_ coming from IP 1.2.3.4

Fields to Include in Interchange Data

Click the following check boxes to include the information in the log.

Host Name

Includes the host name in the log.

Pretty Name

Includes the pretty name in the log.

Check Info

Includes information that is checked. For example, for an SMTP check, the information could be (TCP port 25) - ping.

Extra Info

Includes the response on the check. For example, this information could be "Service is running" or "404 not found error" for a URL check.

Additional Info

Includes additional information in the log for the round trip or the time necessary to complete the test.

Number of Cycles Since Start

Includes the number of cycles since the start. The UID is the unique ID that Servers Alive assigns to each host entry. This UID cannot be changed.

Host ID

Includes the ID of the host server.

Group ID

Includes the group ID.

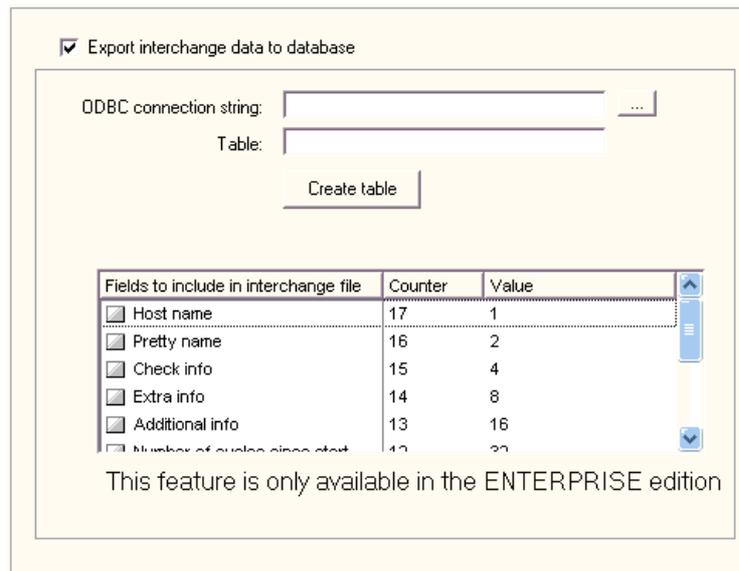
Cycle Start

Includes the date and time for the start of the cycle. The format is `yyyymmddhhmmss`. For example, `20041206093035` would mean the cycle started at December 6, 2004 at 9:30:35 in the morning.

Remark

Includes a remark in the log file.

To Database (Interchange Data) (Setup Dialog Box)



This feature is available in the free version of Servers Alive and in the Enterprise edition. This feature is not available in the Standard edition.

Export Interchange Data to Database

Click the check box to enable this feature and enter settings in the dialog box.

ODBC Connection String

Enter the connection string for the Open Database Connectivity (ODBC) database. Click the browse button to open the **Create Database Connection String dialog box** (on page 61) and select a data source.

You can also use UDL files for database logging. Because UDL files use OLEDB providers, the files use memory more efficiently than ODBC drivers. To create a UDL file, open Notepad and save an empty file as `<your_filename>.UDL`. Double-click the `.UDL` file to open the **Data Link Properties** dialog box and configure the UDL connection. To use the file, enter the path to the UDL file as a connection string in the **ODBC Connection String** box.

Table

Enter this name before you click the **Create Table** button.

Enter the name of the table for the database that you want to send information to.

Create Table

Click this button to create the database.

Fields to Include in Interchange Data

Click the following check boxes to include the information in the log.

Host Name

Includes the host name in the log.

Pretty Name

Includes the pretty name in the log. You can enter the size of the **Pretty Name** in the box. If you enter or modify the size, recreate the table by clicking the **Create Table** button.

Check Info

Includes information that is checked. For example, for an SMTP check, the information could be (tcp port 25) - ping.

Extra Info

Includes the response on the check. For example, this information could be "Service is running" or "404 not found error" for a URL check.

Additional Info

Includes additional information in the log for the round trip or the time necessary to complete the test.

Number of Cycles Since Start

Includes the number of cycles since the start.

Host ID

Includes the ID of the host server.

Group ID

Includes the group ID.

Cycle Start

Includes the date and time for the start of the cycle. The format is `yyyymmddhhmmss`. For example, `20041206093035` would mean the cycle started at December 6, 2004 at 9:30:35 in the morning.

Remark

Includes a remark in the log file.

Registry Entries for Date and Time Format

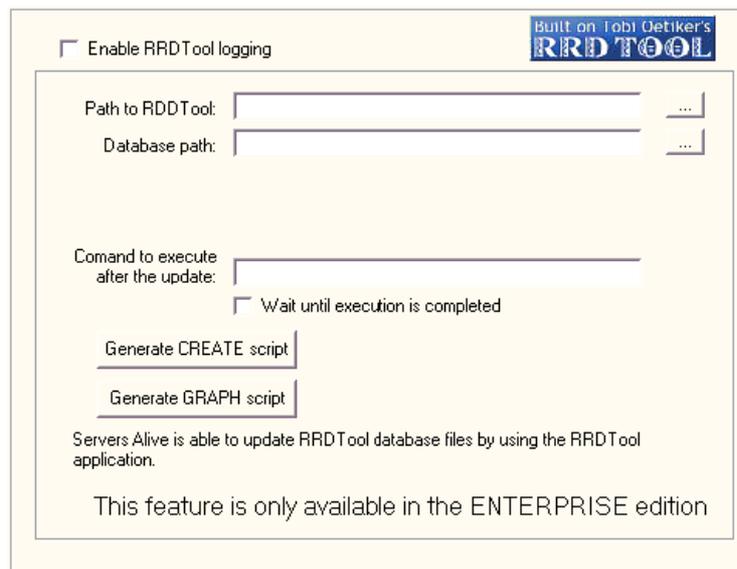
You can define the date and time format for the database logging by specifying the following registry entry keys. When the registry keys are empty, the date and time format of the operating system are used.

`HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Interchange\db_Dateformat`

`HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Interchange\db_Timeformat`

`HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Interchange\db_sqlcmd_before` (string) is the SQL command that is executed before interchange records are added to the database.

RRD Tools (Round Robin Database) (Setup Dialog Box)



This feature is available in the free version of Servers Alive and in the Enterprise edition. This feature is not available in the Standard edition.

The Round Robin Database (RRD) Tools store and display time-series data, such as network bandwidth, server load average, and so forth, from

many different data sources. The RRDTools compact the data so that it does not expand over time. The tool then displays graphs of the data.

For more information about RRDTools, see the *RRDTools web site* (<http://people.ee.ethz.ch/~oetiker/webtools/rrdtool/>).

Servers Alive updates existing RRDTools databases.

RRDTools databases give the following benefits:

- Round robin logging resulting in minimal data transfer.
- Fixed resolution logging with random data arrival.
- Storage of data at different resolutions in parallel.
- On-the-fly data consolidation.

The RRDTools graphs provide the following benefits:

- You can use data from any number of databases.
- You can display line, area, and stack charts.
- RRDTools perform powerful RPN math on data before graphing it.

Unlike linear databases, the size of an RRDTools database remains constant. In linear databases, the size continuously increases because new data gets appended to the end of the data table. In contrast, the maximum size of an RRDTools database is determined when the database is created. Data is added until the database reaches the maximum size. When the database reaches the maximum size, the new data overwrites existing data at the beginning point.

Other databases store the values as supplied. RRDTools can calculate the rate of change from the previous to the current value and store this information instead.

Other databases get updated when values are supplied. The RRDTools only needs data at pre-defined time intervals. If the database does not get a new value during the interval, the database stores an Unknown value for that interval. So, when using the RRDTools database, you must use scripts that run at regular intervals to ensure a constant flow of data.

Enable RRDTool Logging

Click to enable logging of data with the RRDTools.

Path to RRDTool

Enter the path where you installed the RRDTools.

Database Path

Enter the path where you want the databases stored.

Command to Execute After the Update

Enter a command to start Servers Alive updates to the RRDTools databases. For example, you can enter the name of the .bat file that Servers Alive generates to create the data graphs.

If you enter the data graph command and want to include the graph in the Servers Alive HTML template-based output, you should click the **Wait Until Execution Is Completed** check box.

Wait Until Execution Is Completed

Click this check box to ensure that the databases are updated before the command executes.

Generate Create Script

Click to generate a .bat file that creates the databases for all the entries. You can review the .bat file before executing it.

Generate Graph Script

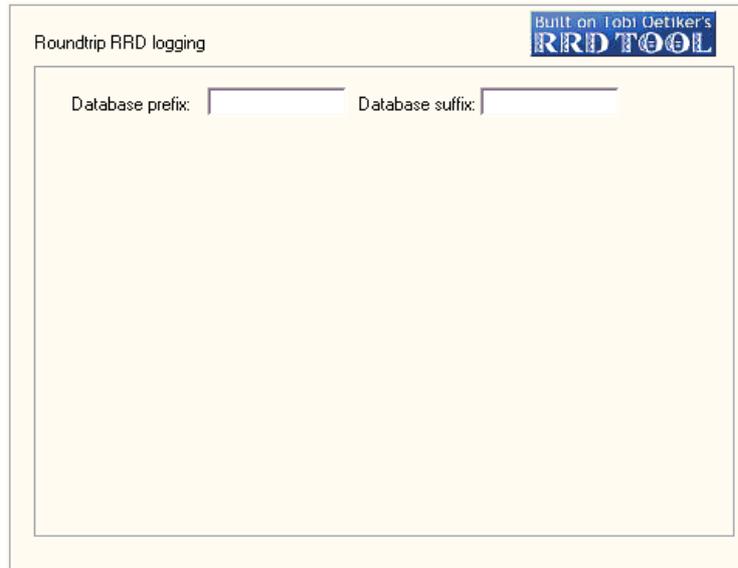
Click to generate a script that creates the graphs of data in the databases. Servers Alive does not actually create the graphs directly. You must run the .bat file to create the graphs.

The graphs are in .gif or .png format. You can include these graphs in web pages.

By default, the RRDTools logging is completed in UTC (GMT) time. You can change the logging time to the local time by editing the Windows registry with the following key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\RRD\UseLocalTime (dword) to 1

RRD Logging (Round Robin Database) (Setup Dialog Box)



Roundtrip RRD logging

Built on Tobi Oetiker's
RRD TOOL

Database prefix: Database suffix:

Database Prefix

Enter the prefix for the names of all the databases. This ensures that each database has a unique name. Once you enter the prefix, you should not change it.

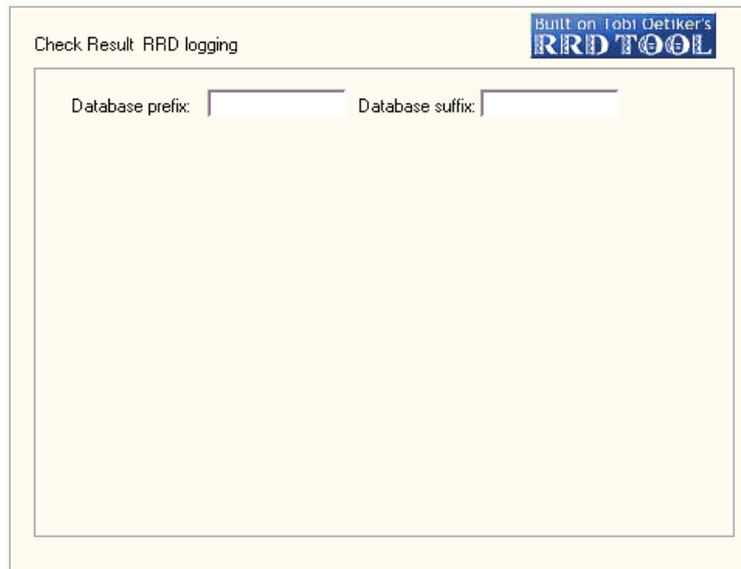
By default, Servers Alive creates and updates database files with the name `xy`, where `xy` is the unique ID of the entry. For example, if you want to name the database `sa_xy.rrd`, enter `sa_` for the prefix and `.rrd` for the suffix.

Database Suffix

Enter the suffix for the names of the databases. See the previous paragraph.

Check Result RRD Logging (Round Robin Database) (Setup Dialog Box)

RRD logging shows the results of the check.



Check Result RRD logging

Built on Tobi Oetiker's
RRD TOOL

Database prefix: Database suffix:

Database Prefix

Enter the prefix for the names of all the databases. This ensures that each database has a unique name. Once you enter the prefix, you should not change it.

By default, Servers Alive creates and updates database files with the name `xy`, where `xy` is the unique ID of the entry. For example, if you want to name the database `sa_xy.rrd`, enter `sa_` for the prefix and `.rrd` for the suffix.

Database Suffix

Enter the suffix for the names of the databases. See the previous paragraph.

Output (Setup Dialog Box)

You can specify outputs to an HTML page, WAP page, or status summary message.

HTML Page (Setup Dialog Box)

If you choose to have Servers Alive generate an HTML page that is based on a template, you have tools that allow you a higher degree of control over the final product. To use a template, you must first tell Servers Alive the name of the resulting page and then select the HTML template to use. Servers Alive reads through the template after each cycle and uses the template to generate the end result page.

A template has three parts and supports a set of custom HTML tags that Servers Alive replaces on-the-fly with the associated information. The three parts are as follows:

- Header
- Core
- Footer

The header part is everything before the `<sa_report>` tag. The header is only interpreted once per page generation. Everything between `<sa_report>` and `</sa_report>` is interpreted for every host that must be on the page. The footer part is the part after `</sa_report>` and is also interpreted only once.

You can add an optional parameter to `sa_report` called SORT that determines how the hosts are sorted. The default sort is set in the software.

- To sort by status, you would use `<sa_report sort=status>`.
- To sort by the type of check, you use `<sa_report sort=check>`.

You can add the name of the top level group with `<sa_topgroup_name>`. Use the following tags for the header and footer:

- `<sa_topgroupheader>`
- `<sa_topgroupfooter>`

The interpretation of the header and footer part converts these tags to their current value:

`<sa_currentlongtime>` - 1:32:07 PM.

`<sa_currentshorttime>` - 13:32.

`<sa_currentlongdate>` - Day, Month Date, Year (Monday, May 1, 2002).

`<sa_currentshortdate>` - Day/Month/Year (5/1/2002).

Note that `sa_currentlongtime`, `sa_currentshorttime`, `sa_currentlongdate` and `sa_currentshortdate` use the format that is defined within the international settings of the control panel of the Servers Alive computer.

`<sa_version>` - ex. 2.1.952.

`<sa_cycles>` - Number of cycles since Servers Alive started.

`<sa_cyclestart>` - Date/time when the cycle started.

`<sa_cyclestop>` - Date/time when the cycle stopped.

`<sa_cycletime>` - Time the last check cycle occurred in minutes-seconds format.

`<sa_alerts>` -List of all alerts for this entry.

The `<sa_alerts>` tag displays a `
` tag between each alert, by default. You can change the `
` to another value by entering the string you want in the following registry entry:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU
Consulting\ServersAlive\StartUp
\HTMLAlertsSeparator(string)
```

`<sa_startshorttime>` - Returns the time, in a short format, when Servers Alive started.

`<sa_startlongtime>` - Returns the time, in a long format, when Servers Alive started.

`sa_startshortdate>` - Returns the date, in a short format, when Servers Alive started.

`<sa_startlongdate>` - Returns the date, in a long format, when Servers Alive started.

`<sa_nr_entries>` - Returns the number of entries.

`<sa_nr_unavailable>` - Returns the number of entries that are not available.

`<sa_nr_unchecked>` - Returns the number of entries that are unchecked.

`<sa_nr_maintenance>` - Returns the number of entries in maintenance.

`<sa_fullpath>` - Displays the path of the entry.

Additional structures are available for headers and footers:

- `<sa_groupheader>` `</sa_groupheader>`
- `<sa_groupfooter>` `</sa_groupfooter>`
- `<sa_select_case STATUS>`

- `<sa_case>`
- `</sa_select_case>`
- `<sa_nr_up>` - Returns the total number of up entries.
- `<sa_nr_down>` - Returns the total number of down entries.
- `<sa_receivedtraps>` - Returns the SNMP received traps.

For more information, see *SNMP Trap Receiver (Setup Dialog Box)* (on page 122).

- `<sa_currentresult>`
- `<sa_previousresult>`
- `<sa_currenttimeinms>`
- `<sa_previoustimeinms>`

The following parameters are valid within a group header and group footer:

- `<sa_group_name>`
- `<sa_group_up_entries>`
- `<sa_group_down_entries>`
- `<sa_group_maintenance_entries>`
- `<sa_groupid>`
- `<sa_group_path>`
- `<sa_group_number_of_entries>` - Returns the total number of entries within the group.

The following parameter is valid outside of the entries loop:
`<sa_receivedtraps>`.

The following parameter is valid within the entries loop: `<sa_groupid>`.

Within the core section, between `<sa_report>` and `</sa_report>`, you can specify many more options. You can use the following tags in the core section:

- `<sa_hostname>`
- `<sa_prettyname>`
- `<sa_status>`
- `<sa_statuschangedate>`
- `<sa_statuschangetime>`
- `<sa_onstatustime>` - Time that an entry is on a specific status in days-hours-minutes-seconds format; for example, 3d 7h 32 m 45s. If the days are 0, days are not displayed.

The HTML template can sort with `sa_onstatustime` to list the more recent up/down entries before older entries.

- `<sa_checkdescription>`
- `<sa_checkresponse>` - Same as the `%e` parameter. This tag returns whether the SAIF tag contains (CON) or does not contain (NC0) a specific string.

- `<sa_checkresponse_num>` - Shows only the numeric value of `<sa_checkresponse>`. For example, if `<sa_roundtrip>` returns 2567 ms, then `<sa_roundtrip_num>` shows 2567.
- `<sa_hostid>`
- `<sa_ip>` - IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- `<sa_uid>`
- `<sa_depends_on_uid>` - Gives the UID of the parent entry. When no parent entry exists, returns -1.
- `<sa_roundtrip>` - Same as the %a parameter.
- `<sa_roundtrip_num>` - Shows only the numeric value of `<sa_roundtrip>`. For example, if `<sa_checkresponse>` shows 220 myMailHost version 2.51, then `<sa_checkresponse_num>` shows 220.
- `<sa_rrd_roundtrip_graphname>` - Displays the name of the RRD graph that Servers Alive generates if this feature is enabled. For more information about this feature, click **RRD Tools (Round Robin Database) (Setup Dialog Box)** (on page 73).
- `<sa_rrd_checkresult_graphname>` - See the previous tag.
- `<sa_threshold>`
- `<sa_threshold_num>` - Shows only the numeric value of `<sa_threshold>`. This is the first value in the returned string. See `<sa_checkresponse_num>` for an example.
- `<sa_stats_avgtrtrip>` - Average roundtrip time of all UP cycles.
- `<sa_stats_avgtrtrip_num>` - Shows only the numeric value of `<sa_stats_avgtrtrip>`. This is the first value in the returned string. See `<sa_checkresponse_num>` for an example.
- `<sa_stats_maxrtrip>` - Maximum roundtrip time of all UP cycles.
- `<sa_stats_maxrtrip_num>` - Shows only the numeric value of `<sa_stats_maxrtrip>`. This is the first value in the returned string. See `<sa_checkresponse_num>` for an example.
- `<sa_stats_minrtrip>` - Minimum roundtrip time of all UP cycles.
- `<sa_stats_minrtrip_num>` - Shows only the numeric value of `<sa_status_minrtrip>`. This is the first value in the returned string. See `<sa_checkresponse_num>` for an example.
- `<sa_stats_upcycles>` - Number of UP cycles.
- `<sa_stats_uptime>` - Up time as a percentage.
- `<sa_stats_downtime>` - Down time as a percentage.
- `<sa_stats_maintenancetime>` - Maintenance time as a percentage.
- `<sa_stats_nondowntime>` - Consecutive UP time.
- `<sa_stats_downcycles>` - Number of DOWN cycles.
- `<sa_stats_maintenancecycles>` - Number of MAINTENANCE cycles.
- `<sa_stats_totalcycles>` - Number of total cycles.
- `<sa_inverted>` - Displays T if the Invert option is enabled for a check; otherwise, `sa_inverted` displays F.

- `<saif>` - Most powerful tag. See the following section for more information.

SAIF allows you to include certain HTML code depending on the condition of the current host. SAIF is used as follows:

```
<SAIF variable IS value AND variable IS value>something</SAIF>
```

```
<SAIF variable IS value OR variable IS value>something</SAIF>
```

```
<SAIF variable NOT value>something</SAIF>
```

Note that an SAIF statement must be on one continuous line. You can have many things inside the SAIF start and stop tags, but they must all be on one line, with no line breaks.

The variables you can check are listed here along with their possible values:

- `sa_status` – Possible values are UP, DOWN, MAINTENANCE, UNAVAILABLE, and UNCHECKED.
- `sa_check` – Possible values are NETWARE, ORACLE, SQL, URL, DISKSPACE, PROCESS, SERVICE, PING, IPXPING, UDP, SNMP, WINSOCK, EXTERNAL, and EXTERNALCOM.
- `sa_hostname` – Host name of the entry.
- `sa_hostid` – ID assigned to entry.
- `sa_UID` – Unique ID assigned automatically to the entry by Servers Alive.
- `sa_depends_on_UID` - Gives the UID of the parent entry. If no parent entry exists, the tag returns -1.
- `sa_depends_on_entry` - Returns the description or pretty name of the entry on which the current entry depends. For all entries that depend on another entry, the description of the entry on which they depend is shown within brackets. For hosts that do not depend on other hosts, nothing displays.
- `sa_checkresponse` - Same as the `%e` parameter. This tag returns whether the SAIF tag contains (CON) or does not contain (NC0) a specific string.
- `sa_prettyname` - Returns the pretty name of the entry.

```
<SAIF SA_STATUS IS DOWN>help us please it's down</SAIF>
```

```
<SAIF SA_STATUS IS DOWN AND SA_CHECK IS SQL>The SQL database is down, again.</SAIF>
```

```
<SAIF SA_CHECK IS ORACLE OR SA_CHECK IS SQL>A database.</SAIF>
```

```
<SAIF SA_CHECK IS URL OR SA_CHECK IS SERVICE OR SA_CHECK IS DISKSPACE AND SA_STATUS IS DOWN>Big alert. Houston we have a problem</SAIF>
```

```
<SAIF SA_HOSTNAME IS www.domain.com AND SA_STATUS IS DOWN>Might wanna update the resume, pal.</SAIF>
```

The evaluation is always processed from left to right and case does not matter. Also, you can include quotes around the values, but they are not necessary.

```
<SAIF SA_DEPENDS_ON_ENTRY NOT -
1>(<sa_depends_on_entry>)</saif>
```

If you would like additional information and a starter template, you can download a zip archive with helpful information from the *Woodstone web site* (<http://www.woodstone.nu/salive/doc/template.zip>).

If you choose to use the sort=check option in the sa_report tag, you can specify a custom priority for the various check types. You edit the following registry entry and supply a string that lists the order of importance for all checks.

```
HKEY_LOCALMACHINE\SOFTWARE\DBU Consulting\Servers
Alive\HTMLPage\CheckTypeSortOrder (string)
```

Ex. Default is WIPXSRDUQONME

(Winsock TCP (W) - Winsock UDP (I) - PING (P) - IPX Ping (X) - NT Service (S) - NT process (R) - Disk space (D) - URL (U) - SQL server (Q) - Oracle (O) - Netware (N) - SNMP (M) - External (E))

Additional features include the following tags used to filter, on the page, the entries that can be displayed based on their status.

```
<sa_report sort=
status=ALL,DOWN,UNAVAILABLE,UP,UNCHECKED>
```

You can have one or more of the list. For example, status=DOWN,UP gives only the entries that are up or down.

You can sort the entries for the page with the following tags. Sorting is always by group by default and then by the parameter that you give within the page.

```
sort=HOSTID,UID,NAME (or
HOSTNAME),CHECK,STATUS,PRETTYNAME,IP, ENTRYPATH
```

You can have one or more in the list; for example sort=name,check.

If you do not want to sort by group first, then set the nogroup option.

In the group **My Entries**, each entry is part of a group, or subgroup. The full path is the ENTRYPATH, or the path to the entry:

```
group \subgroup\subsubgroup
```



```
<!--The core section begins here. It is repeated for every host on the
page.-->
```

```
<sa_report sort=status>
```

```
<!--Use SAIF to change the color depending on whether the host is up or
down.-->
```

```
<tr bgcolor="<saif sa_status is down>ff0f00</saif><saif sa_status is
up>dbdcdf</saif>">
```

```
<TD BGCOLOR="#ffffff">
```

```
<!--Use SAIF to display the correct icon (not supplied with Servers
Alive)
```

```
depending on the host condition.-->
```

```
<SAIF SA_STATUS IS UP></SAIF>
```

```
<SAIF SA_STATUS IS DOWN></SAIF>
```

```
</TD>
```

```
<TD WIDTH=20 BGCOLOR="#8fbc8f">
```

```
<!--Display Host ID with SA_HOSTID.-->
```

```
<CENTER><FONT SIZE=2><sa_hostid></FONT></CENTER>
```

```
</TD>
```

```
<TD WIDTH="145">
```

```
<!--Display Pretty Name with SA_PRETTYNAME.-->
```

```
<FONT FACE=verdana SIZE=1><sa_prettyname></FONT>
```

```
</TD>
```

```
<TD WIDTH="280">
```

```
<!--Display the type of check with SA_CHECKDESCRIPTION.-->
```

```
<FONT FACE=verdana SIZE=1><sa_hostname>
(<sa_checkdescription>)</FONT>
```

```
</TD>
```

```
<TD WIDTH="80">
```

```
<!--Display check parameters with SA_THRESHOLD.-->
```

```
<FONT FACE=verdana
SIZE=1><CENTER><sa_threshold></CENTER></FONT>
```

```
</TD>
```

```
<TD WIDTH="70">
```

```
<!--Display the response time/data with SA_CHECKRESPONSE.-->
```

```
<FONT FACE=verdana
SIZE=1><CENTER><sa_checkresponse></CENTER></FONT>
```

```
</TD>
```

```
<TD WIDTH="175" valign="center" align="center">
```

```
<!--Display the time of the last status change with
SA_STATUSCHANGETIME and SA_STATUSCHANGEDATE.-->
```

```
<FONT FACE=verdana SIZE=1><sa_statuschangetime>,
<sa_statuschangedate></FONT>
```

```
</TD>
```

```
</TR>
```

```
<!--End of the core section.-->
```

```
</sa_report>
```

```
<!--Beginning of footer.-->
```

```
</TABLE>
```


Add

Click to enter the name of a web page. The name of the new page appears in the tree on the left side of the **Setup** dialog box.

Delete

Click to delete a web page.

Page Name

Enter the page name for the resulting HTML page. The name must also include the directory in which the file is created.

Template Based

Click to define a template file.

Template File

Enter a file name to use as boiler plate for the log file. You can click the browse button and select a file.

Header File

Customize the web page by specifying a custom HTML header page. You must also specify both the name and directory for these two files. If you use this option, you must also specify a footer file. When creating the HTML page, Servers Alive copies the header, adds the Servers Alive grid to it, and appends the footer at the end. To publish this page on the Internet or intranet, you need a third-party web server.

Footer File

Enter the file to use as a footer. See the previous option for more information.

Look

Customize the contents of the grid created by Servers Alive.

Technical

Specifies that the grid contains the name, port number, and pretty name.

Manager

Specifies that the grid contains the pretty name, but not the name and port number.

Exclude Time Info

Specify whether the grid includes the current status and the time/date that it detected that status. Click **Yes** or **No**.

Upload It Via

Select the check box to upload the page to your server with a protocol. Click one of the following protocols in the dropdown list.

- **FTP** - File Transfer Protocol

FTP is the least secure protocol.

- **SFTP** - Simple File Transfer Protocol,
- **FTP + SSL insecure data channel,**
- **FTP + SSL secured data channel,**
- **FTP + SSL wrapped SSL channel.**

FTP Server

Enter the name and IP of the remote FTP server; for example, you can enter: ftp.company.com.

If you want to upload the information using a port other than the default port, enter the host name and port number in the following format:
host_name:port.

Remote Name

Enter the directory and filename that the file should have on the FTP server; for example, if you want to upload to ftp.company.com and store the file in /user/me/directory and call the file myfile.asp, then you can enter: /user/me/directory/myfile.asp.

User Name

Specify the user name if the page must reside on a remote computer that requires authentication before you can write on the computer's disk.

Password

Specify the password.

PASV

Specifies to use passive ftp. This mode works better when you are connecting through a firewall than the normal FTP connection mode.

However, clicking this check box does not guarantee that PASV mode works for your connection. PASV causes some security risks, so some network administrators disable PASV mode on the server side.

Registry Settings for Reset Times

The upload of HTML pages can give a "Busy executing command" error when several files have to be uploaded. By default, Servers Alive waits 100ms after the upload to give the socket enough time to do a correct reset. If this is too much or too little time, you can change the value using the registry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\FTPSleepTime (dword) Max is 5000 (ms).

If you decide not to use a template page, refer to the following information.

Registry Settings for Status

For each of the different statuses that Servers Alive can display in the HTML pages, you can change the font type by adding or editing the following registry keys:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UpFontStart
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UpFontStop
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\DownFontStart
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\DownFontStop
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\MaintenanceFontStart
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\MaintenanceFontStop
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UnavailableFontStart
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UnavailableFontStop
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UncheckedFontStart
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UncheckedFontStop

Registry Settings for Last Check Times

Servers Alive displays the last check time just before or just after the table with the hosts. This can be configured by adding or editing the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\PlaceOfCheckTime (dword)
0 is below the table, 1 is above the table

Registry Settings for Tables

You change the default size of the columns by adding or editing the following registry values:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\HostColumn (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage>StatusColumn (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\SmallStatusColumn (string)

Example: "100" or "35%" or "AUTO"

To change the background color of the table of the generated HTML page, you must add or edit the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\TableBackground (string)

Example: "#FF0000" or "Red"

By default, Servers Alive generates `<TABLE BORDER="1">` as beginning of the table with the entry's statuses. Using the previous table background property gives you the option to specify `<TABLEBGCOLOR="tablebackground">`.

By adding or editing the following registry value you are now able to specify `<TABLE BGCOLOR="tablebackground" tableproperties>`

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\TableProperties (string)

Registry Settings for the Number of Host Down Times

If you want to see the number of times a host has been down since the last log filename change in the saved HTML file, you must add or edit the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\Includedownstats (dword) with a value of 1

Servers Alive can replace the words UP - DOWN - ... in the HTML page by icons. To do this you must add or edit the following registry values:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UpIcon (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\DownIcon (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\MaintenanceIcon (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UncheckedIcon (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\UnavailableIcon (string)

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\IncludeIcons (dword) when 1 the icons are substituted for the normal words.

Registry Settings for Different Pages

All the previous registry settings can be used differently for all the pages that Servers Alive must generate.

- The default page uses HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\ as the root for its registry keys.
- A web page with a display name of WebServers uses HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\HTMLPage\WebServers\ as the root for its registry keys.

WAP Page (Setup Dialog Box)

Servers Alive is the first monitoring platform to support alerting using WAP (wireless access protocol) pages. If you have a cellular device that can view WAP pages, you can spot check your servers while on the road.

Enable WAP Output

Click the check box to enable this feature and enter settings on the dialog box.

WAP alerting uses the concept of WML cards, which are similar to linked HTML pages, to allow you to choose the way you view Servers Alive's current status. There are four different page types that can be used.

To enable one of the pages, you type a full file path, including file name, or you can click the button on the right side of each location box and browse to the correct location.

All Hosts with Status (Small)

Produces a page that shows only the host names and their status.

All Hosts with Status (Large)

Produces a page with an initial view showing the names of the hosts and their status, with a link to show their exact check description.

If you are using this option, the resulting WML file can become very big. If you encounter size problems within your browser, you can use the **Only Down Hosts (Large)** option to produce a WML file. Future versions of Servers Alive will provide more control over what host should be in which WML file.

On some WML browsers, the size of a deck is limited. This is the compiled size of a deck, and, because no direct link exists between the size of the source WML file and the size of the compiled WML file, Servers Alive cannot limit the size of the source WML file. In addition, not all browsers have the same limit.

Only Down Hosts (Small)

Produces a page that shows only the host names of down servers and their status.

Only Down Hosts (Large)

Produces a page with an initial view showing the names of the down hosts and their status, with a link to show their exact check description.

Upload Via

Select the check box to upload the page to your server with a protocol. Click one of the following protocols in the dropdown list.

- **FTP** - File Transfer Protocol

FTP is the least secure protocol.

- **SFTP** - Simple File Transfer Protocol,
- **FTP + SSL insecure data channel,**
- **FTP + SSL secured data channel,**
- **FTP + SSL wrapped SSL channel.**

FTP Server

Enter the name and IP of the remote FTP server; for example, you can enter: ftp.company.com.

If you want to upload the information using a port other than the default port, enter the host name and port number in the following format:
host_name:port.

Remote Dir

Enter the directory and filename that the file should have on the FTP server; for example, if you want to upload to ftp.company.com and store the file in /user/me/directory and call the file myfile.asp, then you can enter: /user/me/directory/myfile.asp.

User Name

Specify the user name if the page must reside on a remote computer that requires authentication before you can write on the computer's disk.

Password

Specify the password.

PASV

Specifies to use passive FTP. This mode works better when you are connecting through a firewall than the normal FTP connection mode.

However, clicking this check box does not guarantee that PASV mode works for your connection. PASV causes some security risks, so some network administrators disable PASV mode on the server side.

If you want to store your WAP page on a remote server that requires authentication, you can use the following registry entries to supply the authentication information. The server listed here should be the same as the server listed in the software for WAP file storage.

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\Username (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP>Password (string)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\Server (string)

The upload of WAP pages can give a "Busy executing command" error when several files have to be uploaded. By default, Servers Alive waits 100ms after the upload in order to give the socket the time to do a correct reset. If this is too much or too little time, you can change the value in the registry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\FTPSleepTime (dword) Max is 5000 (ms).

Servers Alive does not provide any WAP access through its built-in web server. It only generates WML files that can be viewed with a WML

enabled browser, typically a WAP-enabled phone, through a third-party web server.

If you want to publish WML files with your own web server, you must add the needed MIME type to your web server. Some WML browsers need those to be able to show the downloaded WML files.

You will need the following:

- Associated extension: WML
- Content type (MIME): text/vnd.wap.wml

You can edit the Windows registry with the following keys to modify the responses:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\IncludeAllSmallResponse (dword)

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\IncludeAllLargeResponse (dword)

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\IncludeDownSmallResponse (dword)

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\IncludeDownLargeResponse (dword)

With a value of 1 it will add the response column too. (%e parameter)

To change the DOCTYPE header of the WAP file, edit the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\WAP\WML_Version (string) with acceptable values: 1.1 or 1.2 or 1.3 or 2.0

Status Summary (Setup Dialog Box)

The **Status Summary** dialog box allows you to enter conditions for sending a status summary message through the protocol that you want. This is useful if you want to receive a quick, periodic update on your servers.

Servers Alive can send an email to show the status of the entries by email, paging, or instant message (IM).

Enable Status Summary

Click the check box to enable this feature and enter settings on the dialog box.

When to Send

Click an option to determine when to send the status summary message. You can send an email after each cycle or at a predefined time. If you select **Approximately At**, you can enter a time and date for when to send the message.

What Entries

Select an option from the dropdown list to specify the information to include in the message. You can choose to receive information for certain types of entries or the summary line, as follows:

- **Status Change Entries**
- **Status Change Entries and ALL Down Entries**
- **All Entries**
- **Summary Line Only**
- **Summary Line per Group**

To

Enter an email address, such as person@company.com. To send the status summary message to several email addresses, separate the addresses with a comma, as in the following example:

```
user1@company.com,user2@company.com.
```

Message

Enter the message you wish to receive as part of the status summary.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Via

Select the protocol for sending the status summary from the dropdown list. You can select any protocol, such as SMTP, SMS, and so forth.

General (Setup Dialog Box)

The **General** settings for **Setup** include the following:

- Proxy settings,
- Startup settings,
- And various settings for the individual user.

Proxy Settings (Setup Dialog Box)

The image shows a screenshot of the Proxy Settings dialog box in Servers Alive. It contains two identical sections for configuring proxy servers. Each section has a title 'Proxy Server' and contains the following fields:

- Server name:** A text input field.
- Port:** A text input field.
- Type:** A dropdown menu with 'Web Standard' selected.
- Use Proxy Authentication:** A checkbox that is currently unchecked.
- Username:** A text input field.
- Password:** A text input field.

In Servers Alive, you can set up two different sets of proxy settings. You can configure the following settings for two proxy servers.

Proxy Server

Depending on your setup, you can require Servers Alive to do some or all URL type checks through a proxy for security purposes. You can force this behavior by specifying a server and port in this section. You can enter either the domain name or IP address of the server. Just entering information in this section of the **Setup** dialog box does not force all URL checks to go through the proxy. You must still enable the use of proxy on specific entries.

Server Name

Enter the name of the proxy server.

Port

Enter the port for the proxy server.

Type

Enter the type of protocol for the proxy. This setting depends on what your proxy server supports.

- **Web Standard** - This includes HTTP, or hypertext transfer protocol.
- **Socks 4** - Socks 4 is a protocol for TCP proxy across firewalls.
- **Socks 4a**
- **Socks 5**
- **Relay**

Use Proxy Authentication

Click to enable proxy authentication.

User Name

Enter the user name.

Password

Enter the password.

Startup Settings (Setup Dialog Box)

Load startup info from registry

Hostfile: ...

Start checking but wait seconds after the start of the program

Start minimized

Only show Pretty Name in GUI

Other startup options

Cycle unit: Send mail at start/stop of checking

Cache IP addresses and expire them every cycles

List of public holidays. Must be dd-mm-yyyy and separated by a comma.

The **Startup Settings** branch of the **Setup** dialog box tree controls how Servers Alive gets its list of monitored services and what the software does with them initially.

Load Startup Info from Registry

Click if you plan to have Servers Alive start automatically and read in a saved list of monitored entries, which is required for operation as a

service. In the registry, Servers Alive stores the various startup options and the name of the file containing information on what entries to check.

Hostfile

Specify where the saved file containing check information is located. This file has not been created yet if you are reading through this documentation for the first time, so you must refer to this information again later, after you have created your list of entries.

Start Checking But Wait __ Seconds After the Start of the Program

Click the check box to enable Servers Alive to automatically start checking when it is launched. Enter the number of seconds that you want Servers Alive to pause before checking. This is useful if Servers Alive runs as a service when the computer boots up, but you want Servers Alive to wait for all local programs to finish launching before starting its check cycle.

Start Minimized

Starts Servers Alive minimized, whether the software is launched through the Programs menu or as a service.

Only Show Pretty Name in GUI

Shows only the pretty names in the software interface. Pretty names are labels that you assign to your monitored items for easy recall.

Other Startup Options

Cycle Unit

Determines whether Servers Alive uses minutes or seconds as the cycle unit. This time unit determines how long the software waits between check cycles. You can specify settings for the check cycle on the **Misc Settings** branch of the **Settings** dialog box tree.

Send Mail at Start/Stop of Checking

Click this check box to enable Servers Alive to send mail at the beginning and ending of every check cycle.

Use High Encryption for Password Storage

Select this check box to ensure that passwords are stored with high, or AES 256-bit, encryption settings.

Cache IP Addresses and __ Expire Them Every __ Cycles

Ensures that Servers Alive stores the IP addresses in cache. Clear this check box to ensure that Servers Alive does not cache the IP addresses.

This check box is selected by default. Thus, by default, the first time Servers Alive checks a host using ping, TCP, or UDP, the software resolves the name into an IP address. Each of the following times Servers Alive checks your host, the software uses the IP address stored in memory.

Click the second check box and enter a numeric value to determine how many cycles pass before the IP addresses expire.

List of Public Holidays

Enter a list of public holidays. You must use the dd-mm-yyyy format with a comma delimiter. For example, you can enter 12-25-2003 for December 25, 2003.

You can use the **Startup** branch of the **Setup** tree to edit your list of public holidays. These public holidays can be treated as a Sunday, rather than whatever day they actually fall on, when Servers Alive determines whom to alert. You turn that feature on when defining a person with the **Edit > People** command.

You can change the way tabs on dialog boxes appear by editing your registry with the following key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\tabs_look (dword)

0 - tab dialog style

1 - property page style like Windows Properties dialog boxes

To reduce the amount of time that Servers Alive waits between two checks, edit the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\PerItemCycle {string}

The default is 250 ms. Enter values starting at 10.

Misc Settings (Setup Dialog Box)

Automatically save changes to a file
 Load windows positions at startup
 Send keep alive mails every minutes
 Automatically restart checking after minutes

Check times (every x minutes):

	8am to 6pm	6pm to 8am
Weekday	<input type="text" value="2"/>	<input type="text" value="3"/>
Saturday	<input type="text" value="1"/>	<input type="text" value="1"/>
Sunday	<input type="text" value="1"/>	<input type="text" value="1"/>

Automatically Save Changes to a File

Click to save changes to a file. If the **Automatically Save Changes to a File** option is enabled, all changes made to the current entries configuration are saved automatically. If the option is enabled and you start a new set of entries, you are prompted for a file name when you exit Servers Alive.

Load Windows Positions at Startup

Select to open Servers Alive in the same size and position that it had when you closed the software. If **Load Window Positions at Startup** is enabled, Servers Alive restores its last position on the screen and also restores itself to the last known window size.

Send Keep Alive Mails Every __ Minutes

Enter the number of times that you want mails sent. You can request a mail from Servers Alive every once in awhile as proof that it is still running.

Automatically Restart Checking After __ Minutes

Specify how often you want Servers Alive to start checking in minutes.

Check Times (Every X Minutes)

Enter values in the grid to tell Servers Alive when to begin a check cycle on your list of hosts. For example, if you enter 30 in the **8am to 6pm** column of the **Weekday** row, then Servers Alive starts a check cycle every 30 minutes from 8 in the morning until 6 in the evening Monday through Friday. If you enter 0 in the grid, the software defaults to starting

a check cycle every five minutes during the applicable time period of the column and row.

Weekday

Saturday

Sunday

Saturday 6pm to 8am means from Saturday 6pm to Sunday 8am.

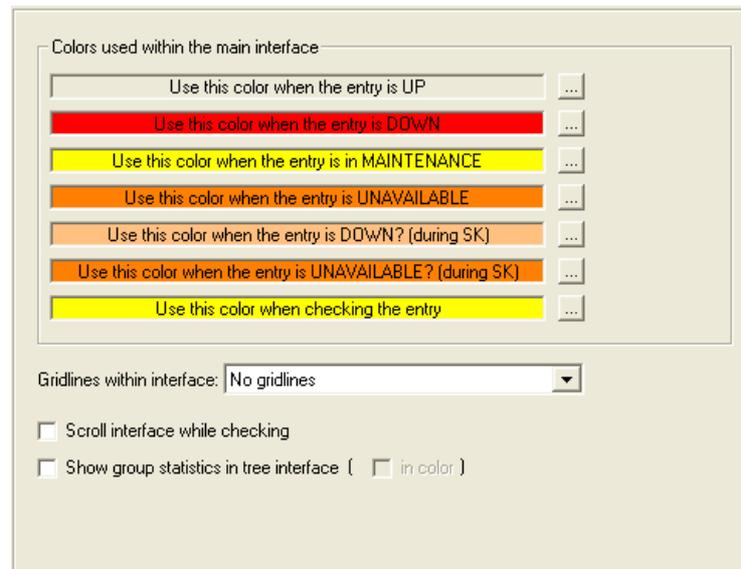
By default, the morning starts at 8h (8AM) and the evening starts at 18h (6PM). You can change this by adding or editing the following registry entries:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\MorningStart (dword)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\EveningStart (dword)

Times are in 24h format. 6pm would be 18.

You can use the **Startup** branch of the **Setup** tree to edit your list of public holidays. These public holidays can be treated as a Sunday, rather than whatever day they actually fall on, when Servers Alive determines whom to alert. You turn that feature on when defining a person with the **Edit > People (on page 242)** command.

Interface Settings (Setup Dialog Box)



Colors Used Within the Main Interface

For each of the following options, click the browse button to select a color that appears when the condition described by the option occurs. For example, you can select a red color to indicate when servers are down.

- **Use This Color When the Entry Is UP**
- **Use This Color When the Entry is DOWN**
- **Use This Color When the Entry Is in Maintenance**
- **Use This Color When the Entry is UNAVAILABLE**
- **Use This Color When the Entry Is DOWN? (During SK)**
- **Use This Color When the Entry is UNAVAILABLE? (During SK)**
- **Use This Color When Checking the Entry**

Gridlines Within Interface

Click an item in the dropdown list to display horizontal or vertical grid lines or both in the Main window of Servers Alive. You can also choose not to display grid lines.

Scroll Interface While Checking

Click the check box to ensure that, while Servers Alive checks your servers, the Main window scrolls to display the current entry that the software is checking. When you select this check box, Servers Alive shows five entries at a time.

You can change the number of entries displayed by editing the registry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Startup\NumberOfVisibleItems (string)

Show Group Statistics in Tree Interface

Click this check box to display statistics for entries in a group in the **Status** column of the Main window. The status applies only to the entries in the group—and not subgroups.

In Color

Displays color for group statistics.

Custom Fields (Setup Dialog Box)

You can create up to seven fields to hold information and then use these fields in your Visual Basic scripts or as variables in messages. The output for the custom fields appears as sa_custom_value_1, sa_custom_value_2, and so forth, in the file or database logs.

This feature is available only in the free version and Enterprise edition of Servers Alive.

	Field caption	Field name in database
<input type="checkbox"/> Custom 1	Custom 1	custom_1
<input type="checkbox"/> Custom 2	Custom 2	custom_2
<input type="checkbox"/> Custom 3	Custom 3	custom_3
<input type="checkbox"/> Custom 4	Custom 4	custom_4
<input type="checkbox"/> Custom 5	Custom 5	custom_5
<input type="checkbox"/> Custom 6	Custom 6	custom_6
<input type="checkbox"/> Custom 7	Custom 7	custom_7

This feature is only available in the ENTERPRISE edition

Custom 1

Click this check box to enter information that defines your custom field.

Field Caption

Type the caption that you want to use as the name or label for the field.

Field Name in Database

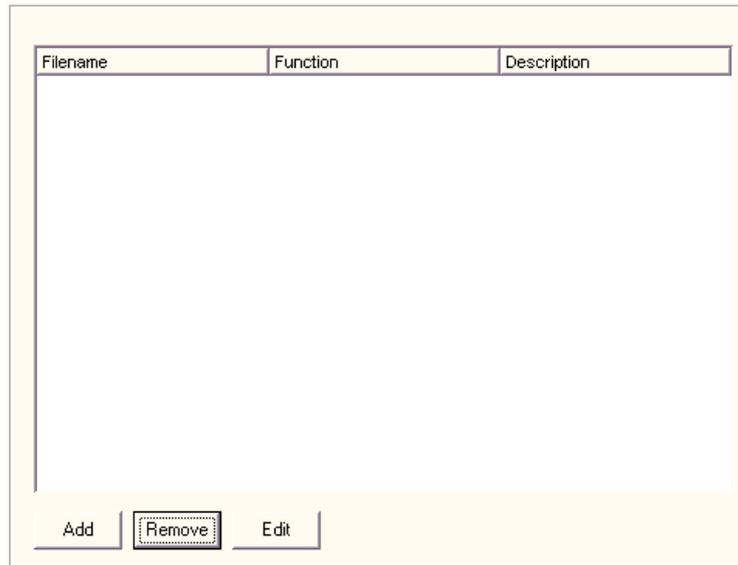
Type the name that you want to use for the field in the database table. You can use this name when writing a script.

Custom Scripts (Setup Dialog Box)

You can define the scripts that Servers Alive can use. The settings that you can define include a filename, the function, and a description for that function. For each entry that you define, you can specify that if the output, or result of the check, must be converted using one of the script functions, the %e parameter, included in the check result. You can write scripts only in Visual Basic.

This feature is available only in the free version and Enterprise edition of Servers Alive.

The script is executed after the status of the entry has been set and before any of the alerts are fired or an output is generated. This affects the alerts when they use the **When Down the "Extra Info Field" Should Contain** option on the **When** tab of the **Add/Edit Alert** dialog box. *See When Tab (Add/Edit Alert Dialog Box)* (on page 218).



You can use the following fields in your Visual Basic scripts:

- Fields.sa_checkdescription
- Fields.sa_ip
- Fields.sa_hostname
- Fields.sa_prettyname
- Fields.sa_status
- Fields.sa_remark
- Fields.sa_fullpath
- Fields.sa_roundtrip
- Fields.sa_groupID, available when you use fields.sa_ip or fields.sa_groupid in the script.

The script accepts one parameter, which is the check result, or %e parameter. The script returns one parameter, which is the value of the new content of the %e parameter.

An example of a custom script follows:

```
Function HTTP_Response(x)
  S=trim(x)
  rcode=left(s,3)
  select case rcode
    case "200"
      http_response="All is going well with
the website"
    case "404"
      http_response="The page you're
requesting
is not available on this server"
    case else http_response=x + " (looks like
that isn't within my case)" +
fields.sa_checkdescription
  end select
end function
```

Filename

Displays the filename that contains the script. Enter information in this column by clicking the **Add** or **Edit** button and typing the information in the *Scripts dialog box* (on page 108).

Function

Displays the code functions for the script. Enter information in this column by clicking the **Add** or **Edit** button and typing the information in the **Scripts** dialog box.

Description

Displays the description for the function. Enter information in this column by clicking the **Add** or **Edit** button and typing the information in the **Scripts** dialog box.

Add

Click this button to add a script to the list.

Remove

Click this button to remove a script from the list.

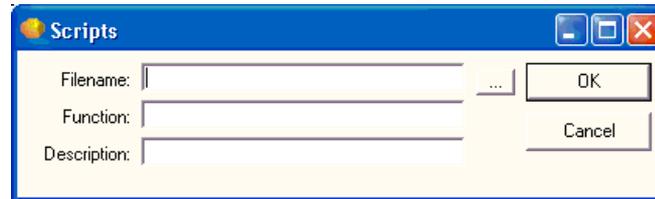
Edit

Click this button to edit information in the list.

Scripts Dialog Box

You can add scripts to the Setup options by clicking **File > Setup** and then selecting **General > Custom Scripts** in the tree. Click the **Add** or **Edit** button to display the **Scripts** dialog box.

This feature is available only in the Enterprise edition of Servers Alive.



Filename

Type or click the browse button to enter the name of the file that contains the script.

Function

Enter the function name of the script.

Description

Enter a text string that describes the script.

MIB Database (SNMP) (Setup Dialog Box)

This feature is available only in the free version and Enterprise edition of Servers Alive. This feature is not available in the Standard edition.

Servers Alive can parse SNMP traps using a built-in MIBs (management information base) database. A MIB database is a core tool for network engineers: you can query a remote server or other device on your network for hardware and software configurations using SNMP. This database is useful for monitoring and collecting data about any specific device on your network, if the device supports SNMP. For example, you can find out what OIDs the remote server supports. The SNMP trap receiver can perform OID lookups within a MIB database. And the SNMP check can interpret the result it receives.

MIB files are a kind of dictionary used to assemble and interpret SNMP messages. Each type of device on your network has its own specific MIB file. The MIB file defines the device as a set of managed objects or, rather, values that the SNMP manager reads or changes. The MIB file allows the SNMP manager to interpret trap messages from devices.

To interpret trap messages, the SNMP manager must access the MIB file, which describes the format and content of the traps that the device can send. To be available for the SNMP manager, the MIB file for each of your equipment types needs to be installed, or compiled, on the SNMP manager. Because MIB files are specific to the hardware, you must have the correct MIB for your hardware type, model, and version number. You can get a MIB file from the equipment vendor.

Name	Description
AGENTX-MIB	This is the MIB module for the SNMP Agen...
DISMAN-EVENT-MIB	The MIB module for defining event trigger...
DISMAN-SCHEDULE-MIB	This MIB module defines a MIB which pro...
DISMAN-SCRIPT-MIB	This MIB module defines a set of objects t...
ETHERLIKE-MIB	The MIB module to describe generic objec...
HCONUM-TC	A MIB module containing textual conventi...
HOST-RESOURCES-MIB	This MIB is for use in managing host syst...
HOST-RESOURCES-TYPES	This MIB module registers type definitions...
IANA-ADDRESS-FAMILY-NUMBERS-MIB	The MIB module defines the AddressFamili...
IANA-LANGUAGE-MIB	The MIB module registers object identifier ...
IANAIFTYPE-MIB	This MIB module defines the IANAIfType T...
IF-INVERTED-STACK-MIB	The MIB module which provides the Invert...
IF-MIB	The MIB module to describe generic objec...

Show aliases too (will be slower!)

64 MIB files in database, containing 2653 OIDs

In the grid, you can change the way the information is displayed. For example, you can click each column heading to resort the information alphabetically in either ascending or descending order. You can also select a column heading and drag it to a different location in the grid to change the order of the columns.

Name

Displays the name of the MIB file in the MIBs database for Servers Alive.

Description

Displays information about MIB file.

You can resize the columns on the grid to see more of each column. Also, if you point the mouse to a description in the list, you can see the entire description in the tooltip that appears.

Show Aliases Too

Displays the **Alias** column. This can possibly slow down the software.

Add MIB

Allows you to import a MIB file into the Servers Alive MIBs database with the *Add MIBs to the MIB Database dialog box* (on page 110).

Remove MIB

Select a row in the grid for a MIB file and click this button to remove the MIB file from the Servers Alive MIBs database. You cannot reverse this action. However, you can import the MIB file into the database again by clicking the **Add MIB** button.

Add Alias

Allows you to add an alias to the MIBs database in Servers Alive. Select a row in the grid and click this button. When you add an alias, the new alias appears in the **Alias** column.

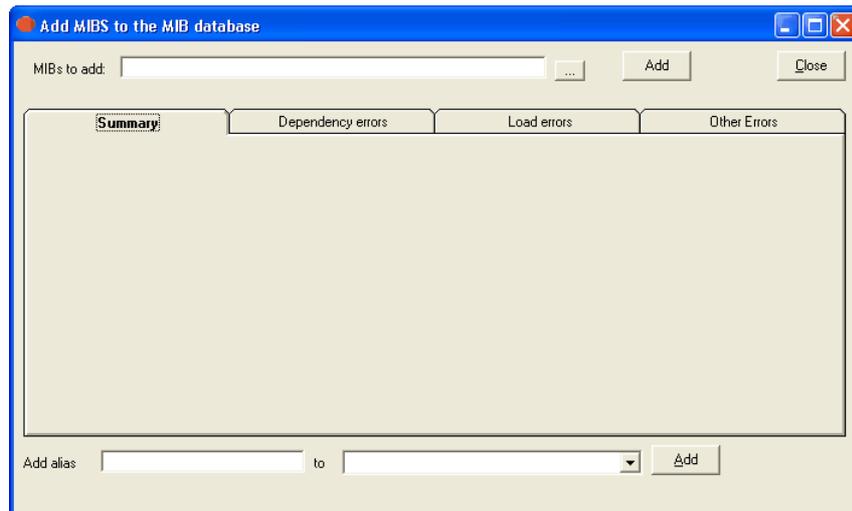
Add MIBs to the MIB Database Dialog Box

This feature is available only in the free version and Enterprise edition of Servers Alive. This feature is not available in the Standard edition.

On the **MIB Database (SNMP)** dialog box, you can do the following:

- Add MIB files to the Servers Alive MIBs database.
- Add aliases to the MIB files in the MIBs database.

Several factors can affect importing a MIB file into the Servers Alive MIBs database. The MIB file format is not standardized and can be different, depending on the vendor that produced the MIB file. Secondly, a MIB file can sometimes depend on another MIB file. If a MIB file depends on another file, and the other MIB file is in the Servers Alive MIBs database, Servers Alive uses that MIB file in relation to the imported MIB file. The **Dependency Errors** tab and the **Summary** tab display errors resulting from missing dependency files when you import a MIB file.



MIBs to Add

Click the browse button and select the MIB file that you want to add to the Servers Alive MIBs database. You can select files with a .mib or .txt extension.

With the browser dialog box, you can select only one MIB file at a time. To add several MIB files at one time, use a wildcard * in the file name that you enter in the box. For example, you can enter cis*.txt to add all MIB files that begin with cis and end with .txt.

Add

Click to add the MIB file that you selected in the **MIBs to Add** box to the MIBs database. You must enter a name in the **MIBs to Add** box before clicking this button.

The results of the import action appear on the **Summary** tab. For example, if the MIB file already exists in the Servers Alive MIBs database, a message appears on the **Summary** tab.

The file name is not the MIB name. Two MIB files can have the same MIB name and exist under two different file names. The MIB name is stored inside the MIB file and appears in the list on the **MIB Database (SNMP)** branch of the **Setup** dialog box.

You can add as many MIB files as you want without closing this dialog box. You can select another MIB file in the **MIBs to Add** box and click the **Add** button again.

You can also use a wildcard to add several MIB files at once. For example, you can enter C:\MIBFiles\Mm*.mib to add Mm1628v2.mib, Mm1628v3.mib, and Mm1628v4.mib to the Servers Alive MIBs database all at once when you click the **Add** button. The list of all the MIB files that match the wildcard in that directory appear in the results of the import on the **Summary** tab.

When you add a MIB file to the MIBs database, Servers Alive automatically creates an alias for the file by adding MIB to the name of the file. The software removes dashes or underscores in the file name. The following table shows some examples.

If you add this MIB file to the MIBs database	Servers Alive creates this alias
rfc1234	rfc1234mib
rfc-1234	rfc1234mib
rfc-1234-mib	rfc1234mib
rfc_1234-mib	rfc1234mib

Summary Tab

Displays the results of the import when you click the **Add** button. This tab appears blank, until you import a MIB file into the Servers Alive MIBs database. The tab then displays the results of the import and the location of the MIB file.

Dependency Tab

Displays the errors in dependency relationships that the software detects when you import an MIB file into the Servers Alive MIBs database. These errors often result when the MIB file is dependent on another MIB file that does not already exist in the database. You must get the other MIB file from the appropriate hardware vendor.

In the grid, you can change the way the information is displayed. For example, you can click each column heading to resort the information alphabetically in either ascending or descending order. You can also select a column heading and drag it to a different location in the grid to change the order of the columns.

When you add a MIB file to the database, Servers Alive tries to locate the files on which the MIB file depends, if any. The software looks for different versions of the file name. The following table shows examples.

If a MIB file depends on	The software searches for the dependent file in the database with the following names
rfc-1234	rfc-1234, rfc1234mib
rfc-1234-mib	rfc-1234-mib, rfc1234mib
rfc_1234_mib	rfc_1234_mib, rfc1234mib

If Servers Alive cannot find the file on which the MIB is dependent, the MIB file is not imported into the Servers Alive MIBs database.

Load Errors Tab

This tab displays errors that result from mistakes within the MIB file itself.

Other Errors Tab

Displays errors that result from importing the MIB file into the Servers Alive MIBs database.

Add Alias

Enter a string to add to the MIB file that is listed in the **MIBs to Add** box. In certain cases, you might want to create an alias of your own. For example, a file with an alias of rfc1234 might be referenced in other MIB files as rfc1234mib. You might want to add that alias to the database.

When you add an alias, the new alias appears in the **Alias** column of the **Setup** dialog box.

To

Click the dropdown list and select a MIB file from the Servers Alive MIBs database.

Add

Click this button to add the alias to the database. A MIB file can have more than one alias.

Built-in Servers (Setup Dialog Box)

Servers Alive has several built-in servers to include:

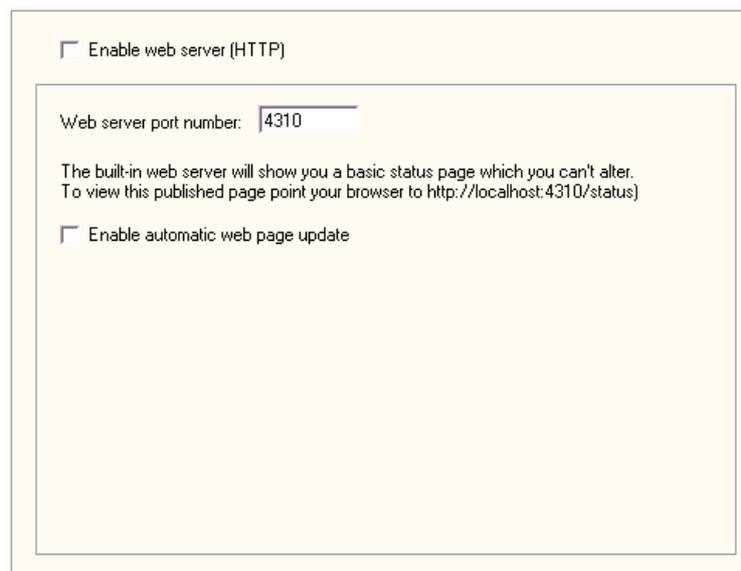
- Web server
- Telnet server
- SSH server
- SNMP server

You can use these to remotely determine the status of all checked items and issue basic management commands.

The difference between SSH and Telnet communications are:

- Communication between a Telnet client and a Telnet server is clear text.
- Communication between an SSH client and an SSH server is encrypted.

Web Server (Setup Dialog Box)



Enable web server (HTTP)

Web server port number:

The built-in web server will show you a basic status page which you can't alter.
To view this published page point your browser to <http://localhost:4310/status>

Enable automatic web page update

Enable Web Server (HTTP)

Click to enable the web server. If you enable the built-in web server, it publishes a standard status page on the port you designate.

This web page cannot be altered beyond a few cosmetic changes. If you need to have a more detailed web page, or desire a different layout, please refer to **HTML Page** (on page 78). Note that the options in the **HTML Page** branch do not apply to the built-in web server.

Web Server Port Number

Specify the port number for the server. The default is 4310.

Enable Automatic Web Page Update

Click to allow automatic updates to the web page. The web page causes the browser to refresh itself every minute for an up-to-date view of the current checked status of all items.

Note that this web page does not include any management options and is not password protected. If you need this sort of functionality, you must use a third party web server.

You can use the following registry key to change the automatic update interval of the built-in web server; the default is 60 seconds:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\AutoUpdateHTTPInterval (string)

In some cases, you might need to adjust the HTTP output buffer to improve the speed. You can do this by creating the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\HTTPDaemon_OutBufferSize (string)

The default value is 999999.

You can force the web server to include the host name for each entry that has a pretty name by editing the following key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\http_show_host_and_prettyname (string) with a value of 1

Telnet Server (Setup Dialog Box)

For more information about security settings, see Security (Setup Dialog Box).

Enable Telnet Server

Click to enable a Telnet server. If you enable the Telnet server and specify a port number, you can interrogate Servers Alive using a Telnet client, which comes with Windows. With a Telnet client, you can see a list of all hosts, their status, and the last time the status changed. The list is ordered by status. The Telnet server supports multiple connections.

Telnet Server Port Number

Enter the port number of the Telnet server. The default port number is 4301.

Maximum Number of Concurrent Connections

Enter the maximum number of concurrent connections.

Echo Back to Telnet Client

Click the check box to enable Telnet character echo. By default, this feature is not turned on. This means that what you type might not be visible on the screen as you type it, depending on the client you use and how it is configured.

You can also issue commands that modify the behavior of Servers Alive. Refer to *Commands* (on page 119) for a list of commands that the Telnet server understands.

Security (Setup Dialog Box)

The following security settings are for Telnet and SSH servers.

The screenshot displays a dialog box titled "Security (Setup Dialog Box)" with two main sections: "IP address access restrictions" and "Password protection".

IP address access restrictions:

- By default all computers will be:
 - Granted access
 - Denied access
- Except those listed below:
- A table with two columns: "Access" and "IP Address". The table is currently empty.
- Buttons: "Add", "Remove", and "Edit" are located to the right of the table.

Password protection:

- Password protected (full-control):
 - Username:
 - Password:
- Password protected (read-only):
 - Username:
 - Password:

You can provide some security to the built-in SSH or Telnet server so that only approved personnel can issue administrative commands. You do this by clicking the branch of the **Setup** tree labeled **Security**. The types of security that you can add to an SSH or Telnet server are IP address restrictions or password protection.

IP Address Access Restrictions

By Default Computers will be

Secures the SSH or Telnet server by allowing only certain IP addresses to connect. You can choose from two basic modes.

Granted Access

Permits all computers to access the server.

Denied Access

Restricts access to all computers.

If you select either **Granted Access** or **Denied Access**, you can add exceptions to the rule. The usual procedure is to deny everyone access by default and then add in certain exceptions, by IP address, for known good addresses. To add an IP address range, specify an appropriate subnet mask.

Except Those Listed Below

Lists exceptions to the computers that are denied or permitted access to the SSH or Telnet server, depending on the option that you selected in **By Default All Computers Will Be**.

Access

Displays whether the specific IP address is denied or permitted access to the server.

IP Address

Lists the IP address of each computer that is denied or permitted access to the SSH or Telnet server.

Add

Click to add an IP address to the list.

Remove

Select an IP address and then click **Remove** to delete the address from the list of exceptions.

Edit

Select an IP address and then click **Edit** to change the address.

Password Protection

Sets password protection, the other type of access restrictions for SSH or Telnet servers. Choose **Password protected (Full-control)** or **Password Protected (Read-only)**. You can have two log-in names: one name that has full control and one that can only retrieve the status of checked hosts.

If no password protection is selected, then Servers Alive uses the following security settings:

- FULL CONTROL password protected
- Username: sshuser
- Password: sshpassword

If you use this type of authentication, remember that the Telnet protocol does not make use of any encryption. Any user name and password that you use goes out over the network in clear text and can be intercepted. Plan accordingly. Note that you can use both types of security simultaneously.

Password Protected (Full-Control)

Allows a name and password for a user who has full control.

User Name

Enter the name of the user with full control.

Password

Enter the password of the user with full control.

Password Protected (Read-Only)

Allows a name and password for a user who can only retrieve the status of checked hosts.

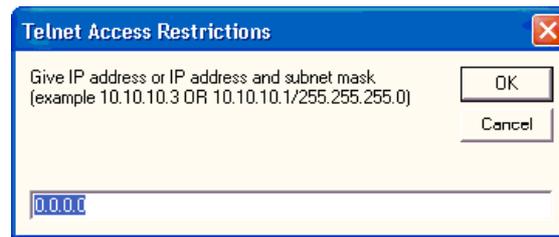
User Name

Enter the name of the user with read-only privileges.

Password

Enter the password of the user with read-only privileges.

Access Restrictions



You can set access restrictions by entering an IP address and subnet mask for Telnet servers, SSH servers, or SNMP trap receivers.

You can open this dialog box by selecting the following items in the Main Window:

- **File > Setup > Tree: Built-in Servers > Telnet Server > Security > Add button**
- **File > Setup > Tree: Built-in Servers > SSH Server > Security > Add button**
- **File > Setup > Tree: Built-in Servers > SNMP Trap Receiver > Add button**

Commands List

You can use the following commands:

RELEASE IP

Internally Servers Alive converts all host names into IP addresses the first time they are used. This applies to the hosts that you check as well as any SMTP servers that you use. If you want to release all of these IP addresses from memory while Servers Alive is running, you can do this with the RELEASE IP command on the Telnet interface.

START CHECKING

Accomplishes the same action as clicking the **Start** button on the Main window of Servers Alive.

STOP CHECKING

Accomplishes the same action as clicking the **Stop** button on the Main window of Servers Alive.

SYST

Shows the build number of Servers Alive.

STATUS

Shows a list of all hosts and their current status.

STATUS DOWN

Shows a list of all hosts in a down state.

STATUS MAINTENANCE

Shows a list of all hosts in a maintenance state.

QUIT

Disconnects your Telnet client from the Telnet interface of Servers Alive.

HELP

Displays basic help on various Telnet commands.

UPDATE

Accomplishes the same action as clicking the **Update** button on the Main window of Servers Alive.

MAINTENANCE x

Sets host **x** into maintenance mode. To get the number of the host issue a **STATUS** command and you will see the number of all hosts.

MAINTENANCE ALL

Sets all hosts into maintenance mode.

ACTIVE x

Sets host **x** into active mode. To get the number of the host, issue a **STATUS** command and you will see the number of all hosts.

ACTIVE ALL

Activates all hosts.

LOAD filename

Accomplishes the same action as clicking **File > Open** from the Main window of Servers Alive.

RESET PAGER

Clears all pager queues.

RESET DOWN COUNTERS

Resets all down counters for all hosts.

RESET STATISTICS

Resets the statistics of all hosts.

SET ALL SOUND TO NONE

Sets all sound entries to none.

SET ALL SOUND TO DEFAULT

Sets all sound entries to default, used most often when you add a sound card to your computer after you have configured Servers Alive.

SET ALL PRIMSMTPMESSAGE TO xyz

Sets all primary SMTP messages to xyz.

SET ALL ALTSMTMPMESSAGE TO xyz

Sets all alternate SMTP messages to xyz.

ENABLE TEAM=<name of team>

Enables the named team.

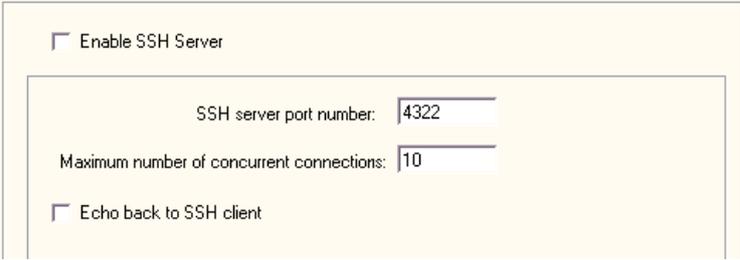
DISABLE TEAM=<name of team>

Disables the named team.

INCHECKCYCLE

Indicates whether Servers Alive is in the middle of a check cycle. The command returns a possible yes/no response. If Servers Alive is in the middle of a check cycle, then the response is Yes. Otherwise, the response is No.

SSH Server (Setup Dialog Box)



Enable SSH Server

SSH server port number:

Maximum number of concurrent connections:

Echo back to SSH client

For more information about security settings, see *Security (Setup Dialog Box)* (on page 124).

Enable SSH Server

Click to enable a SSH server. If you enable the SSH server and specify a port number, you can interrogate Servers Alive with a SSH client, which comes with Windows. With a SSH client, you can see a list of all hosts, their status, and the last time the status changed. The list is ordered by status. The SSH server supports multiple connections.

SSH Server Port Number

Enter the port number of the SSH server. The default port number is 4322.

Maximum Number of Concurrent Connections

Enter the maximum number of concurrent connections.

Echo Back to SSH Client

Click the check box to enable SSH character echo. By default, this feature is not turned on. This means that what you type might not be visible on the screen as you type it, depending on the client you use and how it is configured.

You can also issue commands that modify the behavior of Servers Alive. Refer to *Commands* (on page 119) for a list of commands that the SSH server understands.

SNMP Trap Receiver (Setup Dialog Box)

Enable SNMP trap receiver

SNMP trap receiver port number:

Maximum number of traps to save:

- 0 traps already received since last reset.

Conversion:

For more information about security settings, see *Security (Setup Dialog Box)* (on page 124).

Enable SNMP Trap Receiver

Click to enable Simple Network Management Protocol (SNMP) traps.

If you want to view the received traps in the HTML template-based output, you must use the `<sa_receivedtraps>` tag in the header or footer of the HTML file. For more information about creating the HTML file, see *HTML Page* (on page 78).

SNMP Trap Receiver Port Number

Enter the port number of the SNMP trap receiver. The default port number is 162.

Maximum Number of Traps to Save

Enter the maximum number of traps to receive.

Conversion

Displays the following options that determine how OIDs are represented:

- **Don't Convert Received OIDs to Text** - Ensures that each OID that the SNMP trap detects remain numeric values. The OID is not converted to a text representation.
- **Convert Received OIDs to Short Text** - Ensures that each received OID and the result are converted to a short descriptive value from the MIB database. For example, if the OID is `.1.3.6.1.2.1.2.2.1.6`, the short text is as follows:
ifPhysAddress
- **Convert Received OIDs to Long Text** - Specifies that each OID and the result received by the trap are converted to a long text representation from the MIB database. For example, if the OID is `.1.3.6.1.2.1.2.2.1.6`, the long text value is as follows:
.iso.org.dod.internet.mgmt.mib-
2.interfaces.ifTable.ifEntry.ifPhysAddress

If you select **Convert Received OIDs to Short Text** or **Convert Received OIDs to Long Text**, the software converts any received value within a MIB file to the string representation.

Security (Setup Dialog Box)

The following security settings are for SNMP trap receiver servers.

IP Address Access Restrictions

By Default Traps from All Computers will be

Secures the SNMP trap receiver by allowing only certain IP addresses to connect. You can choose from two basic modes.

Accepted

Permits all computers to access the SNMP receiver.

Denied

Restricts access to all computers.

If you select either **Granted Access** or **Denied Access**, you can add exceptions to the rule. The usual procedure is to deny everyone access by default and then add in certain exceptions, by IP address, for known good addresses. To add an IP address range, specify an appropriate subnet mask.

Except Those Listed Below

Lists exceptions to the computers that are denied or permitted access to the SNMP Receiver, depending on the option that you select in **By Default Traps from All Computers will be**.

Access

Displays whether the specific IP address is denied or permitted access to the SNMP receiver.

IP Address

Lists the IP address of each computer that is denied or permitted access.

Add

Click to add an IP address to the list.

Remove

Select an IP address and then click **Remove** to delete the address from the list of exceptions.

Edit

Select an IP address and then click **Edit** to change the address.

CHAPTER 4

Edit Menu

On the **Edit** menu in the Main window, you can complete the following activities:

- Quickly locate an entry.
- Edit entries, to include settings for checks and alerts.
- Add new entries based on another entry.
- Find and replace various settings, such as your pager number.
- Edit teams, people, and protocols.

The **Edit** menu has the following commands:

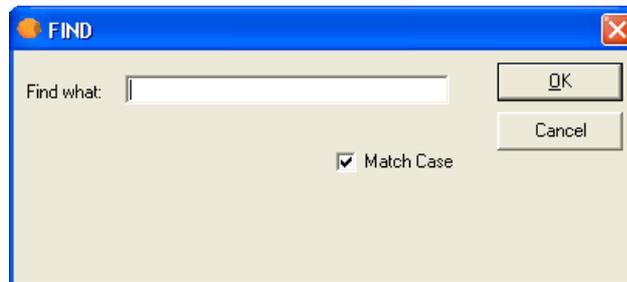
- **Expand All** - Displays all the entries in each group in the Main window.
- **Collapse All** - Shows only the top level of the groups in the Main window.
- **Find** - Searches for a string in the entries.
- **New Entry** - Creates a new entry.
- **New Entry Based On . . .** - Adds a new entry based on an existing entry.
- **Import Hosts** - Opens a list of hosts based on a file that you select. You can save a list of hosts with the **Save As** command and then place the list of hosts on another computer and use it in another copy of Servers Alive.
- **Entry** - Select an entry in the Main window and use this command to edit the settings.
- **Delete** - Removes the selected host from the Main window.
- **Delete All** - Removes all hosts.
- **Global Change** - Makes changes in all hosts.
- **Changes Wizard** - Make changes to items quickly and efficiently.
- **People** - Allows you to add personnel. You can also enable specific protocols for receiving messages and schedule those protocols for each person.
- **Teams** - Allows you to create teams.
- **Protocols** - Allows you to enter settings for each type of protocol.

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Edit > Find (Find Dialog Box)

In a long list of hosts, you can click **Edit > Find** on the Main window to quickly locate a specific entry.



Find What

Enter the pretty name of the entry and then click OK.

Match Case

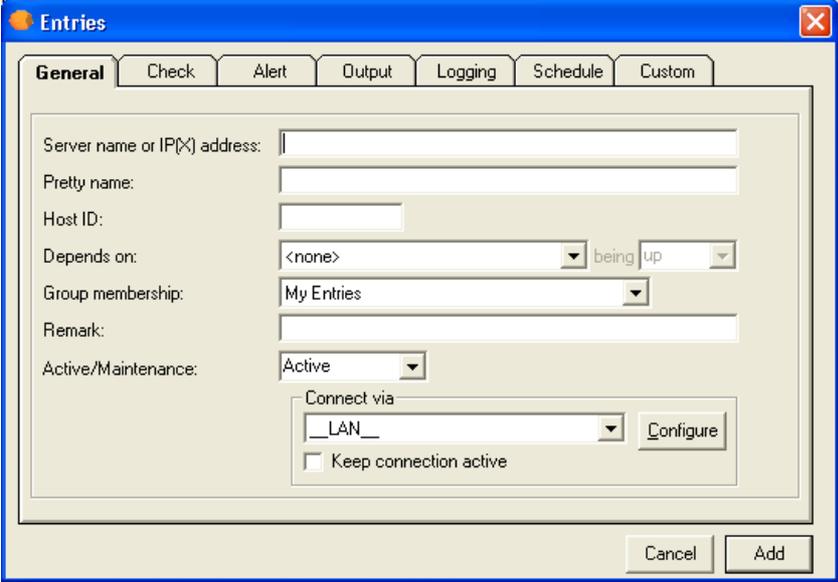
Click this check box to ensure the search locates items that match the case, either upper case or lower case, of the letters that you enter in the **Find What** box. If you clear the check box, the search locates any letters that you enter, either upper case or lower case.

Edit > New Entry (Entries Dialog Box)

Once Servers Alive has been configured properly, you are ready to begin adding or editing entries. When adding or editing an entry, a dialog box appears that allows you to specify what host should be checked and what should be checked on that host.

You can add new entries by clicking the **Add** button. You can edit entries by either selecting an entry and clicking the **Edit** button or double-clicking an entry, when the software is not in a check cycle.

If you have purchased the Standard edition, you can create up to 1000 entries. If you have purchased the Enterprise edition, you can create up to 5000 entries.



The screenshot shows the 'Entries' dialog box with the 'General' tab selected. The dialog box has a blue title bar with the text 'Entries' and a close button. Below the title bar are several tabs: 'General', 'Check', 'Alert', 'Output', 'Logging', 'Schedule', and 'Custom'. The 'General' tab is active and contains the following fields and controls:

- Server name or IP(X) address: [Text input field]
- Pretty name: [Text input field]
- Host ID: [Text input field]
- Depends on: [Dropdown menu with '<none>' selected] and 'being up' [Dropdown menu]
- Group membership: [Dropdown menu with 'My Entries' selected]
- Remark: [Text input field]
- Active/Maintenance: [Dropdown menu with 'Active' selected]
- Connect via: [Dropdown menu with '_LAN_' selected] and a 'Configure' button
- Keep connection active

At the bottom right of the dialog box are 'Cancel' and 'Add' buttons.

You can apply a unique schedule for each entry on the **Schedule** tab.

General Tab (Entries Dialog Box)

Server Name of IP(X) Address

Enter the name of the server or its IP address. You can enter a NetBIOS name (server) or its fully qualified domain name (server.domain.com). Internally Servers Alive attempts to resolve this name to the name's IP address on its first check cycle and then use that address from then on. If the software has trouble resolving a name, you might need to specify the host by IP address. For an IPX ping, you must enter the IPX address of the server. If you enter an IPX address, enter the network address, a colon <:>, and then the node address; for example: 352FBA2B:000000000001.

Pretty Name

Enter the pretty name. The pretty name is used only for display purposes, such as in the software, Telnet client, email, HTTP/HTML output, and so forth. You should enter a descriptive name that instantly identifies the computer and check to you when you receive it in a page or email.

Host ID

Enter the number used to identify the host when using numeric paging and in the interchange format. You do not need to enter anything in this field, as it is automatically generated for you when you create the entry. You can change the host ID to be more meaningful to you, however.

Depends On

Select a server name from the list. This option displays a tool tip with the full description of the check. This feature is useful when the pretty name, or check description, is longer than the **Depends On** box.

Being

Select the status of the server for when you want the check to occur.

Group Membership

Select the group.

Remark

Enter a note or remark for your reference.

Active/Maintenance

Click **Active** or **Maintenance** to specify how to include the entry in the check. If a host is down due to maintenance, you can exclude it temporarily from the list of hosts that is checked. The HTML report shows the host as being in maintenance.

The fastest way to exclude the entry is in the Main window of Servers Alive. You can select the entry, right-click on it, and then choose **Maintenance** on the shortcut menu. You can also place a host in maintenance mode with the Telnet server.

Connect Via

Select an item from the list to select how you want to connect. Click the **Configure** button to change settings for the item that you selected.

By default, Servers Alive connects to the host using the normal LAN connection (**_LAN_**). Additionally, Servers Alive can also create a dial-up network (DUN) connection to an external network before completing the check. After the check, Servers Alive disconnects from the external network. If you have created dial-up network connections on your computer, those connections appear on the **Connect Via** dropdown list.

The DUN feature is available only if a dial-up network connection is installed on the computer running Servers Alive. See the online Help for Windows for more information on how to create a dial-up network connection. To use this feature effectively, Servers Alive must make the connection completely unattended. For that reason, you must configure the dial-up entry to save passwords.

Configure

Click to configure the item that you select in the **Connect Via** list. If you select a DUN connection, you can configure the DUN properties by entering the user name, password, and domain.

Keep Connection Active

Click the check box to keep the connection active after the check is completed.

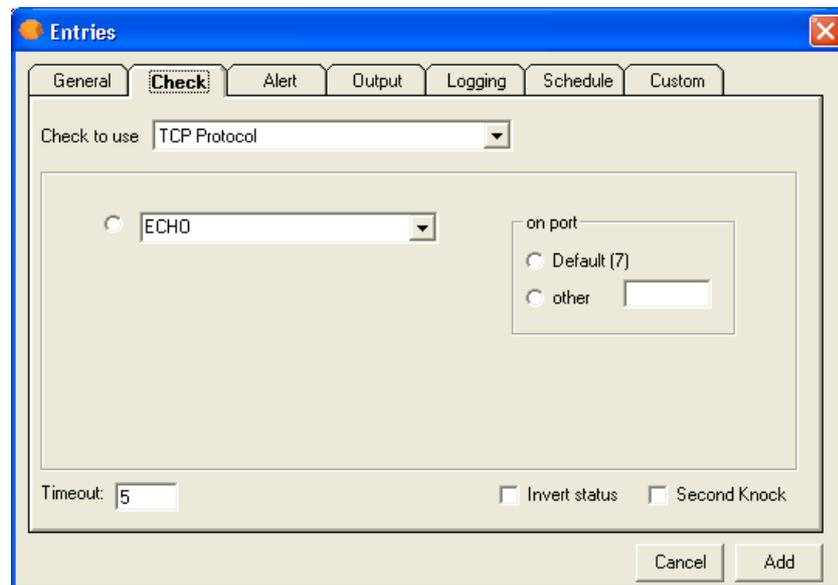
Until

Click this check box to enter a date and time. The box defaults to the current date and time; however, you can enter a different value. For example, you can enter the following:

12/18/2006 6:56:55 AM

This option is available only if you click **Maintenance** in the previous dropdown list.

Check Tab (Entries Dialog Box)



After supplying the needed information for the **General** tab of the **Entries** dialog box, you must select what type of check to use for the entry on the **Checks** tab. You can choose from many check options.

Only one check can be used for each entry on the Main window. If you want to perform multiple checks on a server, you must have separate entries for each check you want. Each check type is discussed in the following sections.

The Winsock checks include any checks that make a basic connection to another computer over TCP/IP. This includes both TCP and UDP connections. TCP checks are used for things such as web and mail servers. UDP checks include things such as Radius servers, DNS servers, and various game servers. Servers Alive can also monitor CITRIX® Terminal Servers with the UDP protocol.

When creating a check, first select the protocol that applies to the check type you want by selecting the appropriate item in the **Check to Use** list. You can select from any of the protocols that Servers Alive supports:

- TCP
- UDP
- DNS
- Radius
- Ping
- NT Service, Process, and Perfmon
- Diskspace
- URL (HTTP/HTTPS and RTSP/MMS)
- Database (Microsoft SQL and Oracle)
- Netware

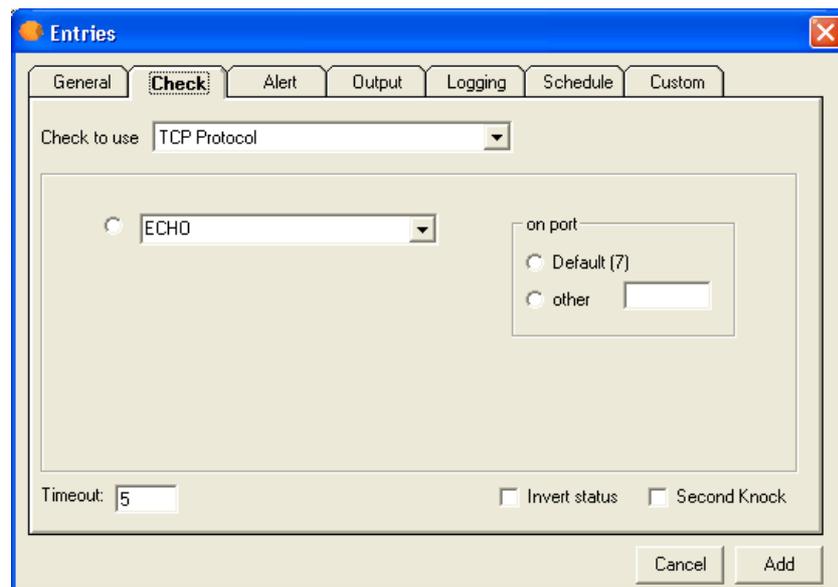
- SNMP
- External COM
- External (Errorlevel)

While verifying that a port is open can be sufficient to monitor a service, this can also cause odd logging on whatever server is being checked. Some services, such as SSH, do not function properly when computers connect and then immediately disconnect. For this reason, you might see spurious warnings in the logs regarding connections from the Servers Alive Server. This is not a problem, but it is something you should keep in mind.

The check process is case-sensitive. This means that a process with the name "fest" is different from a process with the name "Test." You can change this so that each check is case-insensitive by editing the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\ProcessnameCaseInsensitive (dword) with a value of 1.

Check Tab: TCP Protocol Option (Entries Dialog Box)



You can define your own protocol and the corresponding port by clicking **Edit > Protocol** (on page 262) in the Main window.

Select the specific port or service you want to check.

On Port

Default

Click to use the default, or most common, ports or services. Servers Alive defines these, along with their default ports.

Other

Click this option if you want to check a service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 300 seconds.

Invert Status

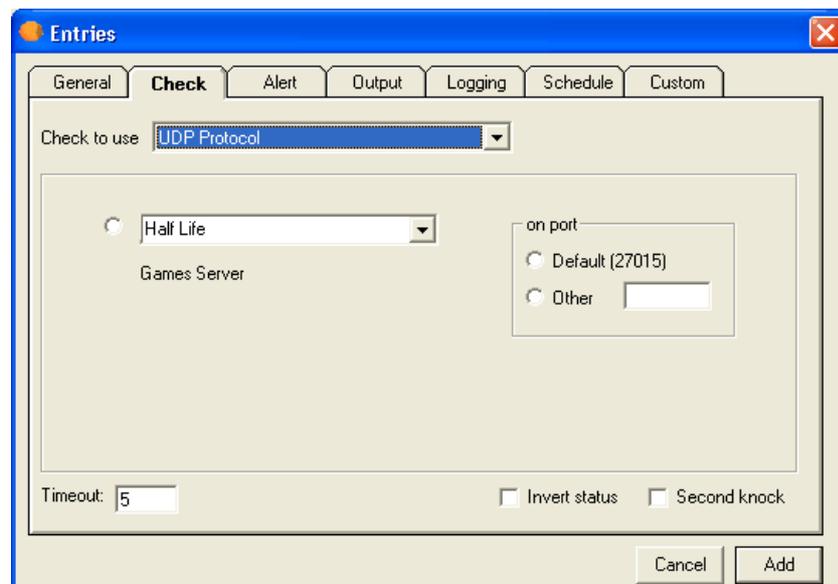
Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: UDP Protocol Option (Entries Dialog Box)



Servers Alive supports checks for common game servers including the following:

- Quake1, QuakeWorld Master, Quake 2, Quake 2 Master, Quake 3,
- Half-Life, Half-Life Master,

- Tribes, Tribes Master, Tribes 2,
- Unreal, Unreal Master,
- Hexen World, and Hexen 2.

Thanks to Carl at *DNA Games* (<http://www.dnagames.net>) for providing the information needed to provide the game server checks.

You can define your own protocol and the corresponding port by clicking *Edit > Protocol* (on page 262) in the Main window.

Select the specific port or service you want to check.

On Port

Default

Click to use the default, or most common, ports or services. Servers Alive defines these, along with their default ports.

Other

Click this option if you want to check a service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 300 seconds.

Invert Status

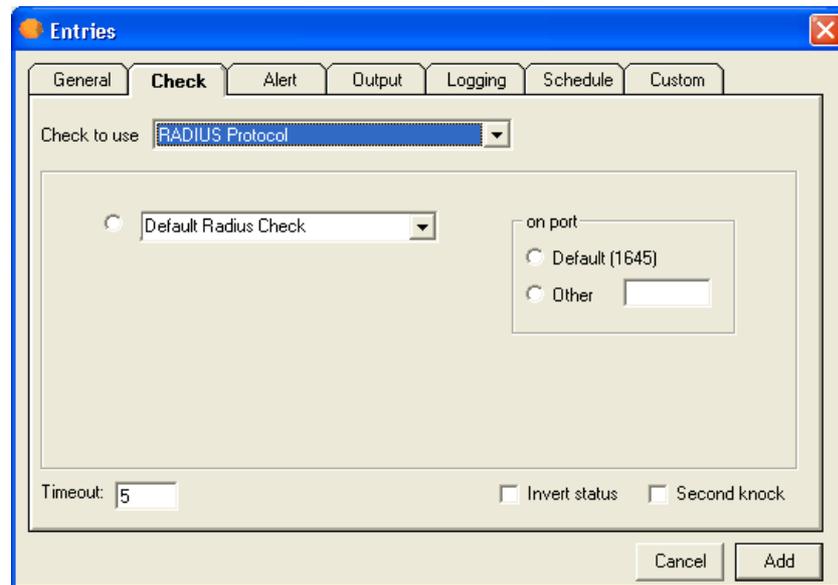
Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: Radius Protocol Option (Entries Dialog Box)



You can define your own protocol and the corresponding port by clicking **Edit > Protocol** (on page 262) in the Main window.

Select the specific port or service you want to check.

On Port

Default

Click to use the default, or most common, ports or services. Servers Alive defines these, along with their default ports.

Other

Click this option if you want to check a service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 300 seconds.

Invert Status

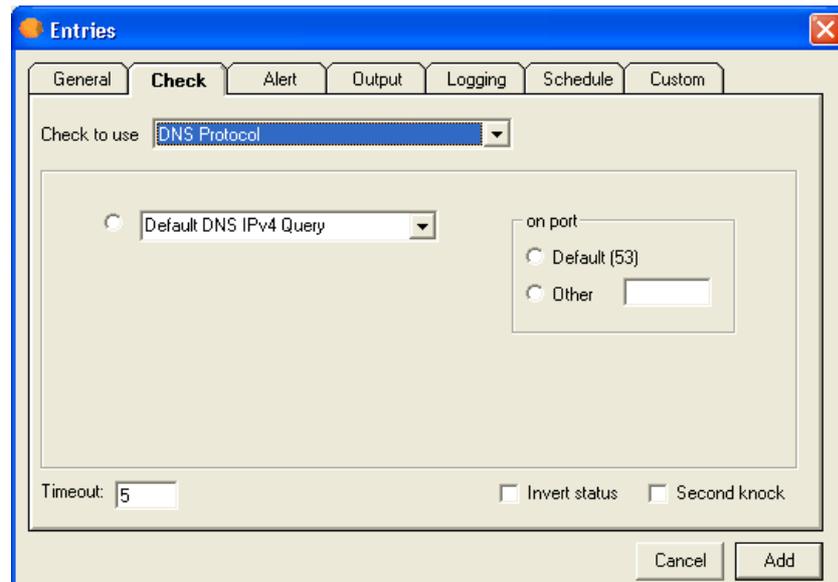
Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: DNS Protocol Option (Entries Dialog Box)



You can define your own protocol and the corresponding port by clicking *Edit > Protocol* (on page 262) in the Main window.

Select the specific port or service you want to check.

On Port

Default

Click to use the default, or most common, ports or services. Servers Alive defines these, along with their default ports.

Other

Click this option if you want to check a service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 300 seconds.

Invert Status

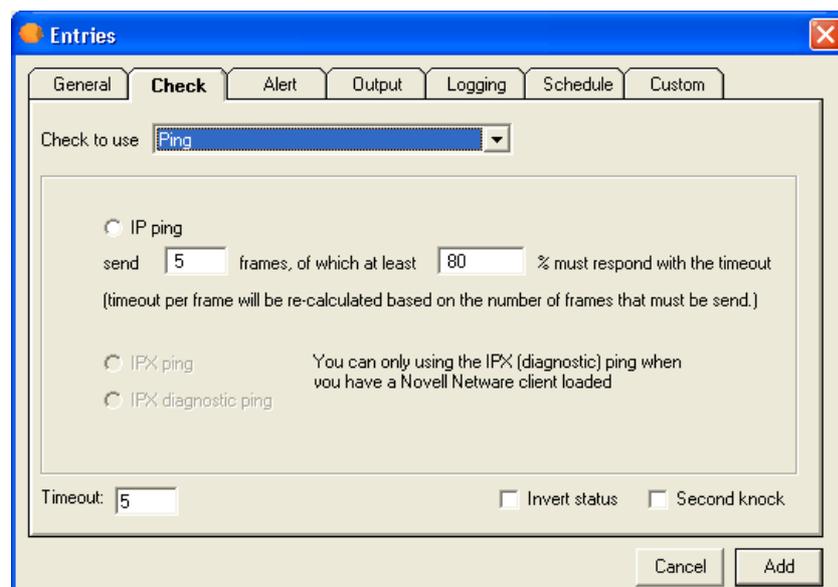
Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: Ping Option (Entries Dialog Box)



IP Ping

Click to enable the ping feature. Servers Alive can ping a host using an ICMP network frame, which determines if the computer and the network between the computer and the Servers Alive computer are functional.

Servers Alive can also ping over the IPX protocol for Novell servers and clients using the Novell Netware client, which you must install separately.

Maximum timeout for a ping check is 600s. During the check, the timeout per frame is calculated and has a maximum of 32s per frame—a limit of the ICMP.DLL.

For example, if Servers Alive must send 10 frames and the timeout is set to 400, then each frame has a maximum timeout of 32 seconds. If the number of frames is set to 20 and the timeout to 400, each frame has a maximum timeout of 20 seconds.

A ping (IP) can generate the following error codes, which can be found in the log files:

- IP_SUCCESS = 0
- IP_BUF_TOO_SMALL = (11001)
- IP_DEST_NET_UNREACHABLE = (11002)
- IP_DEST_HOST_UNREACHABLE = (11003)
- IP_DEST_PROT_UNREACHABLE = (11004)
- IP_DEST_PORT_UNREACHABLE = (11005)
- IP_NO_RESOURCES = (11006)
- IP_BAD_OPTION = (11007)
- IP_HW_ERROR = (11008)
- IP_PACKET_TOO_BIG = (11009)
- IP_REQ_TIMED_OUT = (11010)
- IP_BAD_REQ = (11011)
- IP_BAD_ROUTE = (11012)
- IP_TTL_EXPIRED_TRANSIT = (11013)
- IP_TTL_EXPIRED_REASSEM = (11014)
- IP_PARAM_PROBLEM = (11015)
- IP_SOURCE_QUENCH = (11016)
- IP_OPTION_TOO_BIG = (11017)
- IP_BAD_DESTINATION = (11018)

Send ___ Frames, Of Which at Least ___ % Must Respond with the Timeout

Enter the number of frames and percentage that must respond within the timeout limit that you set.

The **IPX Ping** and **IPX Diagnostic Ping** options are available if the Novell Netware client is installed and if the host name is entered as an IPX address. Example: 352FBA2B:000000000001).

IPX Ping

Click to use socket 9086.

IPX Diagnostic Ping

Click to use socket 456.

Timeout

Enter the length of time for the timeout in seconds.

For example, you can enter the following items:

Timeout 5 seconds

10 frames

75% success rate

As a result of these settings, Servers Alive sends 10 frames and each of them should get a response within $5s/10=.5s$. If Servers Alive receives the response, the frames are internally flagged as being OK. The next frame is sent after the timeout of the previous check or when the previous check gets back. After the ten frames, Servers Alive calculates the percentage of frames that came back on time. Servers Alive checks to see if this fits the given rule, in this case 75%, and based on this check, indicates an OK or DOWN for the host entry.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: URL (HTTP/HTTPS) Option (Entries Dialog Box)

The screenshot shows the 'Entries' dialog box with the 'Check' tab selected. The 'Check to use' dropdown is set to 'URL (http/https)'. Below this, there is a text input field for the URL, a dropdown for the method (set to 'GET'), and two dropdowns for 'should contain' and 'this exact phrase'. There is a checkbox for 'Password protected page' with 'Username' and 'Password' input fields. A dropdown for 'no proxy' and a dropdown for 'HTTP Version to use: 1.0' are also present. At the bottom, there is a 'Timeout: 5' field and checkboxes for 'Invert status' and 'Second knock'. The 'Add' button is highlighted.

Servers Alive can perform a URL (Universal Resource Locator) check based on the HTTP (web) and HTTPS (secure web) protocol.

To use this check, you should have a temp directory with write access to it. To accommodate this requirement, the URL (HTTP/HTTPS) check creates a file in the same directory that you installed Servers Alive. The file is named `_temp_for_url.tmp`.

In the first box of the check, you should enter a URL for the web page, as in the following examples:

- `http://www.mydomain.com/sub-dir/page.html`
- `https://www.mydomain.com/sub-dir/page.html`

If you add the `yyyy-mm-dd` parameter to the string for the URL, the parameter is translated. For example, the following string

`http://www.domain.com/Log/{yyyy-mm-dd}.html`

Becomes the following:

`http://www.domain.com/Log/2005-03-23.html`

You can use the following values for the date and time, surrounded by { and }:

<code>dd</code>	day
<code>mm</code>	short month (01)
<code>yy</code>	short year (02)
<code>Mmmm</code>	long month (January)
<code>yyyy</code>	long year (2002)

For both the HTTP and the HTTPS check, Servers Alive can connect to the remote server using a proxy server. This proxy server is defined in the **Proxy** branch of the **Setup** dialog box.

You can enter the conditional settings to perform the check.

You can select **Get** or **Post** in the dropdown list to implement a check with either a get or a post action.

You can also select **Head** in the dropdown list to check for a string in the header of the received web page, according to the conditionals that you enter in the next boxes.

For both the HTTP and the HTTPS check, Servers Alive can also check whether the content of the retrieved page is correct or not. To use this functionality, you must use the **Should contain** or **Shouldn't contain** option in combination with a word or sentence that should or should not be in the retrieved web page.

The following list shows the results for different options:

<u>If you select this option</u>	<u>And this option</u>	<u>You get this result</u>
Should Contain	All of These Words	Each of the words should be in the page to get an up reading.
Should Contain	Any of These Words	At least one of the words should be in the page to get an up reading.
Should Contain	This Exact Phrase	This phrase, with the exact words in the exact order, must be in the page to get an UP reading.
Should Not Contain	All of These Words	If all of the indicated words are in the page, a down reading results.
Should Not Contain	Any of These Words	If any of the words appear in the page, a down reading results.
Should Not Contain	This Exact Phrase	If the exact words appear in the page in the exact order, a down reading results.

You can select **CRC** in the dropdown list to perform a cyclic redundancy check (CRC). This is useful if you want to ensure the integrity of data transmission or ensure that a file or data has not been modified.

You can also select **This Exact Phrase**, **All of These Words**, or **Any of These Words** to determine conditions for the sentence or phrase that you use to check the content of the page. This list appears if you select **Should Contain** or **Shouldn't Contain** in the previous list.

In the content check string, you can have a value that is based on the current date. To do this, add a string that is surrounded by { and } and contains some of the following keywords:

dd	day
mm	short month (01)
yy	short year (02)
Mmmm	long month (January)
yyyy	long year (2002)

For example, “{dd-mm-yy}” translates to “22-01-02”, and “{dd Mmmm yyyy}” would translate to “22 January 2002”.

Data to Post

Appears when you select **Post** in the list box. You can enter the data that needs to be posted in the following format:

VAR1=value1&VAR2=value2

Reset CRC after Each Check

Appears when you select **CRC** in the dropdown list. This check box ensures that the CRC feature is reset after each check cycle.

Password Protected Page

Click to enable a page that is protected by a password.

Username

Enter the user name.

Password

Enter the password.

No Proxy

Click to disable proxy authentication. Click the check box when you have a direct connection to the Internet to retrieve a web page. Some companies or Internet service providers force people to use a proxy server. In these cases, you must define the proxy server settings by clicking **File > Setup** and then click the **General** branch of the tree and select the **Proxy** branch. You can now use these settings within the HTTP/HTTPS checks.

HTTP Version to Use

Select the version of HTTP that Servers Alive uses to complete a check. You can select either Version 1.0 or 1.1. Many servers use Version 1.1. However, for compatibility, the default setting **HTTP 1.0** is recommended.

Timeout

Enter the length of time for the timeout in seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

By default, the software interprets a space as a word separator. To change this, enter the following registry setting:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\URL_Word_Separator (string)

Servers Alive performs the check in a case-sensitive way when you click **Should Contain** in the previous list. This can be changed by adding or editing the following registry value:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\URLContentInsensitive (dword)

1 = case insensitive

0 = case sensitive (default)

A CRC check of a URL (HTTP/HTTPS) check retrieves the web page and calculates a CRC (checksum) on the content of the page. However, it only does this for all that text between the <BODY> and </BODY> tags.

The CRC check can automatically reset the CRC after each cycle. An altered page generates only one down cycle and the next up again.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\CRC\StartTAG (string)

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\CRC\EndTAG (string)

In between those two tags you can still exclude some parts too, as they are often used for changing data like a date or time.

All text in between the following tags is not used for the CRC calculation:

<!-- SA Ignore --> <!-- SA Resume -->

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\CRC\StartIgnoreTAG (string)

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\CRC\EndIgnoreTAG (string)

You can log all communication during an HTTP/HTTPS check to a file so that you can debug the process. Edit the following registry entries:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\logHTTP (dword)

Enter a value of 1 to enable this feature.

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\logHTTPFile (string)

Enter the path and name of the file log.

On some Windows 95 and 98 systems, the HTTPS checks fail and write the following error message to the log: "failed due to Could not acquire security credentials: error 0x80090305."

To fix the error, do the following:

- 1** Install Internet Explorer 5.5 or newer.
- 2** Install the DSCLIENT.EXE file that can be found on the Windows 2000 server CD in the following directory:
\Clients\Win9x\DSCLIENT.EXE. This updates several important pieces of the security subsystem.
- 3** Update the Windows registry by adding ", schannel.dll" to the end of the string found in the following registry key:
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SecurityProviders

Usually, Servers Alive uses one set of UserAgent/SecurityFlag/AdditonalHeaders for all URL (HTTP/HTTPS) checks. However, if for some reason you want to change them for one or more entries, you can do this by opening and editing the entries file directly.

An example without additional parameters is:

```
#TYPE=U#PARA="#URL=http://www.company.com#CCO=CON#CON=#AUTH=F#USR=#PWD=#PRX=F#COO=F##ADPA=""#TIME=10#SK=F#
```

An example with additional parameters is:

```
#TYPE=U#PARA="#URL=http://www.company.com#CCO=CON#CON=#AUTH=F#USR=#PWD=#PRX=F#COO=F##ADPA=""#ADDITIONALHEADERS=Accept-Language:en-us{0d}{0a} Accept-Encoding:gzip, deflate##TIME=10#SK=F#
```

Within the "string," you get a #ADPA="; all information after that, until the next ", is for additional parameters.

Currently you can use several additional parameters:

- USERAGENT
- HTTPSECURITYFLAGS
- ADDITIONALHEADERS

An example that uses two of the parameters is:

```
#TYPE=U#PARA="#URL=http://www.company.com#CCO=CON#CON=#AUTH=F#USR=#PWD=#PRX=F#COO=F"#ADPA="#USERAGENT=NSPlayer/7.1.0.3055#ADDITIONALHEADERS=Accept-Language:en-us {0d} {0a} Accept-Encoding: gzip, deflate#"#TIME=10#SK=F#
```

The {0d} {0a} is needed if you want to send several different additional headers.

You can also specify SSLCERTSTORE and SSLCERTSUBJECT so that Servers Alive presents a client-side certificate to the server when making the connection.

For example, within the host file for a URL check, you get the following example of a simple URL check of `http://www.woodstone.nu` without contains or authentication and a simple GET:

```
#TYPE=U#PARA="#URL=http://www.woodstone.nu#CCO=CON#CON=#AUTH=F#USR=#PWD=#PRX=F#COO=F#CRS=F#HCT=GET#HDT=#"#ADPA=""#TIME=5#SK=F#SEV=emergency#
```

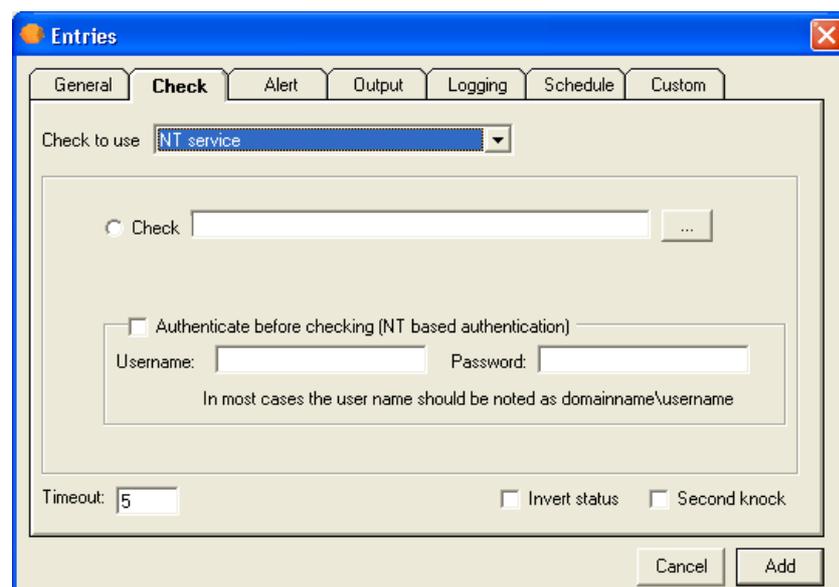
If you want a different user agent for this specific check than what Servers Alive would usually implement, then you can change it with the following example:

```
#TYPE=U#PARA="#URL=http://www.woodstone.nu#CCO=CON#CON=#AUTH=F#USR=#PWD=#PRX=F#COO=F#CRS=F#HCT=GET#HDT=#"#ADPA="#USERAGENT=A new useragent#"#TIME=5#SK=F#SEV=emergency#
```

In the example, instead of "#ADPA=""#, you get the following:

```
"#ADPA="USERAGENT=A New useragent#"#
```

Check Tab: NT Service Option (Entries Dialog Box)



Servers Alive can perform various checks specific to Windows NT, 2000, and 2003. The software can check Windows NT services on local and remote computers. Keep in mind that if you are running Servers Alive as a service, and want to check a service, process, or performance counter on a remote computer, you must specify a user name and password with sufficient rights to perform the check on the remote computer.

In order for Servers Alive to perform the various checks that are specific to Windows NT, 2000, and 2003, the software must have access to the remote server's NetBIOS ports. This can be a problem if there are any intervening firewalls. Please consult with your firewall administrator to get the required access.

NT services can be checked from a Windows 98 computer if the NT administration tools are installed on the computer and are available to Servers Alive. The process works best if the tools are installed in the same directory as Servers Alive.

Check

Click this radio button and then click the browse button to open the *Services Running On dialog box* (on page 152). You can then select from the list of services running on the remote computer.

Authenticate Before Checking

Click to enable authentication before the check starts.

The user performing the service check needs to have at least power-user rights on the computer that is checked. For the process checking, you need administrator rights. This means that, when Servers Alive runs within the context of user_1, user_1 must have power-user or administrator rights on the computer that is checked.

If user_1 does not have sufficient rights, you can specify another user name, usually in the form domain\username, and password of a user with power-user or administrator rights on the computer that is checked.

Username

Enter the user name.

Password

Enter the password.

Timeout

Enter the length of time for the timeout in seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

The various Windows checks can return errors in the log. Some common errors follow:

- 5 Access denied.
- 53 The network path was not found.
- 1219 Multiple connections to a server or shared resource by the same user, using more than one user name, are not allowed. Disconnect all previous connections to the server or shared resource and try again.
- 1220 An attempt was made to establish a session to a network server, but there are already too many sessions established with that server.
- 1312 A specified log on session does not exist. It might already be terminated.
- 1322 No mapping between account names and security IDs was completed.
- 1323 The value provided as the current password is incorrect.
- 1324 The value provided contains values that are not allowed in passwords.
- 1325 The value provided does not meet the length, complexity, or history requirement of the domain.
- 1326 Unknown user name or bad password.
- 1327 User account restriction.
- 1328 Account logon time restriction violation.
- 1329 The user is not allowed to log on to this computer.
- 1330 The specified account password has expired.
- 1331 The account is currently disabled.
- 1722 The RPC server is unavailable.

Usually, Servers Alive de-authenticates at the end of any check cycle that includes authentication. If this does not succeed, it can cause any

subsequent checks to fail. To force an authentication disconnect before a check, add the following registry entry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\DisconnectBeforeAuthenticationConnection (dword).
Value of 1 turns this feature on.

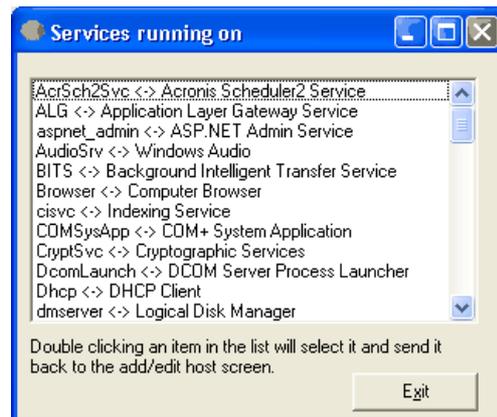
If any error code found within this comma separated list occurs during the authentication phase, Servers Alive still sees the authentication as being successful. This is not a guarantee that the check will pass.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\AuthenticationErrorIgnoreList

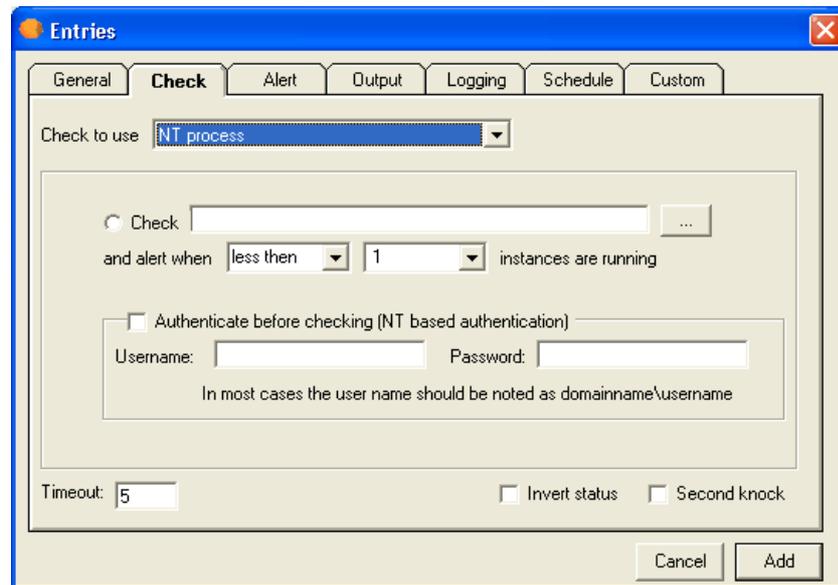
When you use an NT Service check, you can select an item to check, such as **Audiosrv** <=> **Windows Audio**.

To open this dialog box, select the following items from the Main window:

- **Add button** > **Entries** dialog box > **Check** tab > **Check to Use list: NT Service** > Browse button.



Check Tab: NT Process Option (Entries Dialog Box)



Servers Alive can perform various checks specific to Windows NT, 2000, and 2003. The software can check Windows NT processes on local and remote computers. To check if a process is running on a remote server, you must have access to the registry of that system. Keep in mind that, if you are running Servers Alive as a service, and want to check a service, process, or performance counter on a remote computer, you must specify a user name and password with sufficient rights to perform the check on the remote computer.

Servers Alive can only check for Windows NT processes if Servers Alive is running on a computer that runs Windows NT, 2000, or 2003.

In order for Servers Alive to do the various Windows NT, 2000, and 2003 specific checks, the software must have access to the remote server's NetBIOS ports. This can be a problem if there are intervening firewalls. Please consult with your firewall administrator to get the required access, if this is the case.

If you select **NT process**, you can click **List the Available** to get a list of the running processes on the remote computer. Double-click on one to select it and return to the **Check** tab. On the right side, select the check condition. Servers Alive can alert you when less than, or at least x number of, the specified processes are running. This is commonly used to alert when the Dr. Watson process is running (indicating an error).

Check

Click this radio button and then click the browse button to open the *Processes Running On dialog box* (on page 156). You can then select from the list of services running on the remote computer.

And Alert When ____ ____ Instances Are Running

Enter the condition and number of instances to perform the check.

Authenticate Before Checking

Click to enable authentication before the check process starts.

The user performing the service check needs to have at least power user or administrator rights on the computer that is checked. If you do not have sufficient rights, you can specify another user name, usually in the form <domain name>\<user name>, and password of a user with power user or administrator rights on the computer that is checked.

Username

Enter the user name.

Password

Enter the password.

Timeout

Enter the length of time for the timeout in seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

The various Windows checks can return errors in the log. Some common errors follow:

- 5 Access denied.
- 53 The network path was not found.
- 1219 Multiple connections to a server or shared resource by the same user, using more than one user name, are not allowed.

Disconnect all previous connections to the server or shared resource and try again.

- 1220 An attempt was made to establish a session to a network server, but there are already too many sessions established with that server.
- 1312 A specified log on session does not exist. It might already be terminated.
- 1322 No mapping between account names and security IDs was completed.
- 1323 The value provided as the current password is incorrect.
- 1324 The value provided contains values that are not allowed in passwords.
- 1325 The value provided does not meet the length, complexity, or history requirement of the domain.
- 1326 Unknown user name or bad password.
- 1327 User account restriction.
- 1328 Account logon time restriction violation.
- 1329 The user is not allowed to log on to this computer.
- 1330 The specified account password has expired.
- 1331 The account is currently disabled.
- 1722 The RPC server is unavailable.

Usually, Servers Alive de-authenticates at the end of any check cycle that includes authentication. If this does not succeed, it can cause any subsequent checks to fail. To force an authentication disconnect before a check, add the following registry entry:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\DisconnectBeforeAuthenticationConnection (dword).  
Value of 1 turns this feature on.
```

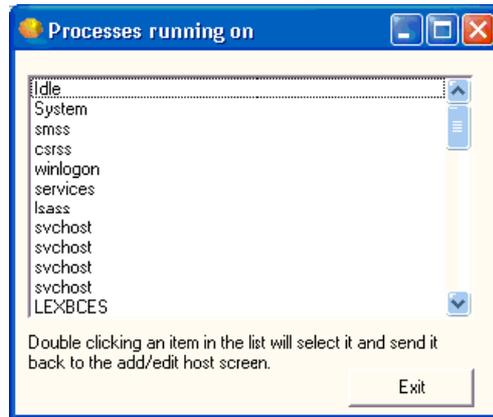
If any error code found within this comma separated list occurs during the authentication phase, Servers Alive still sees the authentication as being successful. This is not a guarantee that the check will pass.

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\AuthenticationErrorIgnoreList
```

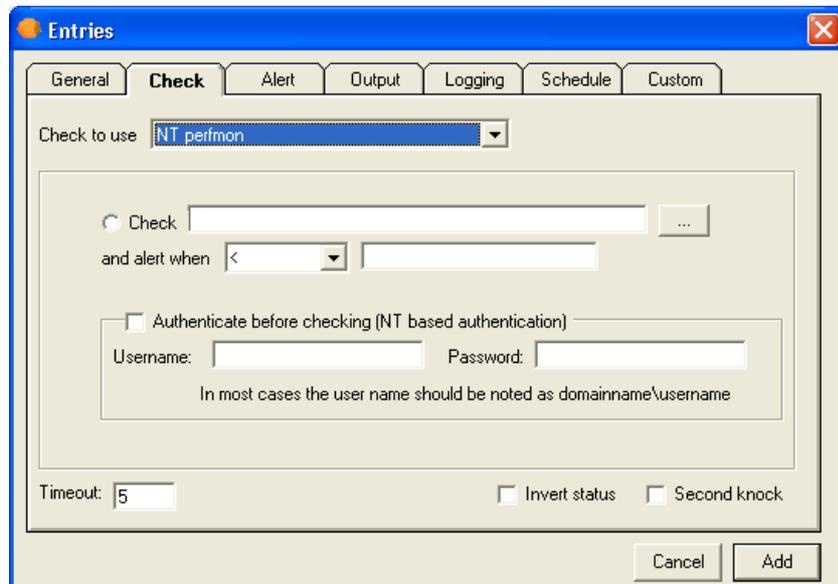
When you use an NT Process check, you can select an item to check such as **Idle**, **System**, or **Winlogon**.

To open this dialog box, select the following items from the Main window:

- **Add button > Entries dialog box > Check tab > Check to Use list: NT Process > Browse button.**



Check Tab: NT Perfmon Option (Entries Dialog Box)



Servers Alive can perform various checks specific to Windows NT , 2000, and 2003. It can check NT performance monitor (perfmon) counters on local and remote computers. If you are running Servers Alive as a service, and want to check a service, process, or performance counter on a remote computer, you must specify a user name and password with sufficient rights to perform the check on the remote computer.

In order for Servers Alive to perform the various Windows NT, 2000, and 2003 specific checks, the software must have access to the remote server's NetBIOS ports. This can be a problem if there are any intervening firewalls. Please consult with your firewall administrator to get the required access, if this is the case.

The software can check to see if the result of a check:

- Is less than a value,

- Is greater than a value,
- Is equal to a value,
- Is different from (<>) a value,
- Contains a result of a formula that is false.

Check _____

Click this radio button and then click the browse button to open the *Select Counter dialog box* (on page 160). You can then select from the list of services running on the remote computer.

And Alert When

Select one of the operators from the list.

<u>This option</u>	<u>Means this</u>
<	Is less than a value.
=	Is equal to a value.
>	Is greater than a value.
<>	Is different from (<>) a value.
Formula	Contains a result of a formula that is false.

When you select **Formula** from the list, you can use the following parameters to check the result of a formula:

- sa_currentresult = the result of the get operation.
- sa_previousresult = the result of the previous get operation.
- sa_currenttimeinms = the current time in milliseconds.
- sa_previoustimeinms = the time of the previous get operation in milliseconds.

You can create formulas using these parameters and have Servers Alive give a down when the result of the formula is false. For example, you can check the number of errors that occur in a network interface with the following formula:

$$(sa_currentresult - sa_previousresult) / ((sa_currenttimeinms - sa_previoustimeinms) / 1000) < 5$$

The example formula gives a down if there are five or more errors per second that were added between the last two cycles of this entry.

Authenticate Before Checking

Click to enable authentication before the check starts.

The user performing the service check needs to have at least power-user rights on the computer that is checked. For the process checking you need administrator rights. This means that, when Servers Alive runs within the

context of user_1, user_1 must have power-user or administrator rights on the computer that is checked.

If user_1 does not have sufficient rights, you can specify another user name, usually in the form domain\username, and password of a user with power-user or administrator rights on the computer that is checked.

Username

Enter the user name.

Password

Enter the password.

Timeout

Enter the length of time for the timeout in seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

The perfmon check sometimes fails or gives unexpected values due to timing issues with the performance counters retrieval DLL. By default the timeout is set to 1000ms. You can change the timeout by creating the following registry entry and giving it a value between 1 and 10000 (milliseconds). Remember the value is in ms and the default is already 1000, so you should make the change with numbers higher than 1000.

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\PerfmonTimings (string)

The various Windows checks can return errors in the log. Some common errors follow:

- 5 Access denied.
- 53 The network path was not found.

- 1219 Multiple connections to a server or shared resource by the same user, using more than one user name, are not allowed. Disconnect all previous connections to the server or shared resource and try again.
- 1220 An attempt was made to establish a session to a network server, but there are already too many sessions established with that server.
- 1312 A specified log on session does not exist. It might already be terminated.
- 1322 No mapping between account names and security IDs was completed.
- 1323 The value provided as the current password is incorrect.
- 1324 The value provided contains values that are not allowed in passwords.
- 1325 The value provided does not meet the length, complexity, or history requirement of the domain.
- 1326 Unknown user name or bad password.
- 1327 User account restriction.
- 1328 Account logon time restriction violation.
- 1329 The user is not allowed to log on to this computer.
- 1330 The specified account password has expired.
- 1331 The account is currently disabled.
- 1722 The RPC server is unavailable.

Usually, Servers Alive de-authenticates at the end of any check cycle that includes authentication. If this does not succeed, it can cause any subsequent checks to fail. To force an authentication disconnect before a check, add the following registry entry:

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\DisconnectBeforeAuthenticationConnection (dword).  
Value of 1 turns this feature on.
```

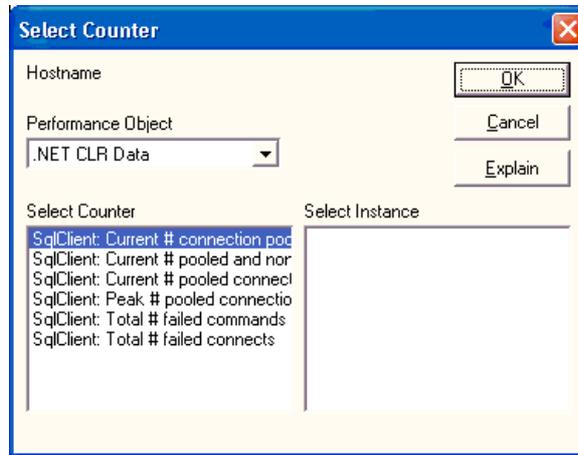
If any error code found within this comma separated list occurs during the authentication phase, Servers Alive still sees the authentication as being successful. This is not a guarantee that the check will pass.

```
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\AuthenticationErrorIgnoreList
```

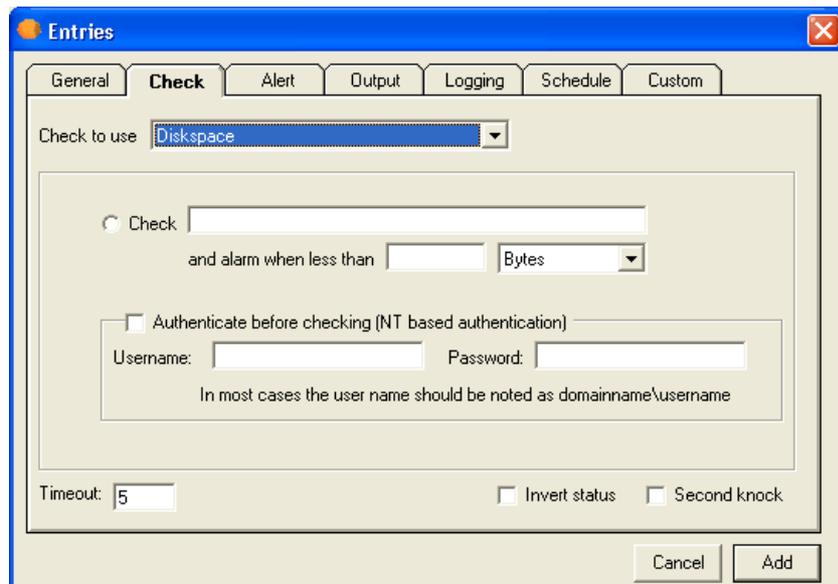
When you use an NT perfmon check, you can select the performance object, counter, and instance to use in the check. For example, you can check **.NET CLR Exceptions, # of Exceps Thrown, _Global_**.

To open this dialog box, select the following items from the Main window:

Add button > Entries dialog box > Check tab > Check to Use list: NT Perfmon > Browse button.



Check Tab: Diskspace Option (Entries Dialog Box)



Check

Enter the item to check. Servers Alive can check to ensure enough disk space exists on a specific Windows network share. The name of the resource must be given as \\server\share.

And Alarm When Less Than _____

Enter the conditions for performing the check. Servers Alive sends you an alarm when the free space is less than x. You must also select the units: **Bytes**, **Kilobytes (KB)**, **Megabytes (MB)**, **Gigabytes (GB)**, **Terabytes (TB)**, or **Percentage**.

For example, if you want an alarm when less than 25 kb of the disk space is available, you should type 25 in the box and select **Kilobytes** in the

list. If you want an alarm when less than 5% of the disk space is available, then enter 5 in the text box and select **Percentage** in the list.

Authenticate Before Checking

Click to enable authentication before the check starts.

The user performing the service check needs to have at least power-user rights on the computer that is checked. For the process checking you need administrator rights. This means that, when Servers Alive runs within the context of user_1, user_1 must have power-user or administrator rights on the computer that is checked.

If user_1 does not have sufficient rights, you can specify another user name, usually in the form domain\username, and password of a user with power-user or administrator rights on the computer that is checked.

Username

Enter the user name.

Password

Enter the password.

Timeout

Enter the length of time for the timeout in seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

The exact byte value of kb/mb/gb/tb can be changed in the registry.

Values to add or change are as follows:

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\diskspace\kb (string value)

- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\diskspace\mb (string value)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\diskspace\gb (string value)
- HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\diskspace\tb (string value)

By default, Servers Alive selects the next available drive letter to connect with when performing a disk space check. You can force Servers Alive to use a specific one if you choose.

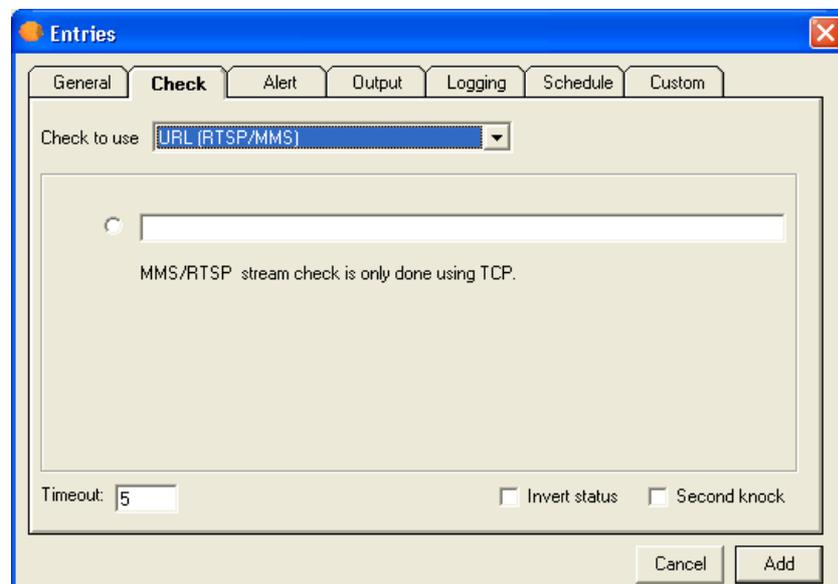
HKLM\SOFTWARE\DBU Consulting\Servers Alive\StartUp\ForcedDriveLetter (string value)

When performing a disk space check, the %e parameter contains the actual free space on the share that is checked. If the compare value is given in MB, the %e parameter is also in MB. However, if the compare value is given as a percentage, the %e is in bytes. You can now control how %e is returned when checking by a percentage by editing this registry value:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\DiskSpace\PercentageMeasure (string)

Possible values: KB, MB, GB, TB, %. The default value is MB.

Check Tab: URL (RTSP/MMS) Option (Entries Dialog Box)



Servers Alive can perform a URL (Universal Resource Locator) check based on the MMS (Microsoft media server) or RTSP (streaming audio) protocol. Select the radio button and enter information in the box.

Servers Alive supports the MMS and RTSP protocols using only TCP, not UDP or HTTP.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 300 seconds.

Invert Status

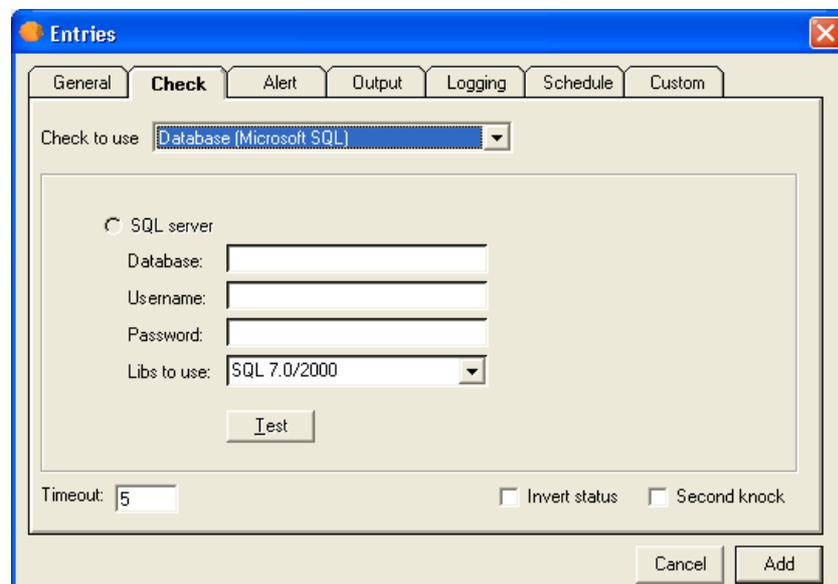
Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: Database (Microsoft SQL) Option (Entries Dialog Box)



Servers Alive works only with Microsoft SQL and not any other third party SQL server.

Servers Alive can check the availability of a Microsoft SQL server database. To perform this check, the software uses the Microsoft SQL client, which you must install separately. Servers Alive supports Microsoft SQL 6.5, 7.0 and 2000 clients. The SQL 2000 client is seen as SQL7.

When you want to check a Microsoft SQL database, you must provide the name of the database, the user name, and the password that is used to connect to the database. The SQL server name is the host name. If you have both multiple clients installed, you can select which client Servers Alive should use.

SQL Server

Click to use SQL server. These options are available only if you have the Microsoft SQL DMO libraries installed on your computer.

Database

Enter the name of the database.

Username

Enter the user name for connecting to the database.

Password

Enter the password to connect to the database.

Libs to Use

Enter the name of the library that you want to use to connect.

Test

Click to perform a test check based on the information that you have entered in this dialog box. The result displays on the dialog box. This is convenient when you want to ensure that a check that you create works.

Timeout

Enter the length of time for the timeout in seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

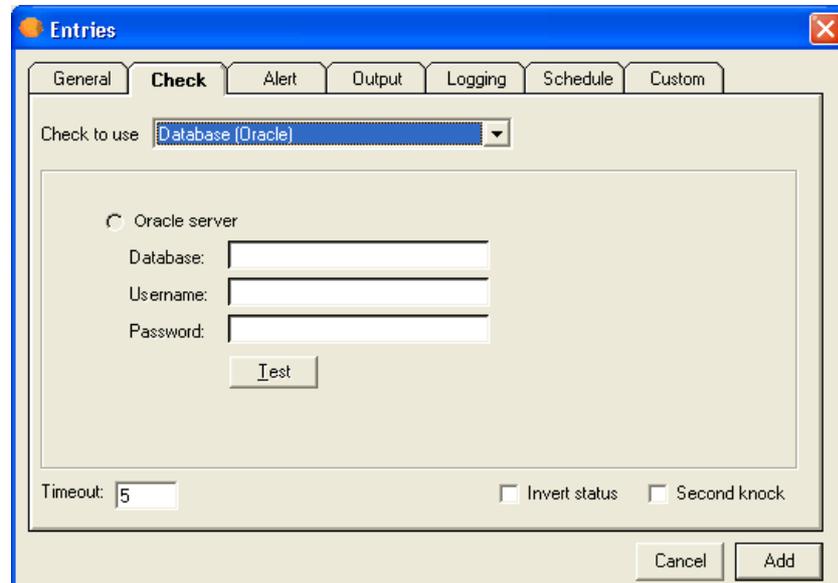
<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end

of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: Database (Oracle) Option (Entries Dialog Box)



Servers Alive works only with Oracle by Oracle Corporation and not any other brand.

Servers Alive can check the availability of an Oracle database. To do this, the software uses the Oracle OLE object, which is part of the Oracle client. Servers Alive supports Oracle 7, Oracle 8, 8g, 8i, 9i, and 10g clients. With Oracle 9i and 10g, you must install the Oracle Windows Interface included with Oracle. In most cases, a full installation of the Oracle client is needed. When you want to check an Oracle database, you must provide the name of the database, the user name, and the password that are used to connect to the database.

Oracle Server

Click to use an Oracle server. These options are not available unless you have installed the Oracle OLE (object linking and embedding) libraries.

Database

Enter the name of the database that you want to connect to.

Username

Enter the user name to connect to the database. The database name is a name that is defined within the **TNSNames.ora** file. For more information on how to configure entries in the **TNSNames.ora** file, please consult your Oracle documentation.

Password

Enter the password to connect to the database.

Test

Click to perform a test check based on the information that you have entered in this dialog box. The result displays on the dialog box. This is convenient when you want to ensure that a check that you create works.

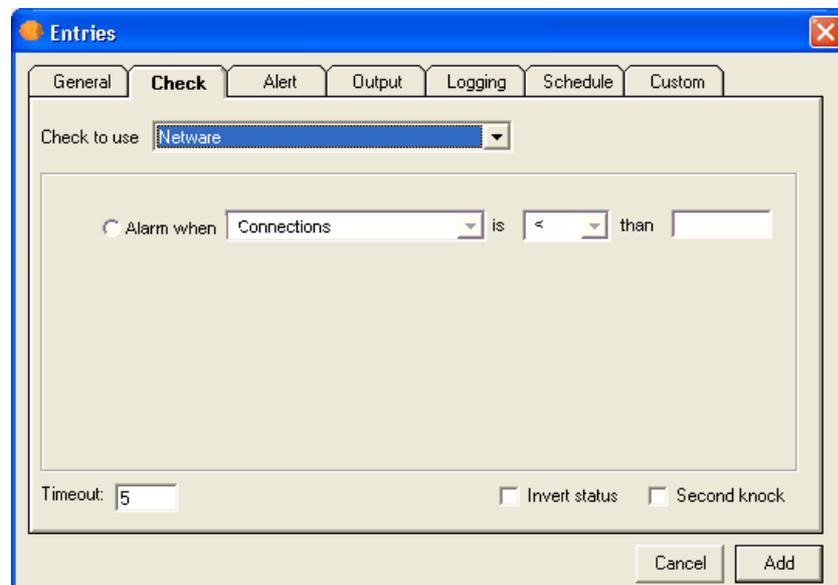
Timeout

Enter the length of time for the timeout in seconds.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: Netware Option (Entries Dialog Box)



Servers Alive works only with Novell Netware Client, and not the Microsoft Netware client.

Servers Alive can check several parameters on your Netware server. For these checks, the software uses the Novell Netware client. If this client is not installed, the Netware check options are not available.

Servers Alive can check:

- The number of active connections on the Netware server.

- The CPU usage of the Netware server.
- The number of mounted volumes.

You can configure Servers Alive to send an alarm to you when the returned number is less than (<), greater than (>), equal to (=), or different from (<>) a base-value.

The Netware checking only gives a valid result when you are currently connected to the Netware server you are checking.

Alarm When ____ is ____ Than _____

Enter the conditional settings for the check.

Timeout

Enter the length of time for the timeout in seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Check Tab: SNMP Option (Entries Dialog Box)

The screenshot shows the 'Entries' dialog box with the 'Check' tab selected. The 'Check to use' dropdown is set to 'SNMP'. Below this, there are several configuration fields: a 'Check' text box, a 'Test it' button, a dropdown for 'and alert when the result' (set to 'is < than'), an 'OR' checkbox, another dropdown for 'is < than', a 'Community string' field (set to 'public'), an 'SNMP port' field (set to '161'), an 'SNMP version' dropdown (set to 'SNMPv3'), a 'Don't convert received result to text' dropdown, a 'Set authentication' button, an 'Advanced' button, a 'Timeout' field (set to '5'), and checkboxes for 'Invert status' and 'Second knock'. At the bottom right are 'Cancel' and 'Add' buttons.

Servers Alive can check the status of a device or host with the Simple Network Management Protocol (SNMP). The software checks if the value of a certain OID is one of the following:

- Is less than a value,
- Is greater than a value,
- Is equal to a value,
- Is different from (<>) a value,
- Contains a value,
- Does not contain a value,
- If the result of a formula is true or false.

Servers Alive can, within one check, retry several times to get an answer from the host.

To get a list of valid OIDs for your SNMP-enabled devices, you should contact the vendor of the device. They can give you an MIB file that contains all the OIDs for the device.

Check ___ And Alert When the Result _____

Enter the host name or object identifier (OID) that you want to check. Examples are the following:

-1.3.6.1.2.1.1.1.0

1.3.6.1.2.1.1.3.0

To check special characters, enter the appropriate hexadecimal value in the **Check** box and then select one of the following items in the dropdown list for **And Alert When the Result**:

This option	Means this
Is < than	Is less than a value.
Is > than	Is greater than a value.
Is = to	Is equal to a value.
Is <> than	Is different from (<>) a value.
Contains	Contains a value.
Doesn't Contain	Does not contain a value.
Formula	Contains a result of a formula that is false.

When you select **Formula** from the list, you can use the following parameters to check the result of a formula:

- sa_currentresult = the result of the get operation.
- sa_previousresult = the result of the previous get operation.
- sa_currenttimeinms = the current time in milliseconds.
- sa_previoustimeinms = the time of the previous get operation in milliseconds.

You can create formulas using these parameters and have Servers Alive give a down when the result of the formula is false. For example, you can check the number of errors that occur in a network interface with the following formula:

$$(sa_currentresult - sa_previousresult) / ((sa_currenttimeinms - sa_previoustimeinms) / 1000) < 5$$

The example formula gives a down if there are five or more errors per second that were added between the last two cycles of this entry.

To create a second rule that works with the first rule, click the check box that immediately follows the boxes for the first rule and enter conditionals. For example, you can create a check that sends a message when the OID < 45 or OID > 60 or alert when the OID > 45 and OID > 60.

Test It

Click to perform a test check based on the information that you have entered in this dialog box. The result displays on the dialog box.

Community String

Enter the appropriate community string for the server. You must enter the community string for the SNMP check for authentication purposes. An SNMPv1 community string serves as a password. By default, on most SNMP systems, this is PUBLIC; however, the community string can be different on your systems.

SNMP Version

Allows you to select the version of SNMP. If you select **SNMPv3**, you can click the **Set Authentication** button and enter the user name, password, and type of authentication in the *SNMPv3 Authentication Parameters dialog box* (on page 173).

Set Authentication

Click this button to enter settings for SNMP version 3 when you click the **SNMPv3** option on the **SNMP Version** list.

Advanced

Click this button to enter settings for an SNMP SET. The SNMP GET check can do an SNMP SET before performing the SNMP GET. You can enter values on the *Advanced Settings for SNMP Checks dialog box* (on page 172).

SNMP Port

Enter the SNMP port number. The default standard port number is 161. However, for security purposes, you can enter a different, non-standard port number.

The dropdown list determines whether the results of the SNMP check are converted to a text representation. This determines how information is displayed in the MIBs database.

- **Don't Convert Received Result to Text** - Specifies that the result of the check remains a numeric value.
- **Convert Received Result to Text** - Determines if the result of the SNMP check is converted to text. For example, .1.3.6.1.2.1.2.2.1.7 is the following:
ifAdminStatus
1 means up.
2 means down.
3 means testing.
- **Convert Received Result to HEX Representation** - Changes the received result to a hexadecimal value. Each character is replaced by the appropriate two-byte hexadecimal value, representing the ASCII text value of the character.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 300 seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

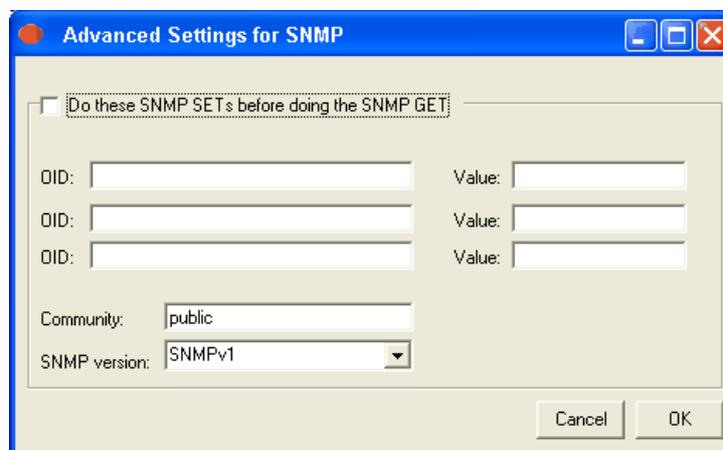
Second Knock

Enables second knock. If a host is seen as down during a check cycle and you have clicked the check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Advanced Settings for SNMP Checks

This dialog box allows you to enter settings for an SNMP SET. The SNMP GET check can do an SNMP SET before performing the SNMP GET. You can enter values for up to three SET processes.

You can use SNMP versions 1 and 2 to perform an SNMP SET before a GET. You cannot perform the SET with SNMP version 3.



Do These SNMP SETs Before Doing the SNMP GET

Click this check box to enable this feature. You can enter values in this dialog box only when you click this check box.

OID

Enter the object identifier (OID) that you want to check.

Value

Enter the value for the object.

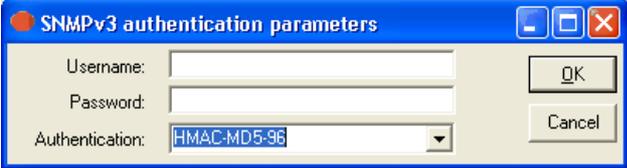
Community

Enter the community string. The default value is "public." You must enter the community string for the SNMP check for authentication purposes. An SNMPv1 community string serves as a password. By default, on most SNMP systems, this is PUBLIC; however, the community string can be different on your systems.

SNMP Version

Click the version that you want to use to perform the SET before the GET from the dropdown list. You can select SNMP Version 1 or Version 2. You cannot perform a SET before the GET using SNMP Version 3.

SNMPv3 Authentication Parameters Dialog Box



The image shows a dialog box titled "SNMPv3 authentication parameters". It contains three input fields: "Username:" (a text box), "Password:" (a text box), and "Authentication:" (a dropdown menu). The "Authentication:" dropdown is currently set to "HMAC-MD5-96". To the right of the input fields are two buttons: "OK" and "Cancel".

User Name

Enter the user name for the SNMP device.

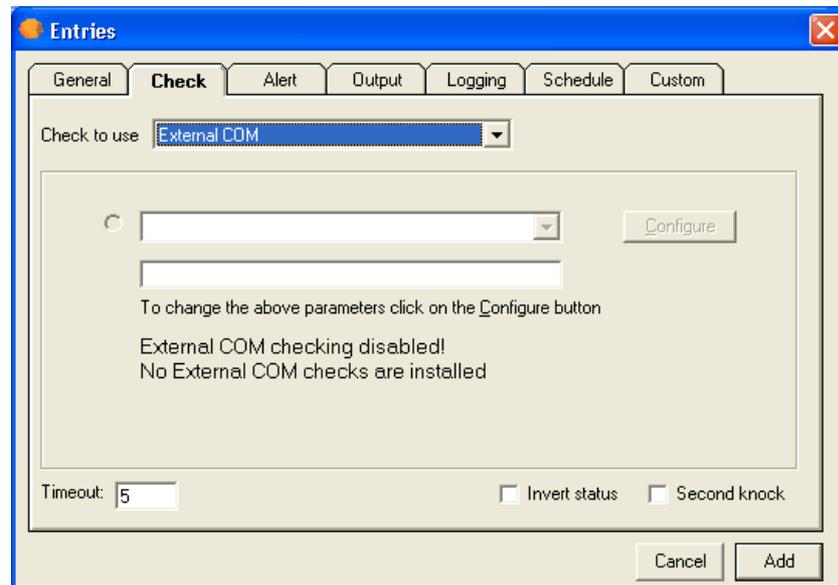
Password

Enter the password for the SNMP device.

Authentication

Select the type of authentication for the device.

Check Tab: External COM Option (Entries Dialog Box)



Configure

Click the **Configure** button to change the parameters.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 600 seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

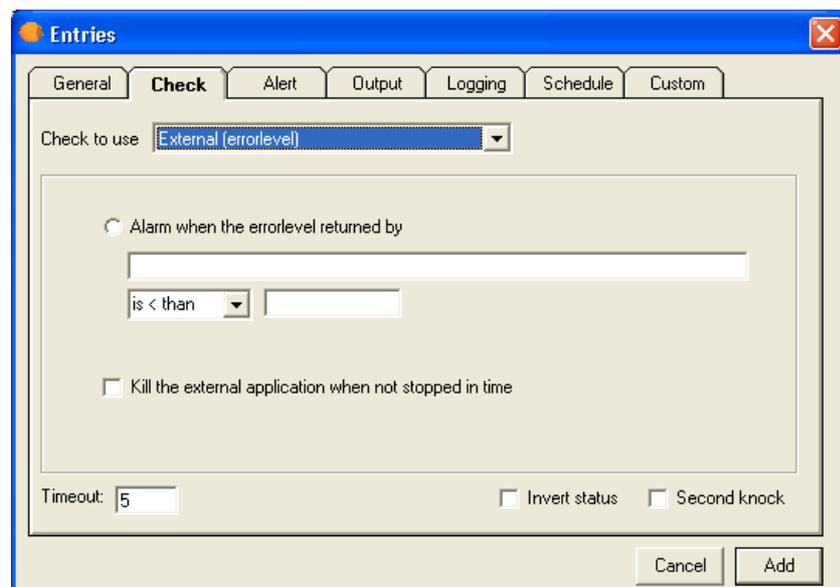
COM links

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Check Tab: External (Errorlevel) Option (Entries Dialog Box)



Servers Alive has many built-in check types, but Servers Alive cannot support all possible check types. To extend the functionality of Servers Alive, you can use the **External (Errorlevel)** check option. With an external check, Servers Alive uses an external application to perform an action and, based on the returned errorlevel, flags the host entry as being up or down.

Within the command line that Servers Alive must execute for this external check, you can use variables.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.

- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

If you want to test an external check that you wrote without the use of Servers Alive, you can use **checkerrorlevel.exe**. This small tool is installed by the Servers Alive Setup program in the Servers Alive directory. It runs your application and displays the error level your application returns.

For more information about **checkerrorlevel.exe**, see *External Checks* (on page 283).

Alarm When the Errorlevel Returned By

Enter the conditional settings for the check.

Kill the External Application When Not Stopped in Time

Shuts down the external application after the timeout has expired. If the external application has not returned an errorlevel to Servers Alive within the given timeout, Servers Alive flags the host entry as down. The external application continues to run. Servers Alive can, in such a situation, kill, or shut down, the external application after the timeout has expired.

Timeout

Enter the length of time for the timeout in seconds. The maximum timeout is 600 seconds.

Invert Status

Click this check box to reverse the status at the end of the check; for example, the status would be reversed from up to down or from down to

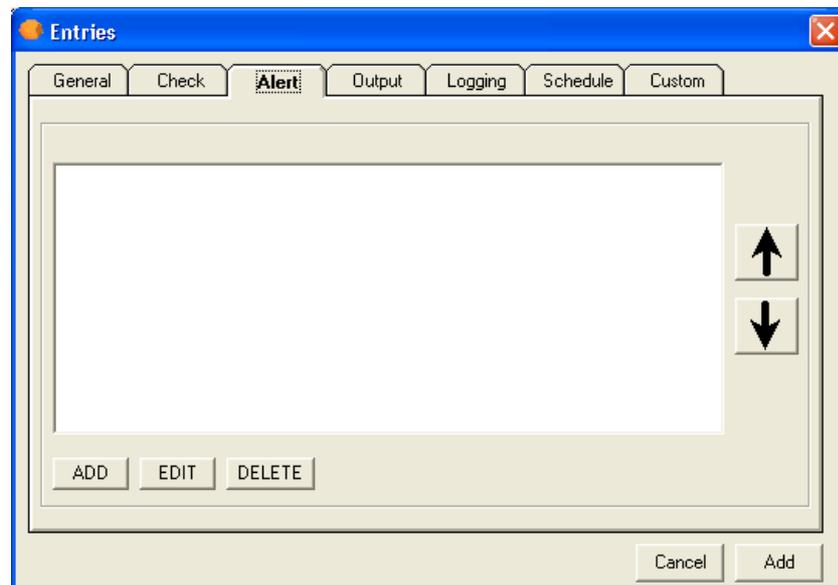
up. The inversion does not occur until the end of the check. All checks up to the point proceed as usual. The check box is clear by default.

<sa_inverted> in the output log or message displays T if you click this check box. If the check box is clear, <sa_inverted> displays F.

Second Knock

Enables second knock. If the software detects a host as down during a check cycle and you have clicked the **Second Knock** check box, the software rechecks the host at the end of the check cycle to verify that the host is down. This feature is useful if you have slow links or computers with slow responses.

Alert Tab (Entries Dialog Box)



Servers Alive supports a rich variety of alerting mechanisms. It supports various email alerting options, numeric and alphanumeric paging, audible alerts, and more. You can even write your own custom alerting software or use built-in Windows messaging to send popup alerts. Servers Alive is also capable of taking remedial action when it determines that a server is down, by executing scripts that you create. Finally, Servers Alive allows you to easily collect alerting events in a central logging server by use of the standard syslog logging mechanism available on UNIX® and Windows servers, with third-party software.

You can select an alert and click one of the arrow buttons to the right of the list to change the order of alerts. This moves the alert up or down one line in the list order.

Use the following buttons to add, edit, or delete alert settings:

- **Add**
- **Edit**
- **Delete**

When you select a type of alert, such as SNPP or Numeric Page, you can set the schedule for Servers Alive to send each type of alert on the **Schedule** tab of the **Add/Edit Alert** dialog box.

If you select an option that sends a page, Servers Alive queues multiple pages, but sends only one page at a time. So if there are three pages in the queue, Servers Alive connects to the paging company for the first page, sends the page, and disconnects from the paging company. The software then re-connects to the paging company, sends the second page, and disconnects, and so forth.

Registry Settings

Many of the alerts incorporate keywords to describe a server state. By default, the software uses the words up and down, but this can be changed through the registry. A list of single letter keys is in the registry entry HKLM\SOFTWARE\DBU Consulting\Servers Alive>Status. Each letter corresponds with a particular check type, as follows:

- **D** – Drive Space
- **E** – External check
- **F** – Perfmon
- **I** – UDP
- **M** – SNMP
- **N** – Netware
- **O** – Oracle
- **P** – Ping
- **Q** – MS-SQL
- **R** – Process
- **S** – Windows Service
- **U** – URL
- **X** – IPX Ping
- **W** – Winsock port (TCP)

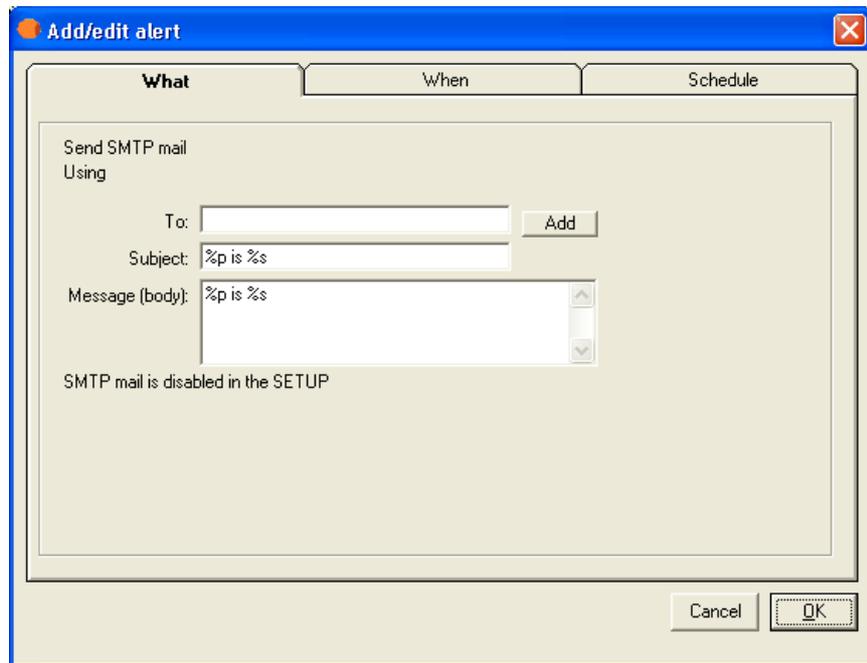
Under each of the single letter keys, you can find numbered string values. Each one of these represents a particular status keyword, as follows:

- **1** – down
- **2** – possibly down
- **3** – unavailable
- **4** – maintenance
- **5** – up
- **6** – unchecked
- **7** – possibly unavailable

If you want to allow Servers Alive to use “-” and “+,” instead of “down” and “up” for all pings, you must set the following registry entries:

- HKLM\SOFTWARE\DBU Consulting\Servers Alive>Status\P\1 = “-” (string)
- HKLM\SOFTWARE\DBU Consulting\Servers Alive>Status\P\5 = “+” (string)

Add/Edit Alert Dialog Box



You can display this dialog box when you click the **Add** or **Edit** button on the **Alert** tab of the **Entries** dialog box. The options of the **What** tab of the **Add/Edit Alert** dialog box are different, depending on the option you select when you click the **Add** button on the **Entries** dialog box.

When you add an entry, you can enable the individual alert entry in the Main window by clicking the check box that appears next to the entry. You can disable the alert entry by clearing the check box.

The following list shows the different options that appear on the **What** tab when you select an option:

What Tab: Send SMTP Mail (Primary) (on page 182)

What Tab: Send SMTP Mail (Alternate) (on page 185)

What Tab: Send Other Mail (on page 188)

What Tab: Alpha Page/SMS (on page 189)

What Tab: Send Network Page (SNPP) (on page 191)

What Tab: Send Network Page (SMPP) (on page 193)

What Tab: Generate NotePager - PageGate Message File (on page 195)

What Tab: Numeric Page (on page 196)

What Tab: Execute Command (on page 198)

What Tab: Sound (on page 205)

What Tab: Send HTTP(S) GET/POST (on page 206)

What Tab: Send ICQ Message (on page 208)

What Tab: Send MSN Message (on page 210)

What Tab: Send WinPOPUP Message (on page 214)

What Tab: Send AIM Message (on page 212)

What Tab: Send SNMP Trap (on page 216)

What Tab: Do an SNMP SET (on page 217)

The dialog box also displays the following tabs:

Schedule Tab (Add/Edit Alert Dialog Box) (on page 219)

When Tab (Add/Edit Alert Dialog Box) (on page 218)

What Tab: Send SMTP Mail (Primary) (Add/Edit Alert Dialog Box)

The screenshot shows a dialog box titled "Add/edit alert" with three tabs: "What", "When", and "Schedule". The "What" tab is selected. Inside the dialog, there is a section for "Send SMTP mail Using". It includes a "To:" field with an "Add" button, a "Subject:" field containing the placeholder "%p is %s", and a "Message (body):" field containing the placeholder "%p is %s". Below these fields, a message states "SMTP mail is disabled in the SETUP". At the bottom right of the dialog, there are "Cancel" and "OK" buttons.

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

SMTP (Simple Mail Transfer Protocol) alerting is probably the most common alerting. SMTP is used to send email messages to you when the software detects a down condition. You should use this as a minimum level of reporting. The SMTP option is enabled only if you configure the global SMTP options from the SMTP branch of the Setup dialog box.

You can give a primary and an alternate list of recipients for each host. If the message must be sent to several email addresses, you can separate them with a comma; for example:

user1@company.com,user2@company.com.

You must provide the global SMTP settings for both primary and alternate SMTP entries in the SMTP branch of the Setup dialog box before you can enter any individual host settings.

Servers Alive can send direct mail. Based on the TO part of the mail, Servers Alive queries for the MX record and contacts the first server that is on the list to send mail. The computer running Servers Alive must access the Internet on port 25, or, rather, access SMTP servers on the Internet. The computer must also perform DNS queries to get the MX records.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the *Alert tab* (on page 178).

Using

Allows you to set conditionals for the message that the alert sends.

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Subject

Enter the information that you want to appear in the Subject line of the alert message.

Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain these variables:

- %h for the host name.
- %p for the pretty name.
- %s for the status.
- %t for the last check time.
- %d for the date.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %c for the complete host/check description.
- %e for extra information. For a URL check, this could contain "404 Not Found" as the error message.
- %a for additional information. For a ping check, this is the round trip time.
- %i for hostID; used for numeric paging.
- %z for the status change time.
- %y for the status change date.
- %r for a remark.
- {0d} for chr(13) for a carriage return.
- {0a} for chr(10) for a line feed.

You can add a custom footer message to all messages sent by Servers Alive. To do this, add or edit the following registry entry:

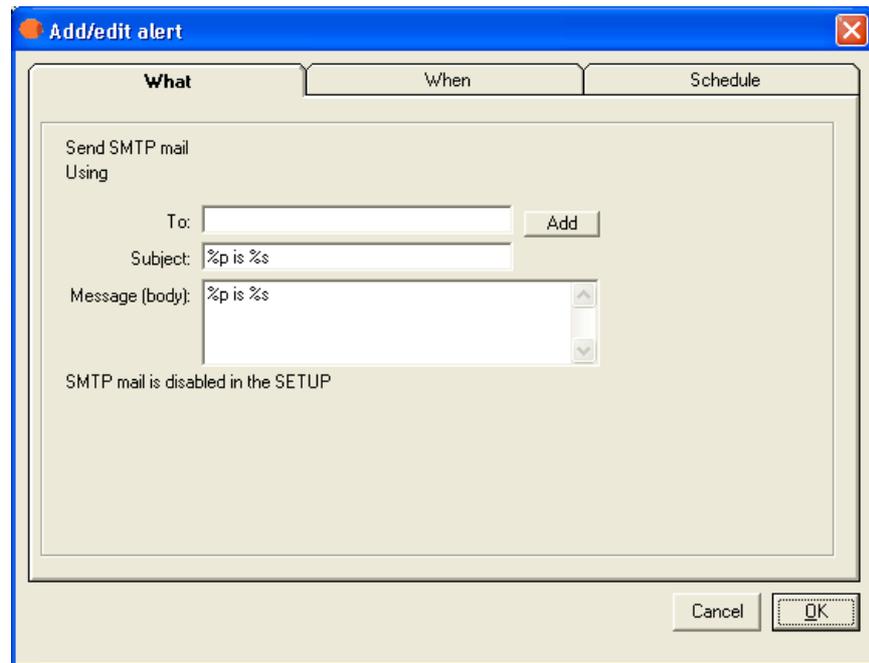
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\CustomFooterMessage (string)

To remove the date/time from the mails, you must add or edit the following registry entry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\ExcludeDateTimeInMail (dword) value 1

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Send SMTP Mail (Alternate) (Add/Edit Alert Dialog Box)

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

SMTP (Simple Mail Transfer Protocol) alerting is probably the most common alerting used. SMTP is used to send email messages to you when the software detects a down condition. You should use this as a minimum level of reporting. The SMTP option is enabled only if you configure the global SMTP options from the SMTP branch of the Setup dialog box.

You can give a primary and an alternate list of recipients for each host. If the message must be sent to several email addresses, you can separate them with a comma; for example:
 user1@company.com,user2@company.com.

Note that you must provide the global SMTP settings for both primary and alternate SMTP entries in the SMTP branch of the Setup dialog box before you can enter any individual host settings.

Servers Alive can send direct mail. Based on the TO part of the mail, Servers Alive queries for the MX record and contacts the first server that is on the list to send mail. The computer running Servers Alive must access the Internet on port 25, or, rather, access SMTP servers on the Internet. The computer must also perform DNS queries, to get the MX records.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the *Alert tab* (on page 178).

Using

Allows you to set conditionals for the message that the alert sends.

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Subject

Enter the information that you want to appear in the Subject line of the alert message.

Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain these variables:

- %h for the host name.
- %p for the pretty name.
- %s for the status.
- %t for the last check time.
- %d for the date.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %c for the complete host/check description.
- %e for extra information. For a URL check, this could contain "404 Not Found" as the error message.
- %a for additional information. For a ping check, this is the round trip time.

- %i for hostID; used for numeric paging.
- %z for the status change time.
- %y for the status change date.
- %r for a remark.
- {0d} for chr(13) for a carriage return.
- {0a} for chr(10) for a line feed.

You can add a custom footer message to all messages sent by Servers Alive. To do this, add or edit the following registry entry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\CustomFooterMessage (string)

To remove the date/time from the mails, you must add or edit the following registry entry:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\ExcludeDateTimeInMail (dword) value 1

With certain versions of the IPHLPAPI.DLL file, you must specify the DNS servers to use when querying for the MX records in the following registry key:

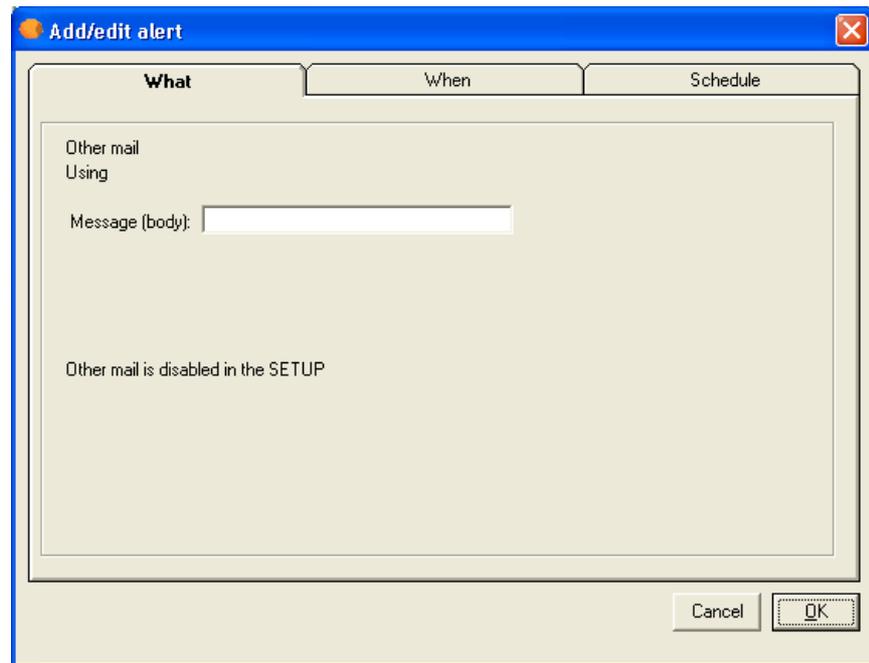
HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\SMTP\Alternate_DNS_to_use (string)

If you do not specify the DNS servers, Servers Alive attempts to determine which DNS servers to use.

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Send Other Mail (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert tab** (on page 178).

Using

Allows you to set conditionals for the message that the alert sends.

Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain these variables:

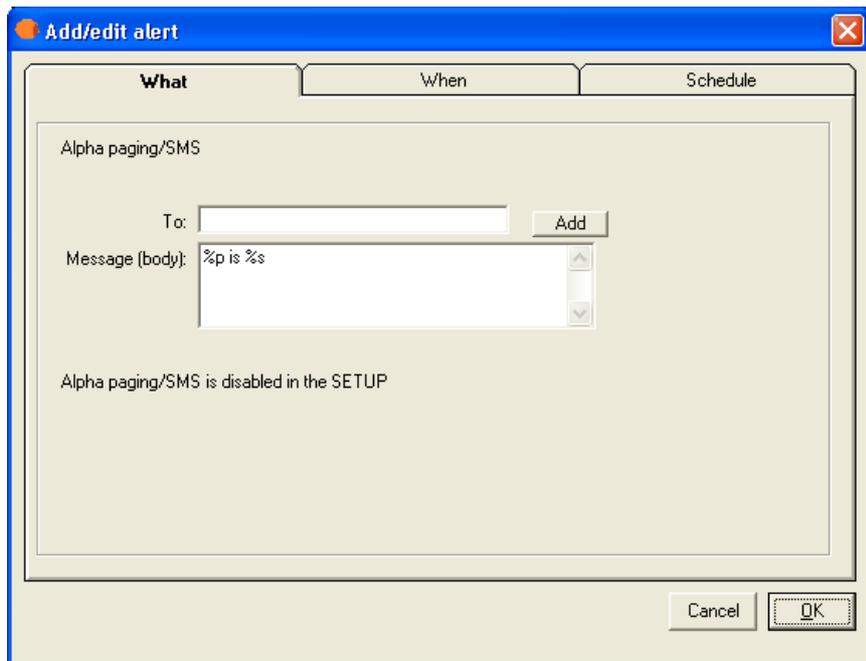
- %h for the host name.
- %p for the pretty name.
- %s for the status.
- %t for the last check time.
- %d for the date.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %c for the complete host/check description.

- %e for extra information. For a URL check, this could contain "404 Not Found" as the error message.
- %a for additional information. For a ping check, this is the round trip time.
- %i for hostID; used for numeric paging.
- %z for the status change time.
- %y for the status change date.
- %r for a remark.
- {0d} for chr(13) for a carriage return.
- {0a} for chr(10) for a line feed.

Tabs

When Tab (Add/Edit Alert Dialog Box)..... 218
 Schedule Tab (Add/Edit Alert Dialog Box)..... 219

What Tab: Alpha Page/SMS (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

One paging option is alphanumeric paging or SMS messaging, which involves sending a text-based message to a cell phone or paging device. In order to send a message to your pager or cell phone, Servers Alive needs the phone number, or PIN number, of the device. You must also specify the message that Servers Alive sends to the device.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the *Alert tab* (on page 178).

Using

Allows you to set conditionals for the message that the alert sends.

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain these variables:

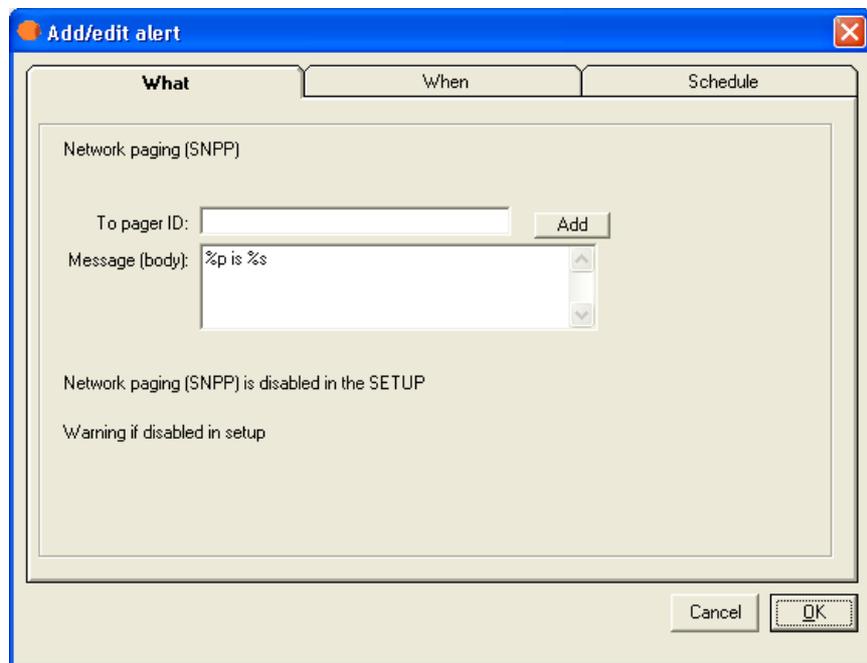
- %h for the host name.
- %p for the pretty name.
- %s for the status.
- %t for the last check time.
- %d for the date.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %c for the complete host/check description.
- %e for extra information. For a URL check, this could contain "404 Not Found" as the error message.
- %a for additional information. For a ping check, this is the round trip time.

- %i for hostID; used for numeric paging.
- %z for the status change time.
- %y for the status change date.
- %r for a remark.
- {0d} for chr(13) for a carriage return.
- {0a} for chr(10) for a line feed.

Tabs

When Tab (Add/Edit Alert Dialog Box)..... 218
 Schedule Tab (Add/Edit Alert Dialog Box)..... 219

What Tab: Send Network Page (SNPP) (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

If sending an SNPP alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

To Pager ID

Enter the pager ID that you want the alert message sent to.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain parameters.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Send Network Page (SMPP) (Add/Edit Alert Dialog Box)

The screenshot shows a dialog box titled "Add/edit alert" with a blue title bar and a close button (X) in the top right corner. The dialog has three tabs: "What", "When", and "Schedule". The "What" tab is selected. Inside the dialog, there is a section for "Network paging (SMPP)". Below this section, there is a text input field labeled "To pager ID:" followed by an "Add" button. Below that is a larger text area labeled "Message (body):" containing the text "%p is %s". At the bottom of the dialog, there are two buttons: "Cancel" and "OK".

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

If sending an SMPP alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

To Pager ID

Enter the pager ID that you want the alert message sent to.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain variables.

You can use the following variables:

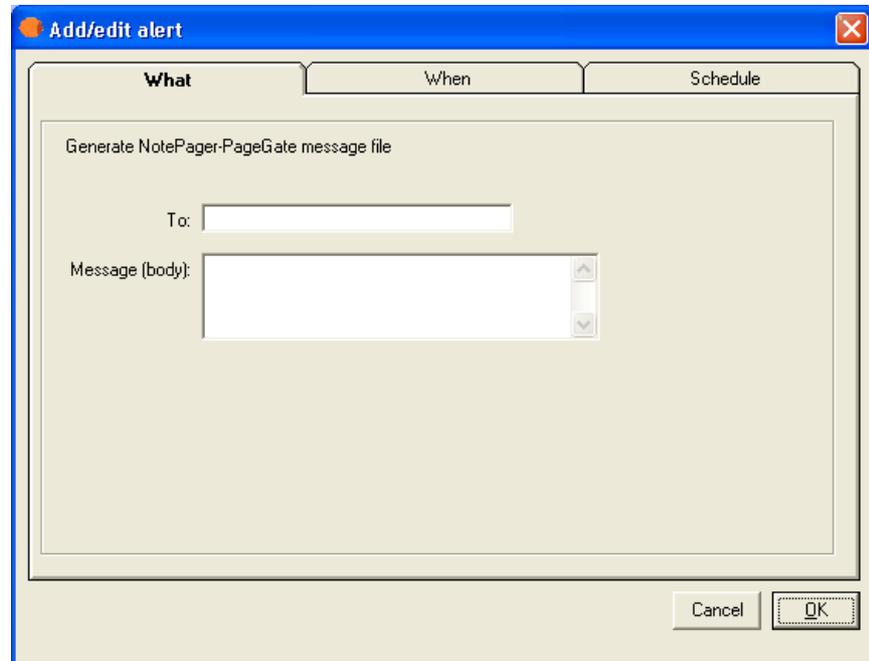
- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Generic NotePager-PageGate Message File (Add/Edit Alert Dialog Box)

To use NotePager and the protocols that it supports, including SNPP, WCTP, and SMTP, you must install the NotePager product from PageGate at the *NotePager web site* (<http://www.notepage.net/>).



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

To

Enter the e-mail address for the message recipient.

Message (body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain variables.

You can use the following variables:

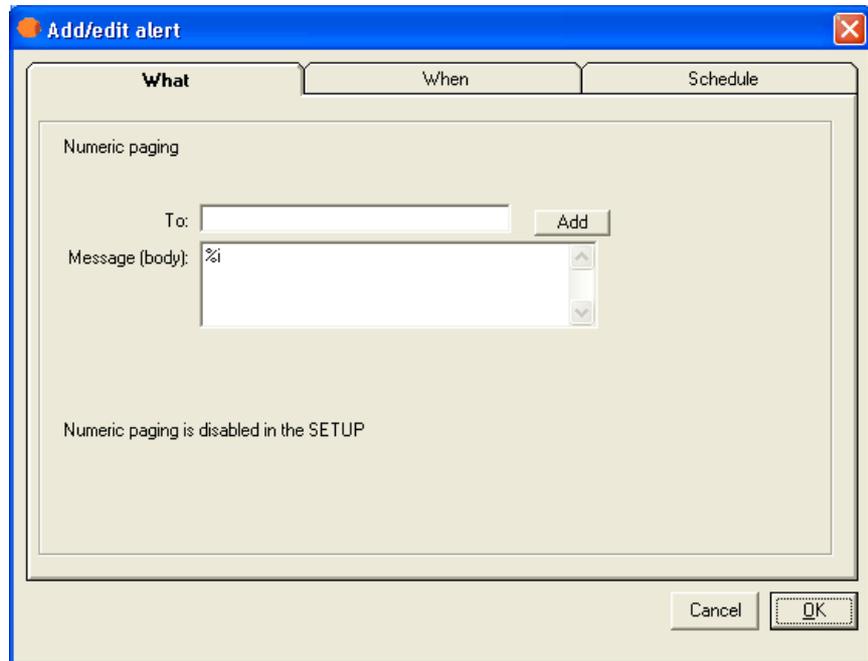
- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.

- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Tabs

When Tab (Add/Edit Alert Dialog Box).....218
 Schedule Tab (Add/Edit Alert Dialog Box).....219

What Tab: Numeric Page (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

Paging is another common alerting method. This important alerting option allows you to receive numeric or alphanumeric pages whenever a server is down. Before you can turn this option on for any entries, you must have first configured paging in the **Setup** dialog box.

Because numeric paging is not based on a real protocol, paging is not a 100% reliable solution. Numeric paging uses the settings that are defined in the **Numeric Paging** branch of the **Setup** tree. The message that is sent to the pager is the host ID, which you can define for each individual host. You can also have Servers Alive send an up or down code. You can turn this on in the **Numeric Paging** branch of the **Setup** tree.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the *Alert tab* (on page 178).

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain these variables:

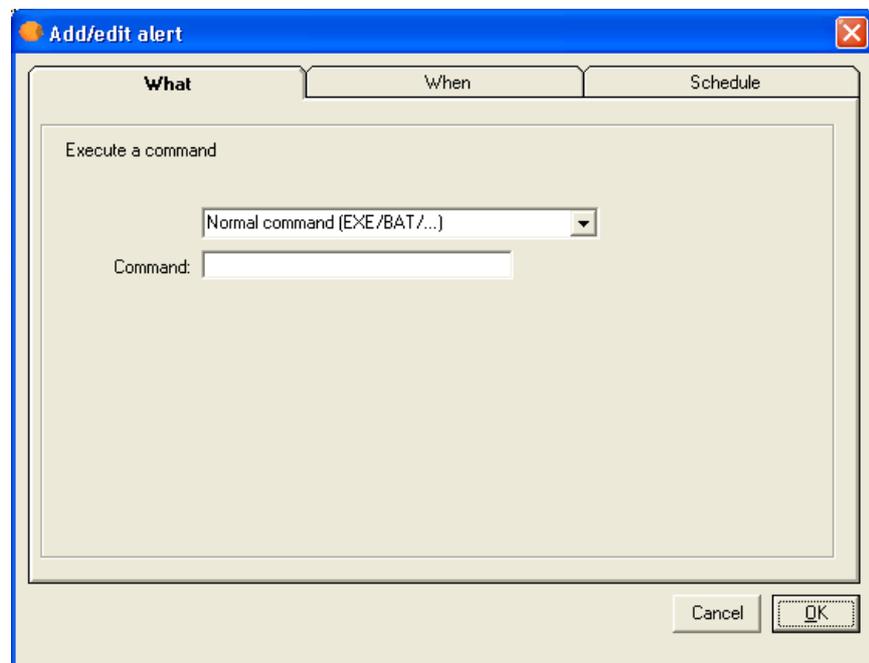
- %h for the host name.
- %p for the pretty name.
- %s for the status.
- %t for the last check time.
- %d for the date.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %c for the complete host/check description.
- %e for extra information. For a URL check, this could contain "404 Not Found" as the error message.

- %a for additional information. For a ping check, this is the round trip time.
- %i for hostID; used for numeric paging.
- %z for the status change time.
- %y for the status change date.
- %r for a remark.
- {0d} for chr(13) for a carriage return.
- {0a} for chr(10) for a line feed.

Tabs

When Tab (Add/Edit Alert Dialog Box)..... 218
 Schedule Tab (Add/Edit Alert Dialog Box)..... 219

What Tab: Execute Command (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

With the **Execute Command** option, you can configure Servers Alive to execute the command of your choice whenever the check status is down. You can enter several different types of commands:

- A normal command: this can be a BAT or EXE file. You must include the full path to the BAT or EXE.
- Restart of a Windows service, even if you are not checking an NT service. You can specify a user name and password to use to restart this NT service in the boxes provided.
- Internal commands that can force a Servers Alive entry into active or maintenance mode.

- Reboot a Windows computer. You can specify a user name and password to use to reboot the Windows computer.

Servers Alive records in the log that a reboot has been successful as long as the software has been able to send the reboot command successfully. Servers Alive does not verify that the computer actually rebooted correctly. If part of the operating system does not respond correctly, the system cannot reboot despite receiving a reboot command.

- Send a WOL (Wake on LAN™ - Magic Packet™)

Advanced Micro Devices (AMD™) first produced Magic Packet technology. The same technology from a joint venture by Intel® and IBM™ is called Wake on LAN (WOL). This technology allows you to remotely wake up a computer that is turned off or operating on low power on a network. You must have WOL capable hardware, although most hardware supports it. Your BIOS must support WOL and it must be enabled. WOL is usually disabled by default for security.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

Next, in the list box, select the type of command that you want to use. In order to use the **Reboot** and **Restart Service** options, Servers Alive must have sufficient rights, in the form of a user name and password, and access to the NetBIOS ports of the remote computer. If a firewall exists between Servers Alive and the remote server, please contact your firewall administrator for assistance.

You can create an alert by stopping a service. In the dropdown list, click **(Re)start NT/Win2K Service** and then click the **Only Stop (Don't Restart)** check box.

You can also send a WOL alert to a specific MAC address when you click **Send a WOL (Wake on LAN - Magic Packet)**. If the system runs within the same segment as the system that runs Servers Alive, you do not need to enter additional information.

Normal Command

When you select **Normal Command** in the list box, you get the following options.

Command

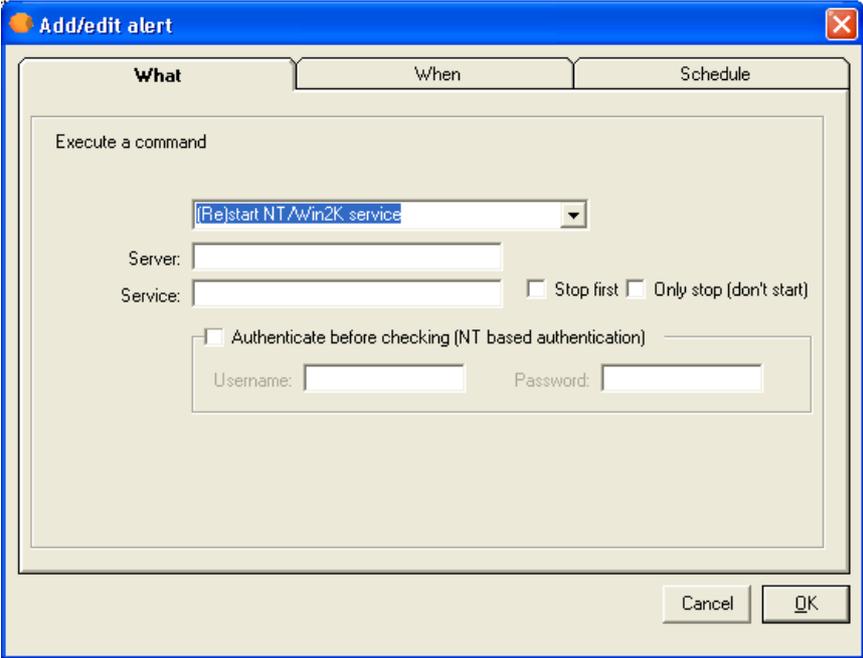
Enter the command that you want to execute. When entering the command, you must pass in various pieces of information to the command you are executing that identify what has broken. You can use variables in your command. They are replaced with the associated information before the command is issued.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

(Re)start NT/Win2K Service

When you select **(Re)start NT/Win2K Service** in the list box, the following options appear.



The screenshot shows the 'Add/edit alert' dialog box with the 'What' tab selected. The 'Execute a command' dropdown menu is set to '(Re)start NT/Win2K service'. Below this, there are two text input fields labeled 'Server:' and 'Service:'. To the right of the 'Service:' field are two checkboxes: 'Stop first' and 'Only stop (don't start)'. Below these is another checkbox labeled 'Authenticate before checking (NT based authentication)'. Underneath this checkbox are two text input fields for 'Username:' and 'Password:'. At the bottom right of the dialog are 'Cancel' and 'OK' buttons.

Server

Enter the name of the server.

Service

Enter the name of the service.

Stop First

Click to stop the command before sending the alert.

Only Stop (Don't Start)

Click to create an alert by stopping a service.

Authenticate Before Checking (NT Based Authentication)

User Name

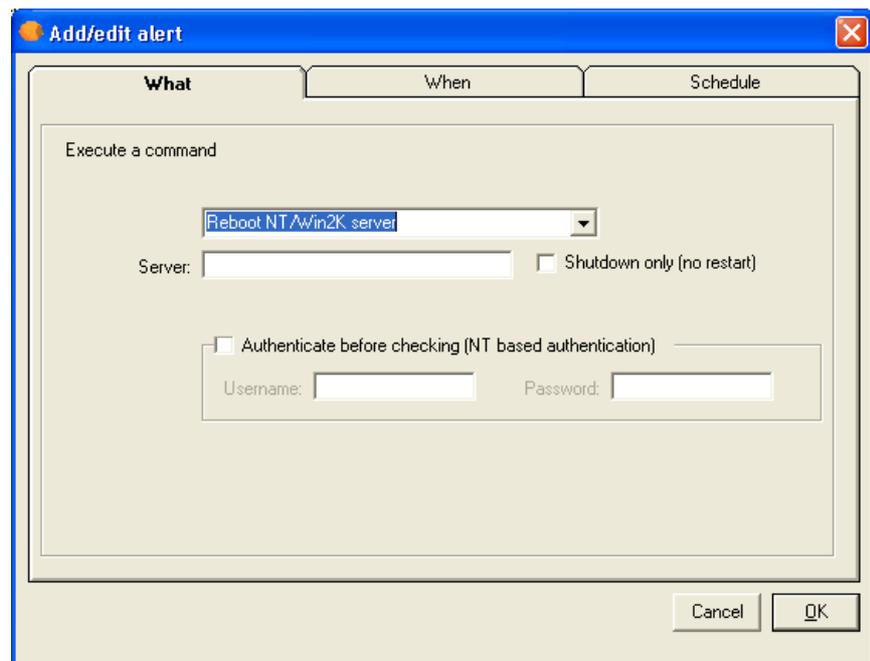
Enter the user name for the alert.

Password

Enter the password for the alert.

Reboot NT/Win2K Server

The following options appear when you click **Reboot NT/Win2K Server** in the list.



Server

Enter the name of the server.

Shutdown Only (No Restart)

Click this check box to ensure that the computer does not boot back up after it is shut down.

Authenticate Before Checking (NT Based Authentication)

Enter the user name and password for the alert.

Internal Servers Alive Command

The following options appear when you click **Internal Servers Alive Command** in the list.

The screenshot shows a dialog box titled "Add/edit alert" with three tabs: "What", "When", and "Schedule". The "What" tab is active. Inside the dialog, there is a section labeled "Execute a command". Below this label, there is a dropdown menu currently showing "Internal Servers Alive command". Underneath that, there is a "Command:" label followed by a dropdown menu showing "Set entry to maintenance". Below the "Command:" dropdown is an "Entry UID:" label followed by an empty text input field. To the left of the "Entry UID" field is a checkbox labeled "until", which is currently unchecked. At the bottom right of the dialog box, there are two buttons: "Cancel" and "OK".

Command

Do one of the following:

- Select **Set Entry to Maintenance** or **Set Entry to Active** to set the alert to active or maintenance mode.
- Select **Set Group to Maintenance** or **Set Group to Active** to set the group to active or maintenance mode.

Entry UID

Enter the UID of the host entry. This box is available only when you click the **Set Entry to Maintenance** or **Set Entry to Active** options in the **Command** list. You can get the UID by selecting an entry on the tree in the Main window and right-clicking.

Until

Click the check box and enter a date and time. The alert lasts until the specific time and date that you enter. This option is available only when you click the **Set Entry to Maintenance** option in the **Command** list.

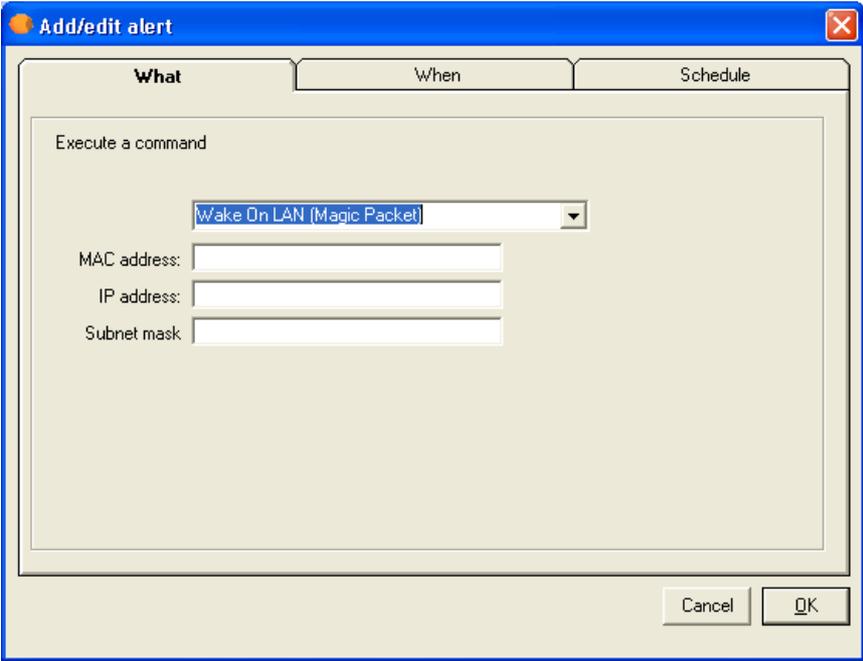
If you do not enter a date, yet enter a time that occurs before the current hour, the alert lasts until the time on the next day. If you enter a time that occurs after the current hour, the alert lasts until the time you specify on the current day.

Group UID

Enter the UID of the host entry. This box is available only when you click the **Set Group to Maintenance** or **Set Group to Active** options in the **Command** list. You can get the group UID by selecting an entry on the tree in the Main window and right-clicking.

WOL (Wake on LAN - Magic Packet)

When you select **WOL (Wake on LAN - Magic Packet)** in the list box, the following options appear.



The screenshot shows a dialog box titled "Add/edit alert" with three tabs: "What", "When", and "Schedule". The "What" tab is active. Inside the dialog, there is a section labeled "Execute a command" containing a dropdown menu with "Wake On LAN (Magic Packet)" selected. Below the dropdown are three text input fields labeled "MAC address:", "IP address:", and "Subnet mask:". At the bottom right of the dialog are "Cancel" and "OK" buttons.

MAC Address

Enter the MAC address of the system to send the alert to.

If the system that receives the WOL packet runs in the same segment as the system that runs Servers Alive, you do not need to enter information in the following boxes. However, if the system is on a different segment, you must enter the following information.

IP Address

Enter the IP address of the system that receives the WOL packet.

Subnet Mask

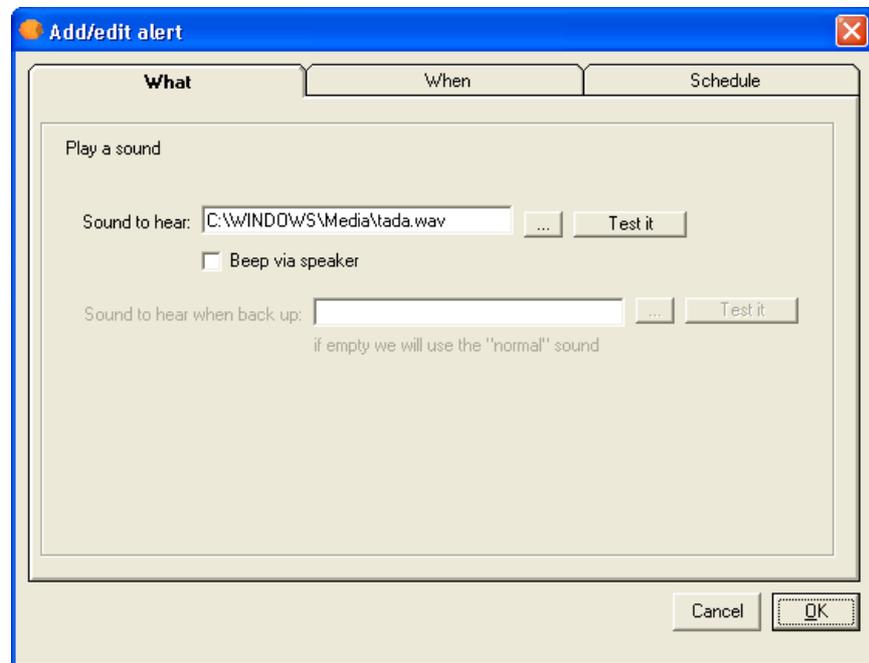
Enter the subnet mask of the system that receives the WOL packet.

Tabs

When Tab (Add/Edit Alert Dialog Box).....218

Schedule Tab (Add/Edit Alert Dialog Box).....219

What Tab: Sound (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

Sound to Hear

Enter the file name for the sound. You can click the browse button to select a WAV file on the computer.

Test It

Click to test the alert and sound.

Beep Via Speaker

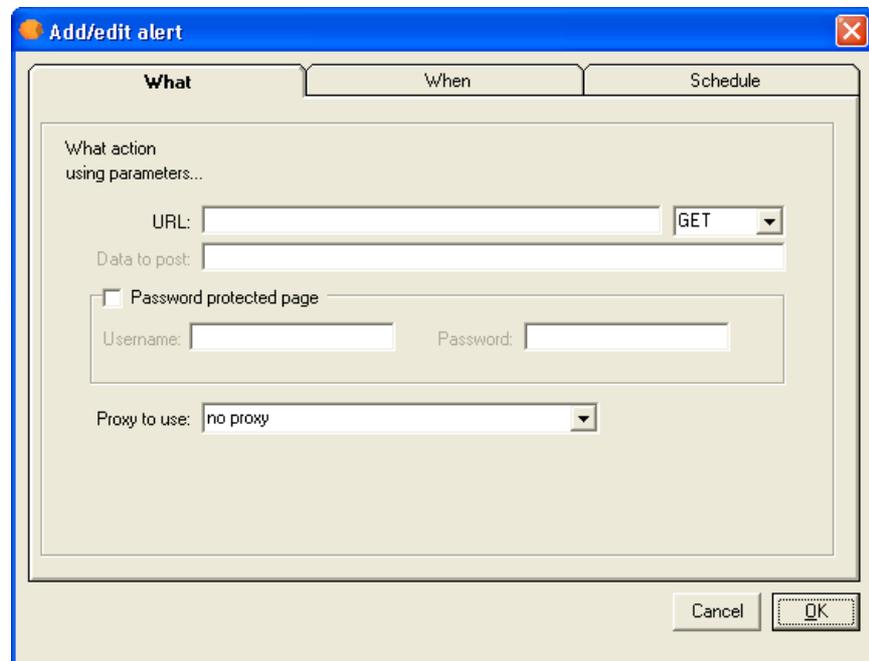
Select this to allow the system beep to alert you.

Tabs

When Tab (Add/Edit Alert Dialog Box).....218

Schedule Tab (Add/Edit Alert Dialog Box).....219

What Tab: HTTP(S) GET/POST (Add/Edit Alert Dialog Box)



Servers Alive can perform a URL (Universal Resource Locator) alert based on HTTPS (secure web) protocol with the post method. Servers Alive can connect to the remote server using a proxy server. This proxy server is defined in the **Proxy** branch of the **Setup** dialog box.

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

URL

Enter the web address, or URL, to post the data, as in the following examples:

- http://www.mydomain.com/sub-dir/page.html
- https://www.mydomain.com/sub-dir/page.html

On the dropdown list next to the URL box, you can click **Get** or **Post** to implement a check with either a get or a post action.

Data to Post

Enter the data that needs to be posted in the following format:

VAR1=value1&VAR2=value2

This option is available only when you click **Post** in the previous dropdown list.

Password Protected Page

Click to enable a page that is protected by a password.

Username

Enter the user name.

Password

Enter the password.

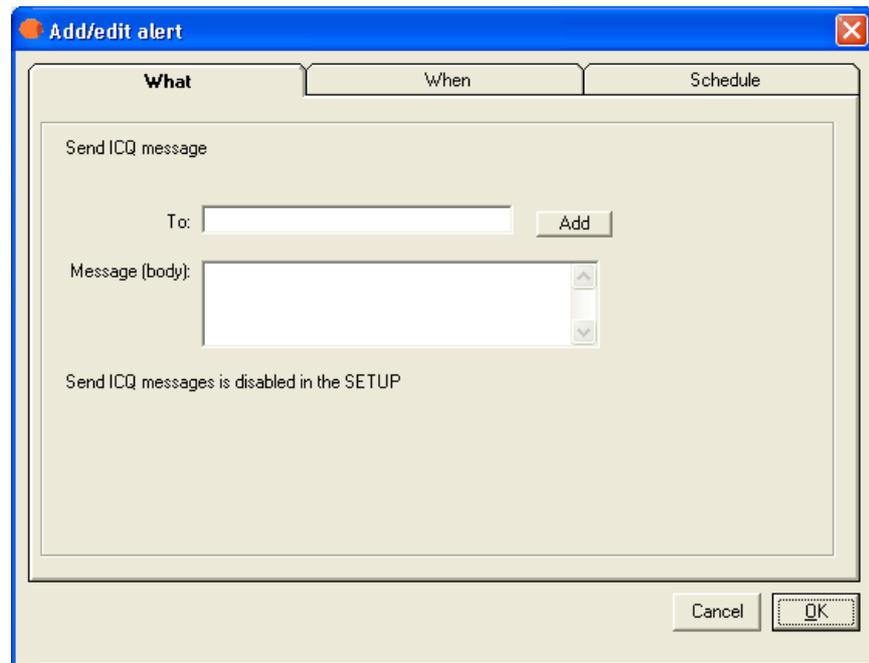
Proxy to Use

Select **No Proxy** to disable proxy authentication. Select **No Proxy** when you have a direct connection to the Internet to retrieve a web page. Some companies or Internet services require a proxy server. In these cases, you must define the proxy server settings by clicking **File > Setup** and then clicking the **General** tree and selecting the **Proxy** branch. You can now use these settings within the **Send HTTP(S) Post** alert by selecting it from the **Proxy to Use** list.

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Send ICQ Message (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

If sending an ICQ alert by LAN (local area network) fails, Servers Alive can send the alert through a DUN (dial-up networking) connection.

For each alert, Servers Alive logs on and logs off of the ICQ network. The software does not stay connected to the network for multiple ICQ alerts.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert tab** (on page 178).

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

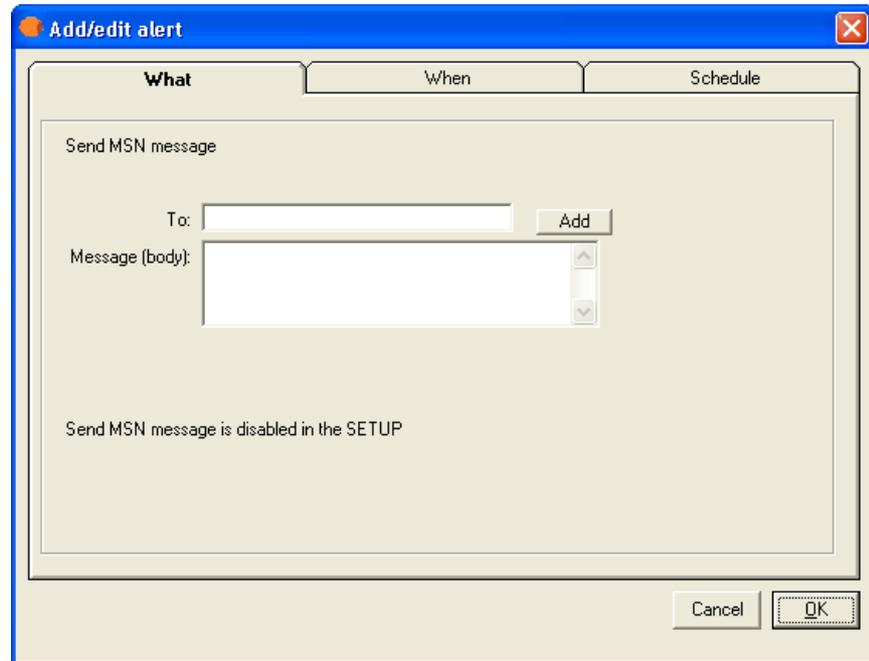
Message (Body)

Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain these variables:

- %h for the host name.
- %p for the pretty name.
- %s for the status.
- %t for the last check time.
- %d for the date.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %c for the complete host/check description.
- %e for extra information. For a URL check, this could contain "404 Not Found" as the error message.
- %a for additional information. For a ping check, this is the round trip time.
- %i for hostID; used for numeric paging.
- %z for the status change time.
- %y for the status change date.
- %r for a remark.
- {0d} for chr(13) for a carriage return.
- {0a} for chr(10) for a line feed.

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Send MSN Message (Add/Edit Alert Dialog Box)

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

If sending an MSN alert by LAN fails, Servers Alive can send the alert through a DUN connection.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert tab** (on page 178).

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

You can also add an MSN contact with the **Select an MSN Contact to Add dialog box** (on page 212).

When you click the **Add** button and select **MSN Contact**, the dialog box might take a minute to appear as the software is logging on to MSN to retrieve a list of contacts.

Message (Body)

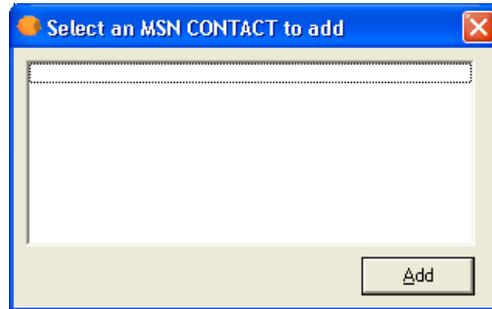
Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain these variables:

- %h for the host name.
- %p for the pretty name.
- %s for the status.
- %t for the last check time.
- %d for the date.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %c for the complete host/check description.
- %e for extra information. For a URL check, this could contain "404 Not Found" as the error message.
- %a for additional information. For a ping check, this is the round trip time.
- %i for hostID; used for numeric paging.
- %z for the status change time.
- %y for the status change date.
- %r for a remark.
- {0d} for chr(13) for a carriage return.
- {0a} for chr(10) for a line feed.

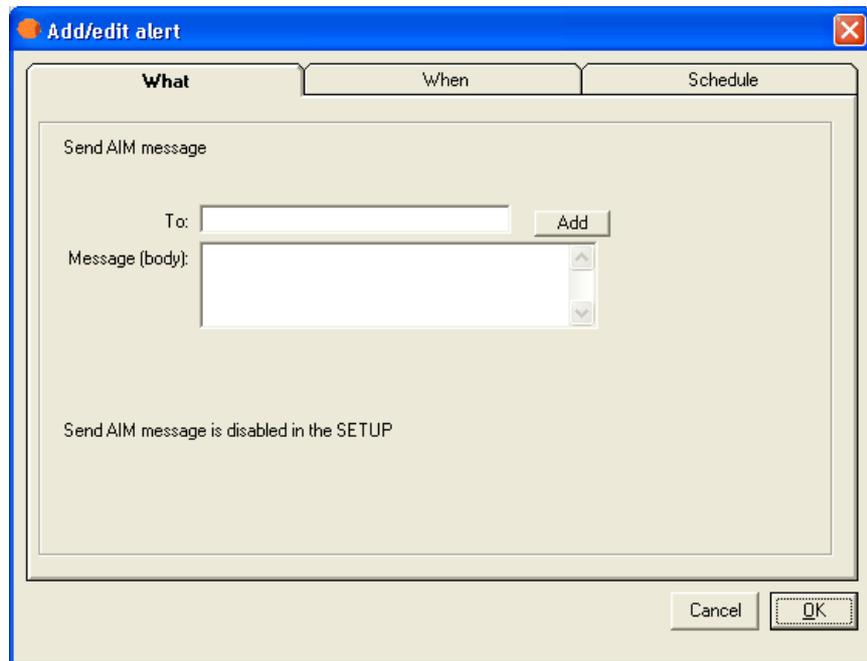
Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

You can add an MSN contact.



What Tab: Send AIM Message (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Message (Body)

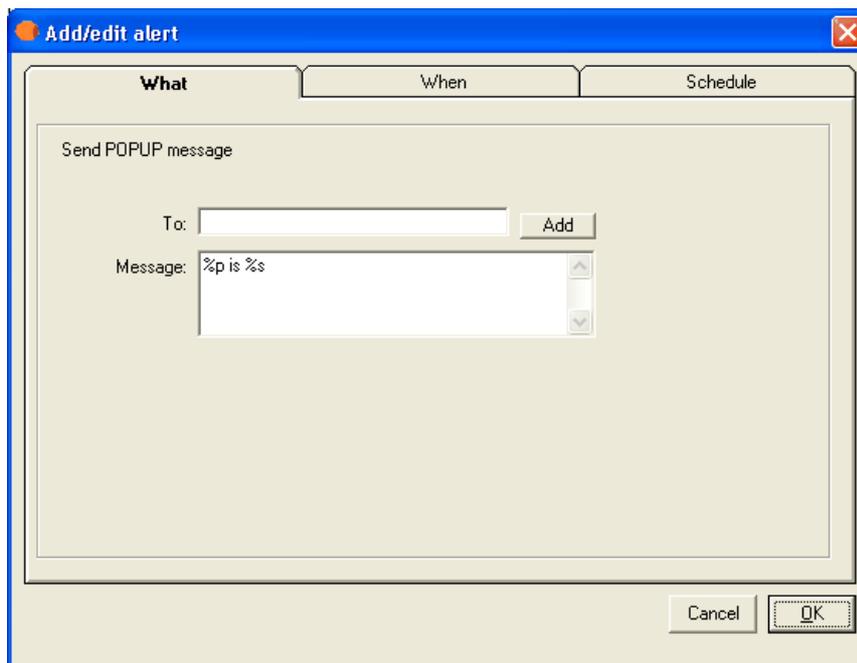
Enter the message that you want for the alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain variables.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Send WinPOPUP Message (Add/Edit Alert Dialog Box)

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the *Alert tab* (on page 178).

To

Enter the information that you want to appear in the To line of the alert message. If you want to specify multiple recipients, separate them with a comma. To enter specific information, such as an IP or email address, click the **Setup** button on the **Main** window and select the **Alerts** branch of the **Setup** tree.

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Add

Click this button to add a person, team, or other item to the box using one of the following dialog boxes:

Select a Person to Add Dialog Box (on page 221)

Select a Team to Add Dialog Box (on page 221)

Message

Enter the message that you want to receive as an alert. You must specify the message that Servers Alive sends. You can use the variables listed below to help you create informative messages. The message and subject can contain variables.

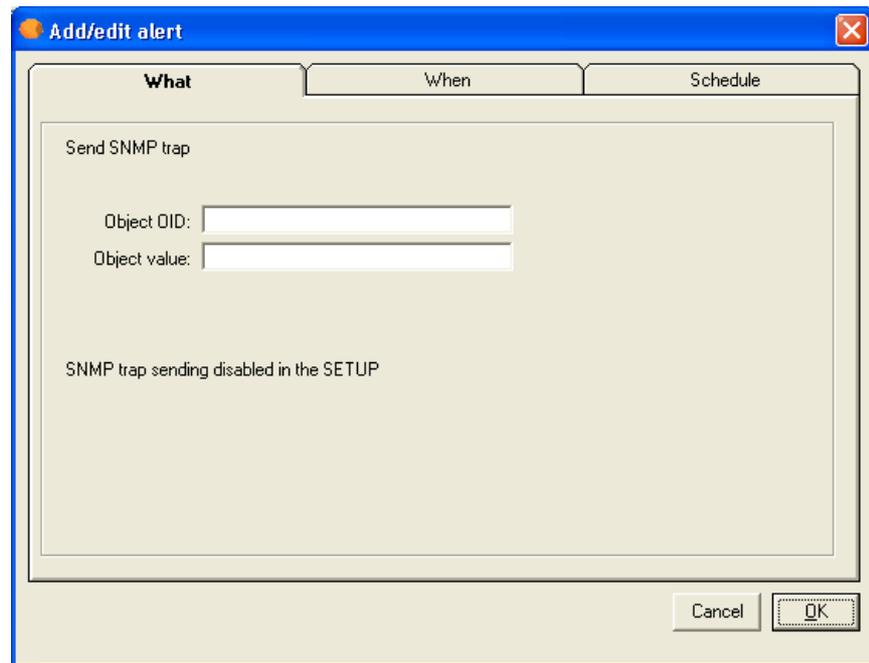
You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Send SNMP Trap (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

Object OID

Enter the object ID.

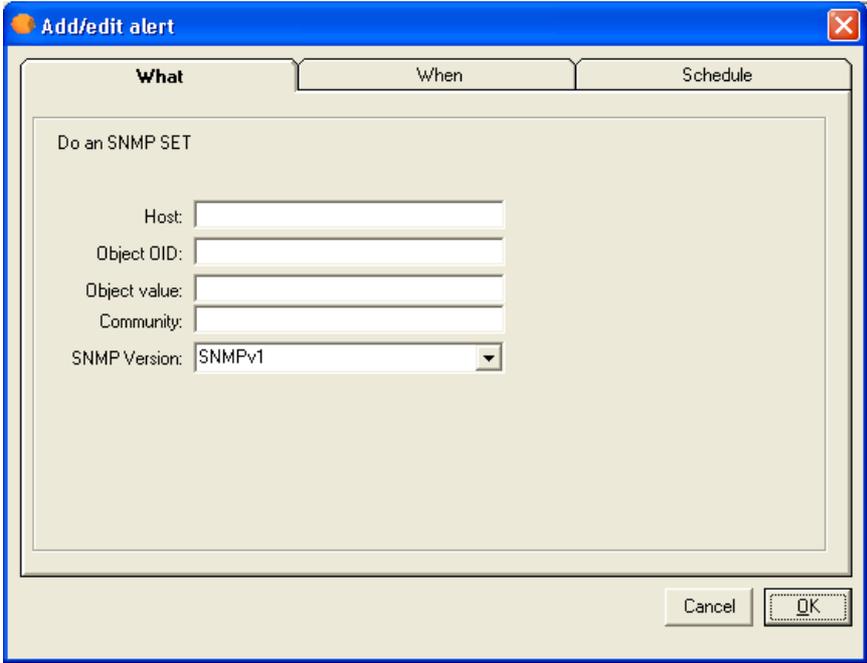
Object Value

Enter the value for the object.

Tabs

When Tab (Add/Edit Alert Dialog Box).....	218
Schedule Tab (Add/Edit Alert Dialog Box).....	219

What Tab: Do an SNMP SET (Add/Edit Alert Dialog Box)



To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box. The same options on the **What** tab appear when you create or edit an executive alert on the **Setup** dialog box.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

Host

Enter the name of the remote host.

Object OID

Enter the object ID.

Object Value

Enter the value for the object.

Tabs

When Tab (Add/Edit Alert Dialog Box).....218
Schedule Tab (Add/Edit Alert Dialog Box).....219

When Tab (Add/Edit Alert Dialog Box)

Select one of the following options to determine when Servers Alive sends the alert message. The alert message can be in the form of a mail message, starting a service, playing a sound, and so forth. You can select options that send messages when the server status changes or when a host is down with certain conditions.

When __ Times Down

Enter a number to indicate that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and Then Every ____ Down Cycles

Specify to send the alert when the server is down a certain number of times and all the subsequent cycles that the server is down.

Every __ Down Cycles

Enter a value to indicate an alert is sent the number of the cycle that the server is down. For example, if you enter 3, Servers Alive sends an alert message on the third, sixth, ninth, and so forth, down cycle.

When __ % of the Last Cycles Are Down

Click to send an alert after a percentage of the recent cycles that the server is not operating.

Always

Select to send an alert whenever a server is down.

When Back Up After a Down

Click to send an alert message when the server comes back up after a down cycle.

And When Back Up Too

Select to send an alert message when the server is operational again. If you choose to receive an email when the host is down N times, but also want a message when the server comes back up, you must select the **And When Back Up Too** option. For example, if you enter 3 and the server is back up on the third cycle, you receive an alert message. If the server comes back up after two cycles, you don't receive an alert message for the down or up cycle.

Stop Alerting After __ Cycles

Enter a number to stop sending alert messages when the server has been up a certain number of cycles that you specify.

When Down the "Extra Info Field" Should Contain

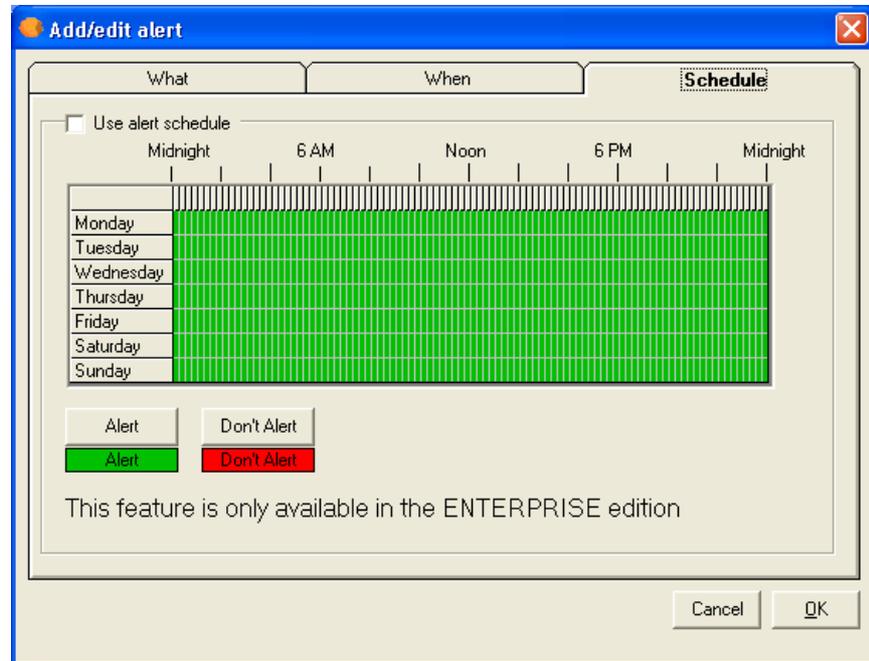
Used to filter specific errors when the host is down. This box corresponds to the %e parameter. You should enter information that the **Extra Info** field for the output log displays or does not display when the host is down, depending on whether you select **Should Contain** or **Should Not Contain**. This gives you more specific information about what happened.

For example, if the URL check fails with a 404 error or because the string you are looking for is not on the page, Servers Alive reads this as a down condition. However, you might want to send an alert with more specific information than an alert indicating a general down condition. When you enter a specific condition that corresponds to the e% parameter in this box and select **Should Contain**, Servers Alive compares this to the existing %e field. When the information in the box matches the existing %e field, Servers Alive sends an alert.

Schedule Tab (Add/Edit Alert Dialog Box)

This feature is available in the free version of Servers Alive and in the Enterprise edition. This feature is not available in the Standard edition.

On the **Schedule** tab, for each alert that you set for the entry, you can set times for Servers Alive to send the alert. For example, for your new entry, you might want to schedule Servers Alive to send paging alerts only between 5 p.m. and 6 a.m.



Use Alert Schedule

Click this check box to allow Servers Alive to send alerts according to the schedule that you set on this tab.

Grid

To change the schedule, you must first select a time. Each block represents an hour. You cannot select a smaller time scale than an hour. Click and drag the pointer to select the hours you want to change and then click the **Alert** or **Don't Alert** buttons. The blocks change color to signify the changed status.

Alert

Click this button after you have selected a time period on the grid. This button allows Servers Alive to send alerts during the time period that you selected.

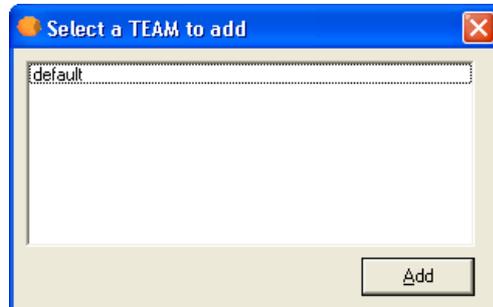
Don't Alert

Click this button after you have selected a time period on the grid. This action tells Servers Alive to not send alerts during the time period that you selected.

You can add a team to appear as the recipient of an alert.

To open this dialog box, click the following path in the Main window:

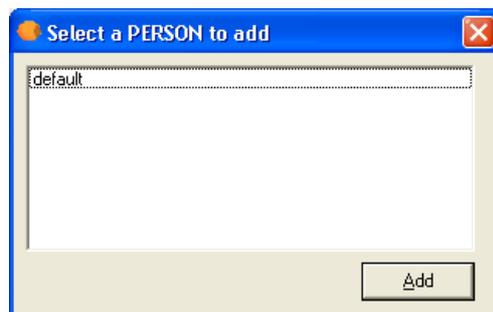
- **Add** button > **Entries** dialog box > **Alert** tab > **Add** button > Any option on the list > **Add/Edit Alert** dialog box > **Add** button > **Team**



You can add a person to appear as the recipient of an alert.

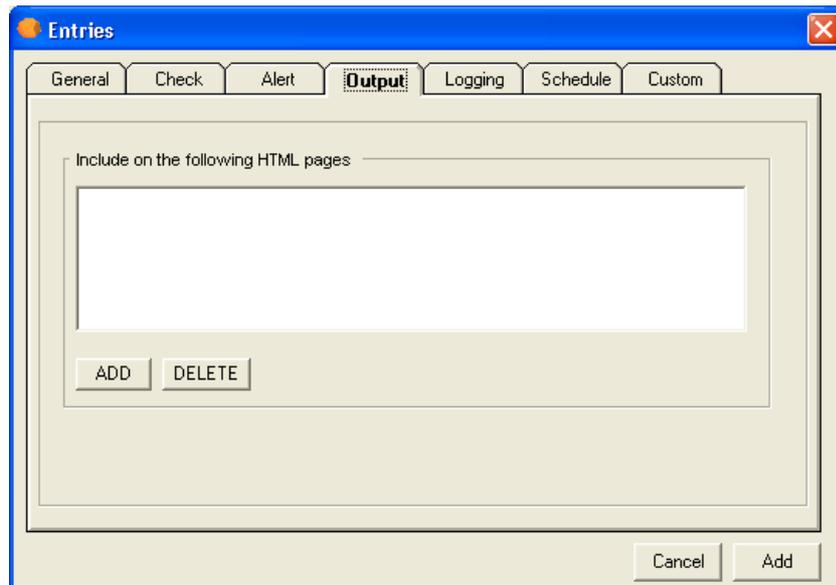
To open this dialog box, click the following path in the Main window:

- **Add** button > **Entries** dialog box > **Alert** tab > **Add** button > Any option on the list > **Add/Edit Alert** dialog box > **Add** button > **Person**



Output Tab (Entries Dialog Box)

The **Output** tab lists the HTML pages that are available. To add HTML pages to the following tab, you must click the **Setup** button and then click the **Output tree**. When you select the **HTML Page > Default Page** branch and click the **Add** button, this creates new HTML pages for output. On the **Output** tab, you can select those pages when you click the **Add** button to add to the list.



Include on the Following HTML Pages

Records the output on the HTML pages that you specify.

Add

Click to add an HTML page.

Delete

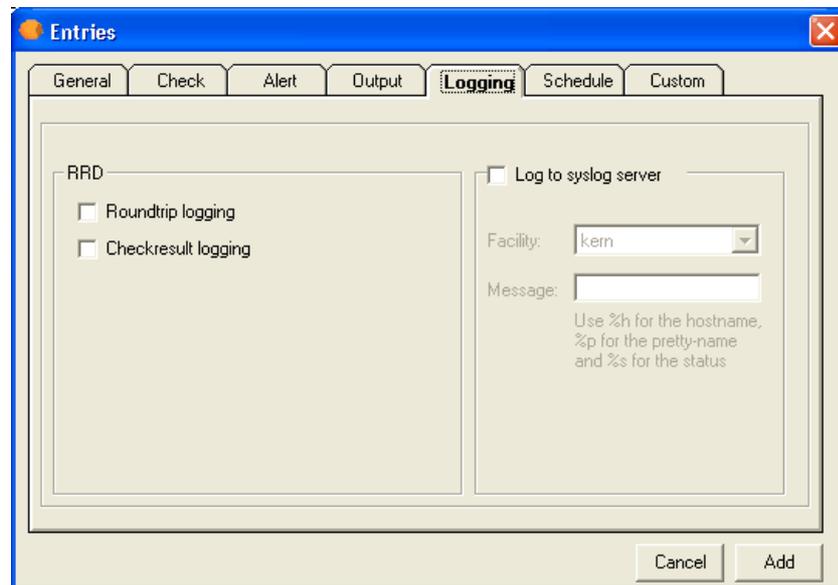
Select a page and click this button to remove it.

Add HTML Page Dialog Box



Select the HTML page from the list and click **OK**. The dropdown list displays the HTML pages that you add when you click the **Setup** button and then click the **Output tree**. When you select the **HTML Page > Default Page** branch and click the **Add** button, the new pages you create appear on this dialog box.

Logging Tab (Entries Dialog Box)



If you want to collect all of the up/down events that Servers Alive detects into a centralized logging server, you can use the settings on this tab. Syslog is a standard method of sending alerts to an alerting server. Free server implementations exist for both Windows and UNIX platforms.

For a Windows based syslog server, we recommend Kiwi Syslog Daemon, available from the *[KiwiSyslog web site](http://www.kiwisyslog.com/)* (<http://www.kiwisyslog.com/>).

RRD

Roundtrip Logging

Check Result Logging

Log to Syslog Server:

Click to activate logging to the syslog server.

Facility

Enter the appropriate facility to use when logging to a Syslog server. For most, the Kern facility should be fine. If not, check with your Syslog server documentation to determine the best setting.

Message

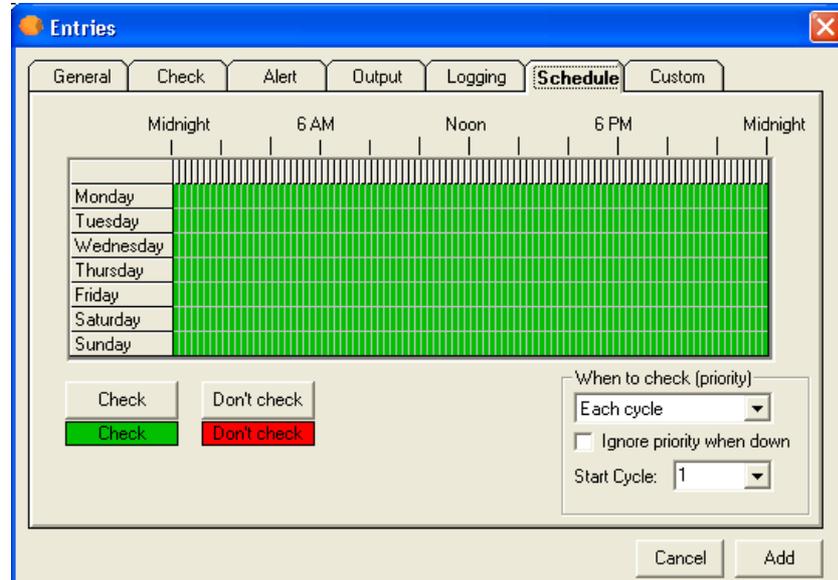
Enter the message for the log. You must enter the message that Servers Alive records in the log. This message can use variables.

You can use the following variables:

- %a for additional information. For a ping check, this is the round trip time.
- %c for the complete host/check description.
- %d for the date.
- %e for extra information. For URL checking, this could contain "404 Not Found" as the error message.
- %h for the host name.
- %i for hostID; used for numeric paging.
- %p for the pretty name.
- %r for the remark.
- %s for the status.
- %t for the last check time.
- %u for the unique ID of the host.
- %w for the IP address of the host that the software checks, if known. If the IP address is not known, the host name is used.
- %y for the status change date.
- %z for the status change time.
- {0a} for chr(10) for a line feed.
- {0d} for chr(13) for a carriage return.
- {25} for a : (colon).

Schedule Tab (Entries Dialog Box)

You can apply a unique schedule for each host entry on the **Schedule** tab.



Many servers have a designated period of time during the week when they are unavailable. These are generally times for scheduled maintenance or backups. Instead of manually changing each host into maintenance mode every time the host needs to go into maintenance services, you can set up a schedule to tell Servers Alive when it should start and stop checking a host. You do this with the **Schedule** tab.

Grid

To change the schedule, you must first select a time. Each block represents an hour. You cannot select a smaller time scale than an hour. Click and drag the pointer to select the hours you want to change and then click the **Check** or **Don't check** buttons. The blocks change color to signify the changed status.

Check

Click this button after you have selected a time period on the grid. This button allows Servers Alive to check a host during the time period that you selected.

Don't Check

Click this button after you have selected a time period on the grid. This action tells Servers Alive to not check a host during the time period that you selected.

When to Check (Priority)

Select an option on the list if the entry represents a server that does not need checking as often as the others and you want Servers Alive to check the host only periodically. Select an item on the list to check the host every cycle or once out of a certain number of cycles. For example, you can select **1 out of Every 2 Cycles**.

Ignore Priority When Down

Click the check box to check a host on every check cycle when the host is down, until it is back up.

Start Cycle

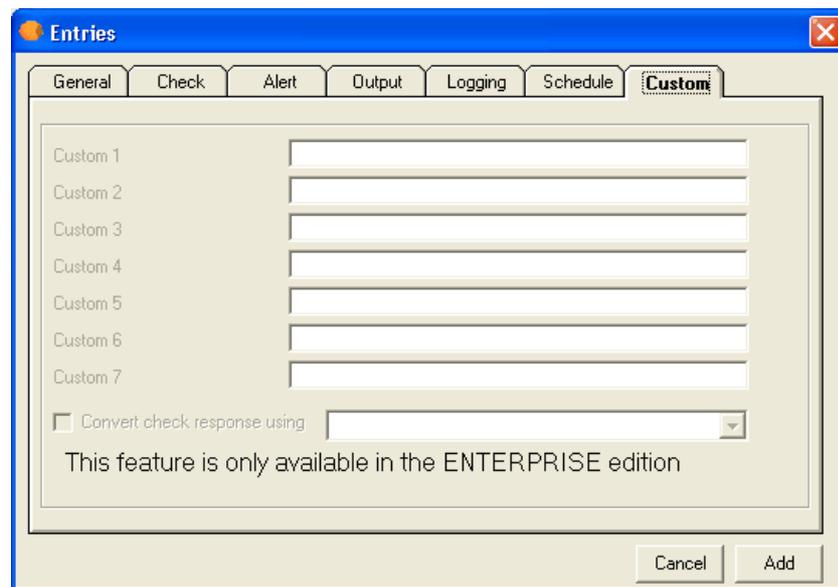
Select a number of **1-500** to indicate the start cycle. This ensures that Servers Alive does not check the entry on the first cycle, but rather on the cycle that you select. For example, if you select **2**, Servers Alive checks only on the second cycle.

Custom Tab (Entries Dialog Box)

This feature is available only in the Enterprise edition of Servers Alive.

The options on this tab are available only when you do one of the following:

- Create custom fields by clicking **File > Setup > General > Custom Fields**.
- Select a custom script by clicking **File > Setup > General > Custom Scripts**.



The output for the custom fields appears as sa_custom_value_1, sa_custom_value_2, and so forth, in the output logs.

Custom 1

Displays the first custom field that you create on the **Setup** dialog box.

Convert Check Response Using

Click the check box and select a file that contains a Visual Basic script from the dropdown list. This allows you to convert the result of the check according to the rules in the script. The files that appear on the dropdown list are the files that you select when you click **File > Setup** and select files in the **Custom Scripts** branch of the **General** tree. If you do not select files in **Custom Scripts**, no options appear on the **Convert Check Response Using** list.

Edit > New Entry Based On . . .

You can create entries based on a template with the **New Entry Based On** command on the **Edit** menu. You can use this command to create similar entries, based on an entry that already exists. For example, if you have many web servers, you can create an entry to check one web server and then use this option to quickly create similar checks for the others.

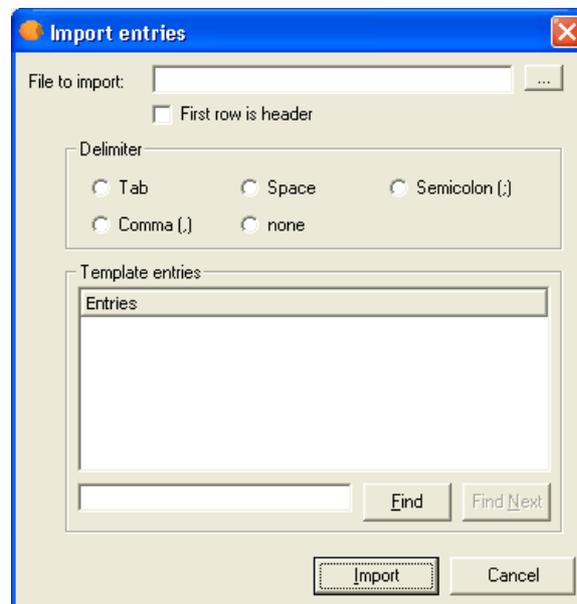
To use this option, first select an entry on the Main window. Then either press **CTRL-D** or select **Edit > New Entry Based On**. When the dialog box appears, change the host and other information as needed.

Edit > Import Hosts (Import Entries Dialog Box)

You can click **Edit > Import Hosts** to open a host entry. This is useful if you want to quickly create new host entries based on an existing set of entries. The file that you import should be in the following format:

```
<name>, <pretty_name>, <remark>
```

The <name> field is required. The <pretty_name> and <remark> fields are optional. In the previous example, the column delimiter is a comma. You can use a tab, comma, space, or semicolon as the column delimiter.



File to Import

Enter the name of the file for the host that you want to import. Click the browse button to select a file on your computer.

First Row is Header

Click the check box if the file that you are importing has a header row.

Delimiter

Select the delimiter that is used to separate columns in the file that you are importing.

Tab

Select if the import file contains tab characters that separate the columns.

Space

Select if the import file contains spaces that separate the columns.

Semicolon

Select if the import file contains semicolons that separate the columns.

Comma

Select if the import file contains commas that separate the columns.

None

Select if the import file does not have a delimiter.

Template Entries

Displays a list of the entries on the computer that you can use as a template. If an entry has a check mark by it in the Main window, the entry does not appear on this list.

Find

Enter a host name in the box and click the **Find** button to find a host in the **Template Entries** list.

Find Next

Click the button to find the host name again.

Import

Click this button to complete the import.

Edit > Entry (Entries Dialog Box)

Select an entry in the Main window and then click **Edit > Entry** to change the settings of a specific host. You can change the settings on the *Entries dialog box* (on page 130).

Edit > Delete All

You can delete all hosts at once.

You must confirm your decision to prevent accidents. If you accidentally delete all your entries, do not close Servers Alive, as it might have been configured to automatically save any changes in the **Setup** dialog box.

First re-open the default host list and verify that all hosts are still listed. Then select **Save to** verify that your copy is available the next time Servers Alive loads.

Woodstone bvba recommends that you back up your entry listing on a regular basis. To do this, click **File > Save As**.

Edit > Delete

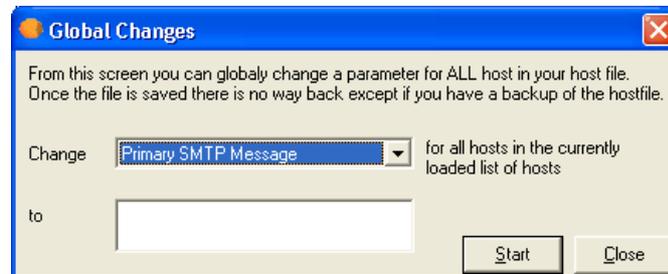
You have two options for deleting hosts. You can delete them on a host-by-host basis, or, for more extreme circumstances, delete all hosts at once.

Before using either option, you must confirm your decision to prevent accidents. If you accidentally delete all your entries, do not close Servers Alive, as it might have been configured to automatically save any changes in the **Setup** dialog box.

First re-open the default host list and verify that all hosts are still listed. Then select **Save** to verify that your copy is available the next time Servers Alive loads.

Woodstone bvba recommends that you back up your entry listing on a regular basis. To do this, click **File > Save As**.

Edit > Global Change (Replace) (Global Changes Dialog Box)



Occasionally, you must make entry revisions on a global level. For example, you might want to change your paging provider or need to send all primary SMTP messages to a new address. To do this, click **Edit > Global Change (Replace)** to make the changes.

Before making global changes, you might want to stop the current check cycle and make a backup of your current listing with **File > Save As**.

Change

Select the parameter that you want to change:

- **Primary SMTP Message**
- **Alternate SMTP Message**
- **Primary SMTP: Send Mail to...**
- **Alternate SMTP: Send Mail to...**
- **Ignore Priority When Down...**
- **Pager message**
- **NT service check password**
- **NT process check password**
- **Alpha pager number**
- **Syslog message**
- **NT performance check password**
- **NT service check username**
- **NT process check username**
- **NT performance check username**
- **Alpha paging enabled**
- **Numeric pager number**
- **Primary SMTP subject**
- **Alternate SMTP subject**
- **Disk space check username**
- **Disk space check password**

- **Numeric pager number**

To

Enter the new value for the parameter that you selected in the **Change** list.

Start

Click when you are ready to make changes.

Edit > Changes Wizard (Global Add/Change Dialog Box)

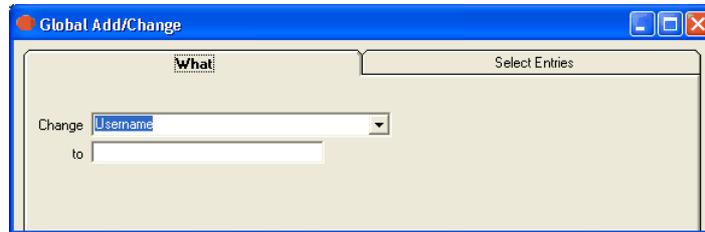
You can search and change the following settings for all or specified host entries when you click **Edit > Changes Wizard**:

- User name
- Password
- Use authentication
- Priority
- Community string
- Checking schedule
- Systems log message
- Logging to the system log server

You can change settings for host entries in a certain group or entries that use a certain protocol for checks, such as TCP, UDP, and so forth.

After you click **Edit > Changes Wizard**, you set the item you want to change on the **What** tab of the dialog box. You then specify which host entries you want to change on the **Select Entries tab** (on page 241). Clicking the **Go** button starts the changes. A message appears on the dialog box when the changes are complete.

What Tab (Global Add/Change Dialog Box)



You can search and change settings for all or specified host entries when you click **Edit > Changes Wizard**.

Change

Select one of the following:

- **Username**
- **Password**
- **Priority**
- **Use Authentication**
- **Ignore Priority When Down**
- **Community String**
- **Checking Schedule**
- **Syslog Message**
- **Logging to the Syslog Server**

The item you select is changed in the host entries. You select the criteria for the host entries on the **Select Entries** tab.

To

Enter the string or Boolean value for the item you selected in the **Change** box. If you select **Username** or **Password**, you can enter a string in the **To** box.

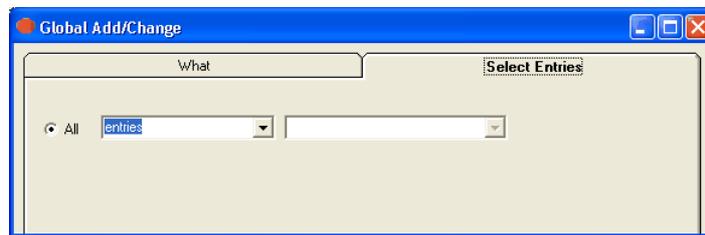
If you select **Priority**, you can change the priority of an entry for a cycle in the **Change** box.

If you have selected a Boolean value in the **Change** box, such as **Use Authentication**, **Ignore Priority When Down**, or **Enable Logging to Syslog Server**, you can select **True** or **False**.

If you select **Checking Schedule** in the **Change** box, you can enter a schedule to apply to the host entries.

After you set the item you want to change on the **What** tab, click the **Select Entries** tab. On the **Select Entries** tab, you can change settings for host entries in a certain group or entries that use a certain protocol for checks, such as TCP, UDP, and so forth.

Select Entries Tab (Global Add/Change Dialog Box)



After you set the criteria to change on the *What tab* (on page 239), you can specify which host entries you want to apply the changes to on the **Select Entries** tab.

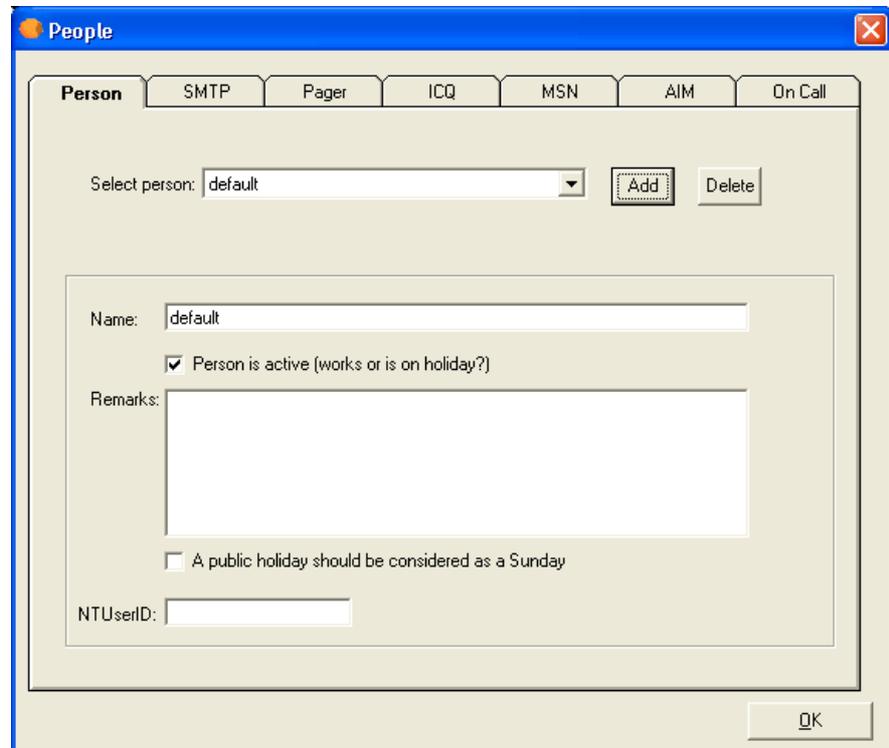
All

Select one of the following:

- **Entries** - Applies the changes to all host entries listed in Servers Alive.
- **Entries with Check Type** - Applies the changes to host entries that use check types with a certain protocol, such as TCP, UDP, and so forth. After you click this option, you can select the protocol in the dropdown list.
- **Entries Member of** - Applies the changes to host entries in the group that you click in the dropdown list, such as **Firewalls**, **Webservers**, or groups that you created.

After you set the criteria for the host entries, click the **Go** button. A message appears on the dialog box when the changes are complete.

Edit > People (People Dialog Box)



If you click **Edit > People**, you can open the **People** dialog box and add people and configure settings for SMTP, paging, ICQ® messages, AOL® Instant Messenger™ (AIM®), and MSN messages for each person. In the Enterprise edition of Servers Alive, you can also set up a specific schedule for each person to receive alert messages on the **On Call tab** (on page 255).

Person Tab (People Dialog Box)

You can enter alert and message settings for each person that you add to Servers Alive. For an example of how to use people and teams, refer to *People and Teams Example* (on page 259).

Select Person

Enter the name of the person that you want to create message settings for.

Add

Click to add people to the **Select Person** list with the **Add** dialog box.

Delete

Select a person in the **Select Person** list and click **Delete** to remove them.

Name

Displays the name of the person that you chose in the **Select Person** list. You can change the name.

The name cannot have a comma <,> or semi-colon <;>. If you use a comma or semi-colon, Servers Alive removes it.

Person is Active

Click to activate the person's settings.

Remarks

Enter information, such as notes, that you want to remember for that person's entry.

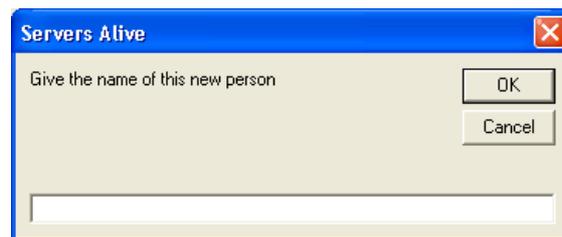
A Public Holiday Should Be Considered as a Sunday

Click to ensure that holidays are treated as a day off in the messaging settings.

NTUserID

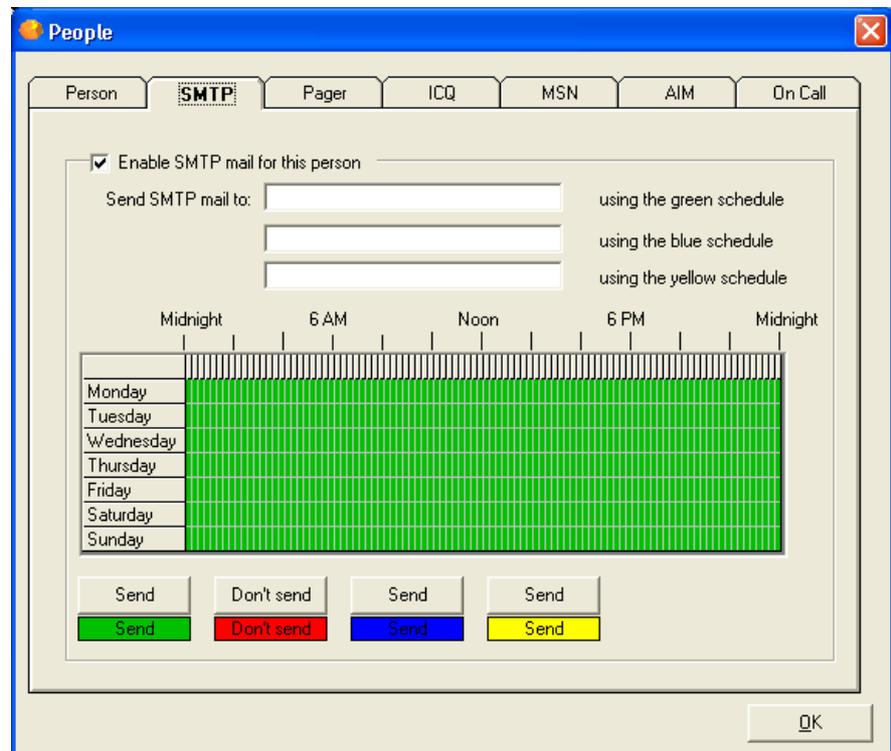
Enter the Microsoft NT user ID for the person. This ID is used for WinPopup alerts.

The **Add** dialog box allows you to add several items, such as HTML pages, teams, or people, to a list on the previous dialog box. Type the name of the item that you want to add and click OK.



The name cannot have a comma <,> or semi-colon <;>. If you use a comma or semi-colon, Servers Alive removes it.

SMTP Tab (People Dialog Box)



Enable SMTP Mail for This Person

Click this option to allow the software to send messages to the person that you selected on the *Person tab* (on page 243).

Send SMTP Mail To _____ Using the Green Schedule

Enter the email address that you want to use for the green schedule on the grid.

Send SMTP Mail To _____ Using the Blue Schedule

Enter the email address that you want to use for the blue schedule on the grid.

Send SMTP Mail To _____ Using the Yellow Schedule

Enter the email address that you want to use for the yellow schedule on the grid.

Grid

To change the schedule, you must first select a time. Each block represents 15 minutes. You cannot select a smaller time scale than 15 minutes. Click and drag the pointer to select the time period that you want to change and then click one of the **Send** or **Don't Send** buttons.

The blocks change color to signify the schedule. The various colors for each schedule cannot overlap.

Send

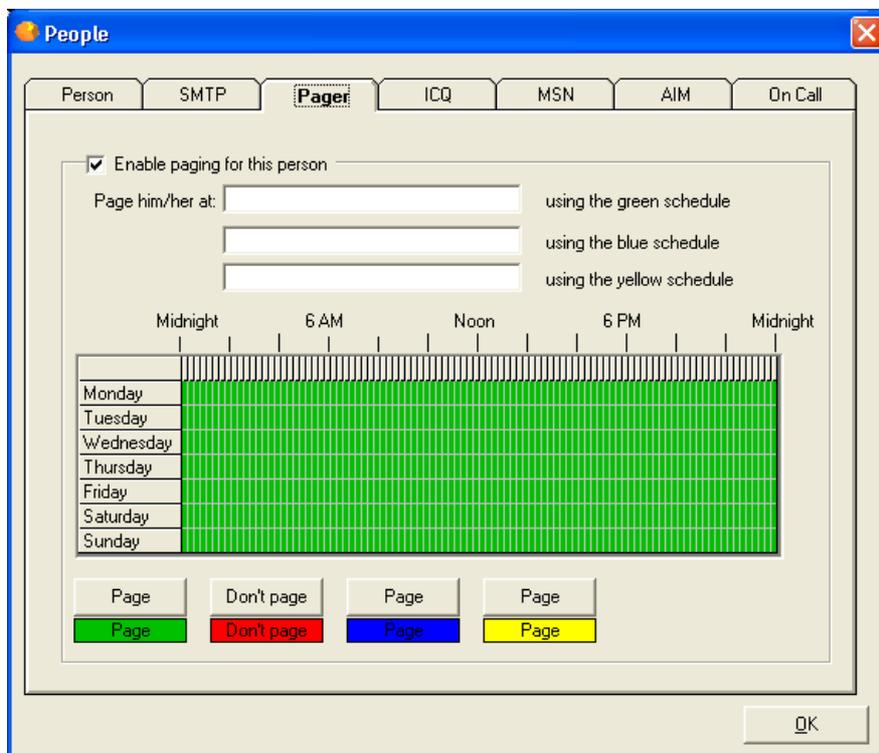
Click one of the **Send** buttons after you have dragged the cursor on the grid to select a time period. This button allows Servers Alive to send a message during the time period that you selected. For example, if you drag the cursor and then click the green **Send** button, an alert that occurs at that time is sent to the address entered in **Send SMTP Mail To** _____ **Using the Green Schedule.**

Don't Send

Click this button after you have selected a time period on the grid. This action tells Servers Alive not to send a message during the time period that you selected.

Pager Tab (People Dialog Box)

The pager settings that you enter on the **Pager** tab of the **People** dialog box are used for numeric, alpha, SMPP, and SNPP paging.



Enable Paging for This Person

Click this option to allow the software to send pager messages to the person that you selected on the **Person** tab (on page 243).

Page Him/Her At _____ Using the Green Schedule

Enter a number.

Page Him/Her At _____ Using the Blue Schedule

Enter a number.

Page Him/Her At _____ Using the Yellow Schedule

Enter a number.

Grid

To change the schedule, you must first select a time. Each block represents 15 minutes. You cannot select a smaller time scale than 15 minutes. Click and drag the pointer to select the time period that you want to change and then click one of the **Send** or **Don't Send** buttons.

The blocks change color to signify the schedule. The various colors for each schedule cannot overlap.

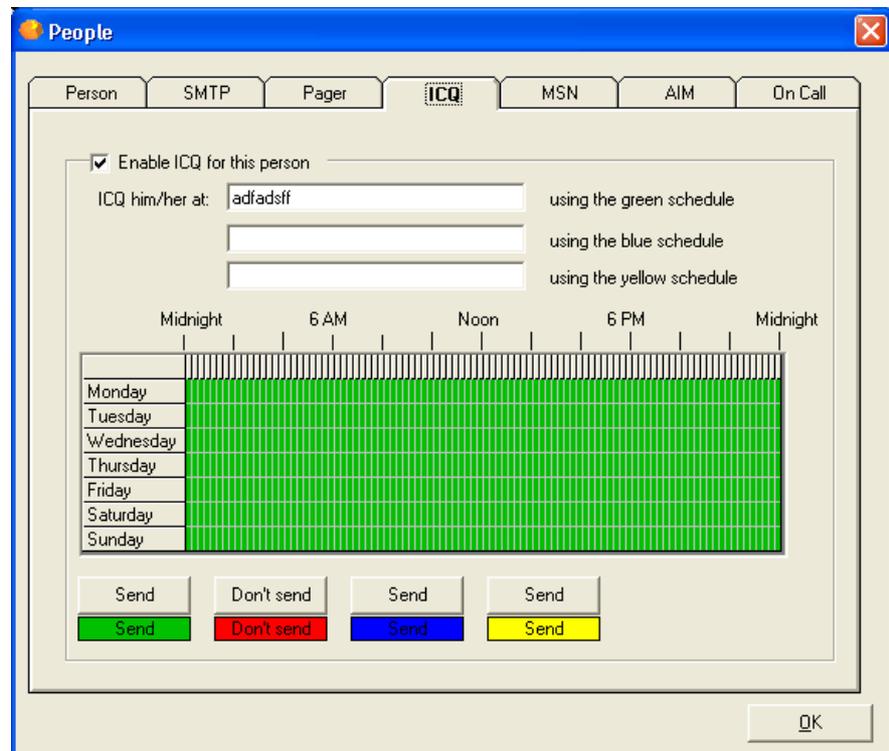
Send

Click one of the **Send** buttons after you have dragged the cursor on the grid to select a time period. This button allows Servers Alive to send a message during the time period that you selected. For example, if you drag the cursor and then click the green **Send** button, an alert that occurs at that time is sent to the number entered in **Page Him/Her At _____ Using the Green Schedule.**

Don't Send

Click this button after you have selected a time period on the grid. This action tells Servers Alive not to send a message during the time period that you selected.

ICQ Tab (People Dialog Box)



Enable ICQ for This Person

Click this option to allow the software to send messages to the person that you selected on the *Person tab* (on page 243).

ICQ Him/Her At _____ Using the Green Schedule

Enter an ICQ number.

ICQ Him/Her At _____ Using the Blue Schedule

Enter an ICQ number.

ICQ Him/Her At _____ Using the Yellow Schedule

Enter an ICQ number.

Grid

To change the schedule, you must first select a time. Each block represents 15 minutes. You cannot select a smaller time scale than 15 minutes. Click and drag the pointer to select the time period that you want to change and then click one of the **Send** or **Don't Send** buttons. The blocks change color to signify the schedule. The various colors for each schedule cannot overlap.

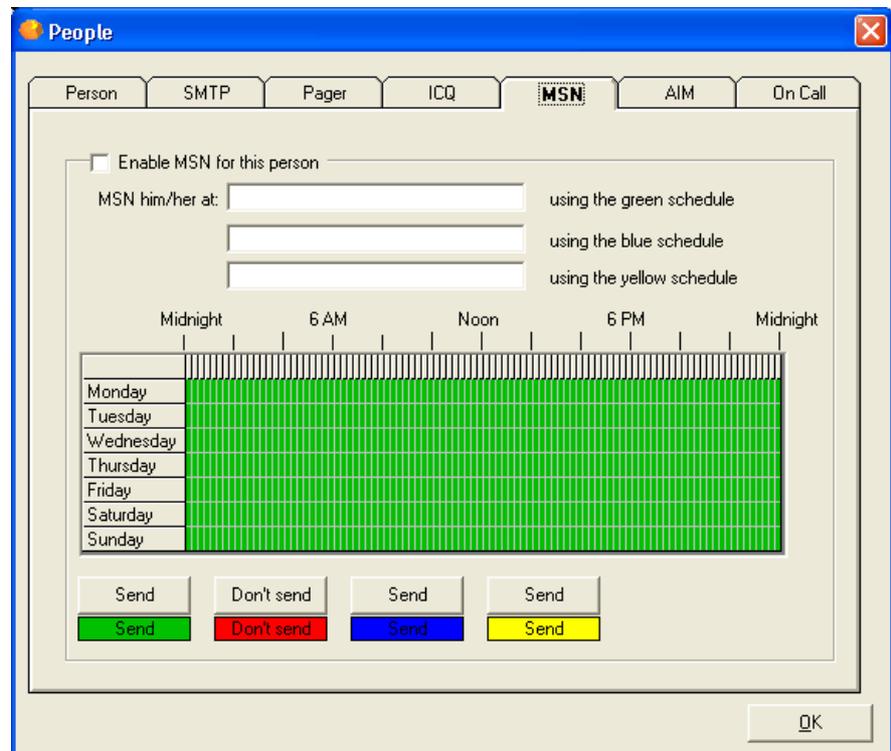
Send

Click one of the **Send** buttons after you have dragged the cursor on the grid to select a time period. This button allows Servers Alive to send a message during the time period that you selected. For example, if you drag the cursor and then click the green **Send** button, an alert that occurs at that time is sent to the number entered in **ICQ Him/Her** _____

Using the Green Schedule.**Don't Send**

Click this button after you have selected a time period on the grid. This action tells Servers Alive not to send a message during the time period that you selected.

MSN Tab (People Dialog Box)



Enable MSN for This Person

Click this option to allow the software to send messages to the person that you selected on the *Person tab* (on page 243).

MSN Him/Her At _____ Using the Green Schedule

Enter an MSN address.

MSN Him/Her At _____ Using the Blue Schedule

Enter an MSN address.

MSN Him/Her At _____ Using the Yellow Schedule

Enter an MSN address.

Grid

To change the schedule, you must first select a time. Each block represents 15 minutes. You cannot select a smaller time scale than 15 minutes. Click and drag the pointer to select the time period that you want to change and then click one of the **Send** or **Don't Send** buttons. The blocks change color to signify the schedule. The various colors for each schedule cannot overlap.

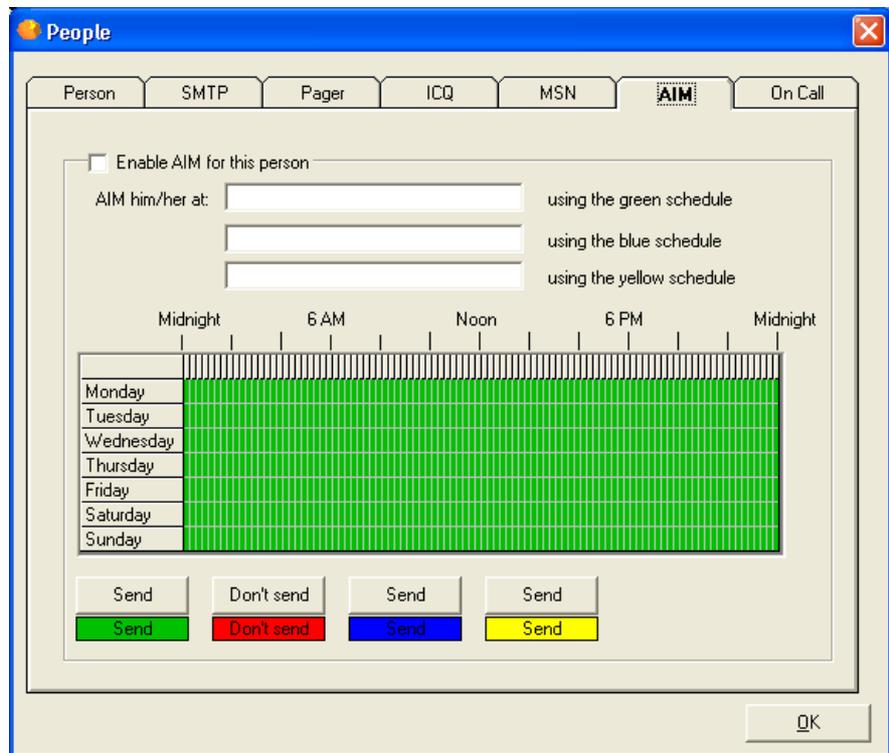
Send

Click one of the **Send** buttons after you have dragged the cursor on the grid to select a time period. This button allows Servers Alive to send a message during the time period that you selected. For example, if you drag the cursor and then click the green **Send** button, an alert that occurs at that time is sent to the address entered in **MSN Him/Her** _____
Using the Green Schedule.

Don't Send

Click this button after you have selected a time period on the grid. This action tells Servers Alive not to send a message during the time period that you selected.

AIM Tab (People Dialog Box)



Enable AIM for This Person

Click this option to allow the software to send messages to the person that you selected on the *Person tab* (on page 243).

AIM Him/Her At _____ Using the Green Schedule

Enter an AIM address.

AIM Him/Her At _____ Using the Blue Schedule

Enter an AIM address.

AIM Him/Her At _____ Using the Yellow Schedule

Enter an AIM address.

Grid

To change the schedule, you must first select a time. Each block represents 15 minutes. You cannot select a smaller time scale than 15 minutes. Click and drag the pointer to select the time period that you want to change and then click one of the **Send** or **Don't Send** buttons. The blocks change color to signify the schedule. The various colors for each schedule cannot overlap.

Send

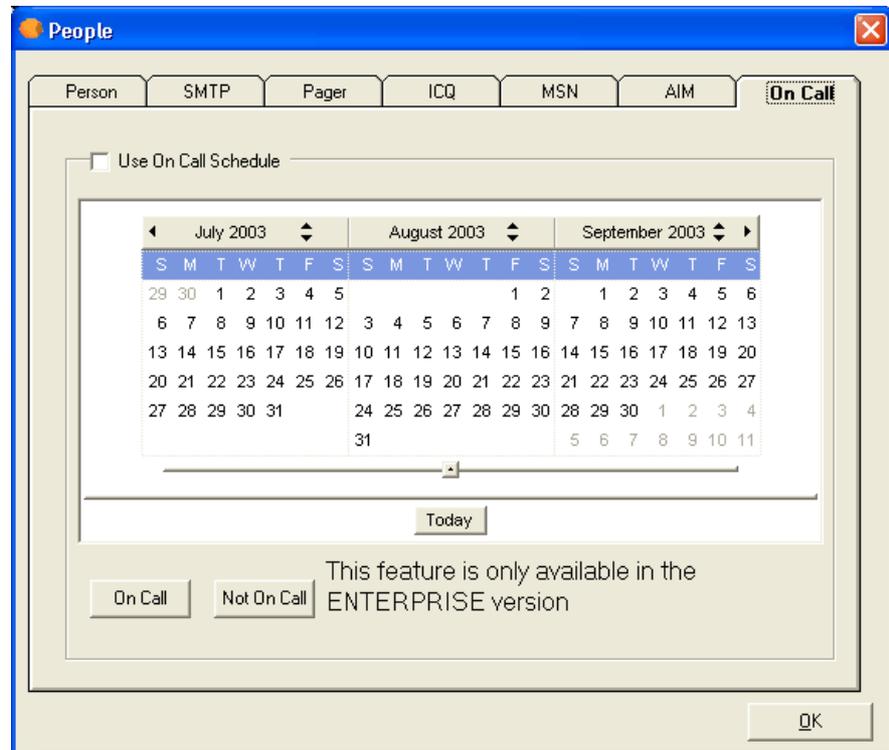
Click one of the **Send** buttons after you have dragged the cursor on the grid to select a time period. This button allows Servers Alive to send a message during the time period that you selected. For example, if you drag the cursor and then click the green **Send** button, an alert that occurs at that time is sent to the address entered in **AIM Him/Her** _____

Using the Green Schedule.**Don't Send**

Click this button after you have selected a time period on the grid. This action tells Servers Alive not to send a message during the time period that you selected.

On Call Tab (People Dialog Box)

This feature is available only in the Enterprise edition and free version of Servers Alive. This feature is not available in the Standard edition.



Use On Call Schedule

Click to enable this feature for the person that you selected on the **Person** tab (on page 243).

When you schedule times for an individual to be on call, that person receives alert messages at the addresses that you specify on the **SMTP**, **ICQ**, **MSN**, or **Pager** tabs.

If this feature is enabled, yet the schedule for this person shows that they are not on call, the individual does not receive alert messages.

To change the months that are displayed on the dialog box, drag the slider bar to the left or right.

On Call

Enters times that a person is on call. To specify that a person is on call and receives alert messages, drag the mouse pointer over the dates that you want and click the **On Call** button.

Not On Call

Specifies that a person is not on call. To ensure that a person does not receive alert messages during a specific time, click the **Not On Call** button.

Today

Click this button to change the calendar display to the current date.

Registry Settings

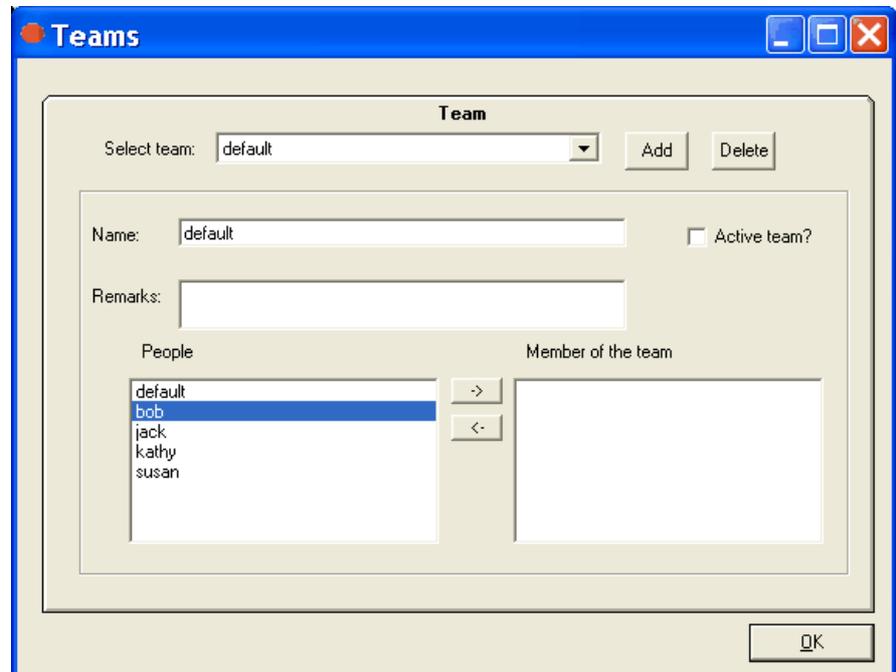
You can set an additional parameter in the Windows registry. To set the first day of the week for the schedule on the **On Call** tab, edit the following Windows registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\StartUp\OnCall_start_day (dword)

1 = Sunday, 2 = Monday, 3 = Tuesday, 4 = Wednesday, 5 = Thursday, 6 = Friday, 7 = Saturday

Any value below 1 or above 7 defaults to 1, or Sunday.

Edit > Teams (Teams Dialog Box)



Servers Alive has an option for companies that use large technical teams to handle their support. You can use team alerting to send alerts to multiple people based on schedules for each individual. This way, you can tell Servers Alive what people are responsible for various servers and let the software alert the team as appropriate based on the people's schedule of availability.

To use team alerting, you must set up person and team entries that define who should be alerted and when. To do this, click **Edit > People** and **Edit > Teams**.

You must first add the people that you want with the **Edit > People** command.

You can use both team and people definitions in your alerting. When setting up an entry, you can use either a team or person entry on the **SMTP** and **Paging** alert settings. To do this, click the **Add** or **Edit** button on the Main window and, on the **Alert** tab, click the **Add** button to select one of the SMTP or paging options. For an example of how to use people and teams, refer to *People and Teams Example* (on page 259).

When using a person entry, you can enclose the person's name in parentheses; for example: (person). When using a team definition, enclose the team name in curly braces, as in {team}.

Select Team

Enter the name of the team.

Add

Click to add people to the **Select Team** list.

Delete

Select a name in the **Select Team** list and click **Delete** to remove the team.

Name

Displays the name of the team that you chose in the **Select Team** list. You can change the name.

The name cannot have a comma <,> or semi-colon <;>. If you use a comma or semi-colon, Servers Alive removes it.

Active Team?

Click to activate the team's settings.

Remarks

Enter information, such as notes, that you want to remember for that team's entry.

People

Displays people that you can add to the team.

Members of the Team

Click the arrow buttons to add or remove people from the team.

People and Teams Example

Suppose your company has four people who are responsible for your servers. These four people are named Jack, Bob, Susan, and Kathy. During the day, when all four are at the office, you want them all to receive any alert, but the four need some time when they are not on call. After looking at their schedules, you determine that each one of them can take a weeknight.

For the weekend, you decide to pair Jack and Kathy and Bob and Susan into sub-teams. Jack and Kathy handle Friday night and Saturday. Bob and Susan handle Sunday and Monday morning before the office opens. When you designate two people to receive weekend pages, they can travel on weekends if necessary. In order to allow Jack and Kathy to not receive any pages Saturday night, they go off call at 11PM that night.

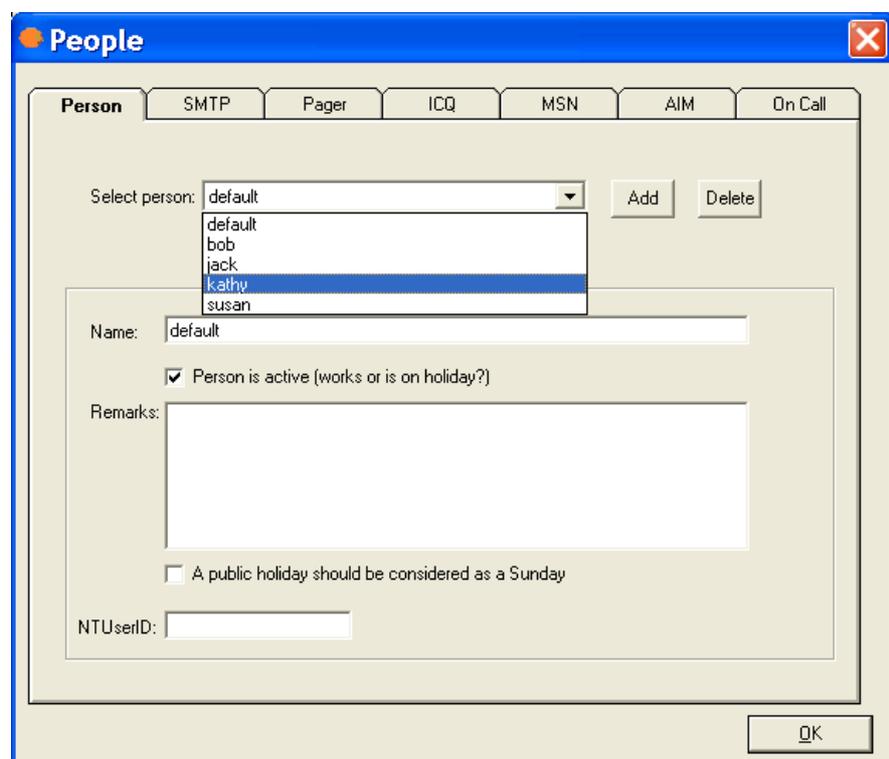
So, for all four, here is their schedule:

- Bob: All Business Hours, Monday Night, Saturday 11PM - Monday 8AM
- Jack: All Business Hours, Tuesday Night, Friday 5PM - Saturday 11PM
- Kathy: All Business Hours, Wednesday Night, Friday 5PM - Saturday 11PM
- Susan: All Business Hours, Thursday Night, Saturday 11PM - Monday 8AM

To set this up, you would first go to the **Edit** menu and select **People**. On the **Person** tab, you must create entries for all four people. Click the **Add** button on the right and enter each person's name.

You cannot enter capital letters.

After you have added each person, go back to each one and check the **Person is Active** box. This means that they can be paged or emailed. If a person goes on vacation, you can remove the check mark later. One consideration with setting up a person's schedule is in how Servers Alive deals with public holidays and alerting. By default, a public holiday is not treated differently than any other day. You can configure Servers Alive to treat public holidays as a Sunday by checking the **A public Holiday Should be Considered as a Sunday** check box. This means that if a holiday falls on a Tuesday, you can designate Servers Alive to check everyone's Sunday schedule instead of his or her Tuesday schedule to determine whom to alert. You can change the list of holidays by clicking **File > Setup** and then clicking **General > Startup** in the **Setup** tree. See *Startup Settings* (on page 99) for more information.



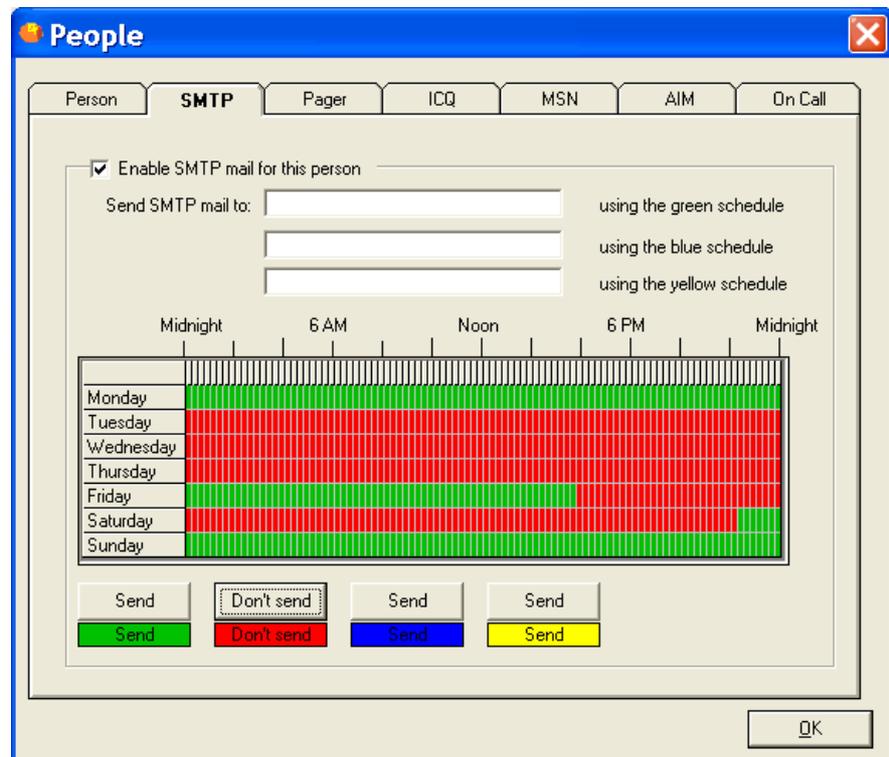
Next you must set up each person's email and pager schedule. Select Bob and then select the **SMTP tab** (on page 245).

First, you should check the **Enable SMTP Mail for this Person** box and enter an email address for Bob. By default, Bob is scheduled to receive email alerts all the time, as indicated by every green time block. You select the time periods when Bob is not on-call and turn them off.

First, you set the weekdays. Bob is on call Monday night, but he is off call Tuesday, Wednesday, and Thursday nights. Select each night that Bob is off call and click the **Don't Send** button to turn them off.

You can now set Bob's weekend schedule. Bob goes off-call on Friday at 5 PM, so go to the row labeled Friday and select everything from Friday 5 PM on, and then click the **Don't Send** button. Bob stays off call until 11 PM Saturday night, so select the entire row labeled Saturday, up to 11

PM. Then click the **Don't Send** button. Bob's schedule is now set, and he will not receive emails during the time period that he is off call. Your screen should look like the following:

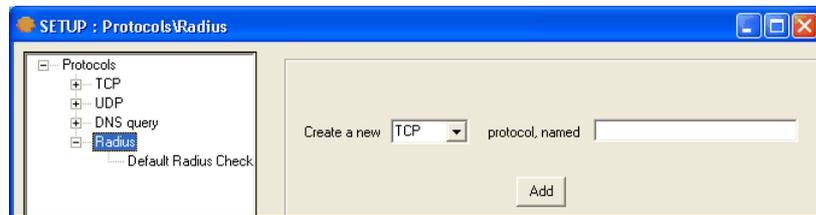


Now that you've seen how to set up one person, you can do similar schedules for the other three people.

The final step is to add all four people to a team. You can create teams with whatever combination of the four you need, depending on what they were responsible for. You might include some of them in a team called "Web" that dealt with your web servers and others in a team that dealt with your network, and so forth. By setting everyone up in a team, you can add a team name to the alerting section of a host entry and then modify the team when necessary.

To add all four people to a team, click **Edit > Teams**. To create a team, you must click the **Add** button and give the team a name. Finally, at the bottom of the dialog box, you select all the team members. In this example in which you are creating one team, you select all four people.

Edit > Protocols (Protocols Dialog Box)



You can create settings for each protocol under a unique name:

- TCP
- UDP
- DNS Query
- Radius

Create a New ____ Protocol

Select the type of protocol for which you want to create a new setting.

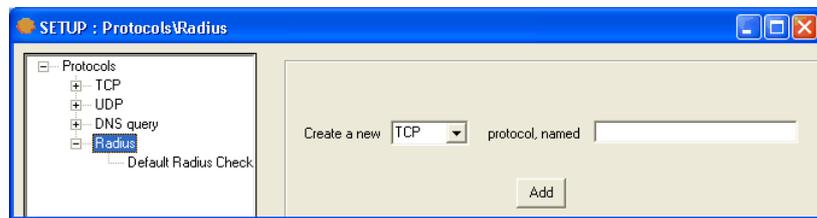
Named

Enter the name for the group of settings.

Add

Click to add the name to the tree. The name appears as a branch of the tree under the specific protocol that you selected. You can now click the new branch of the tree to create specific settings for the name that you created.

TCP (Protocols Dialog Box)



You can create settings for each protocol under a unique name:

- TCP
- UDP
- DNS Query
- Radius

Create a New ___ Protocol

Select the type of protocol for which you want to create a new setting.

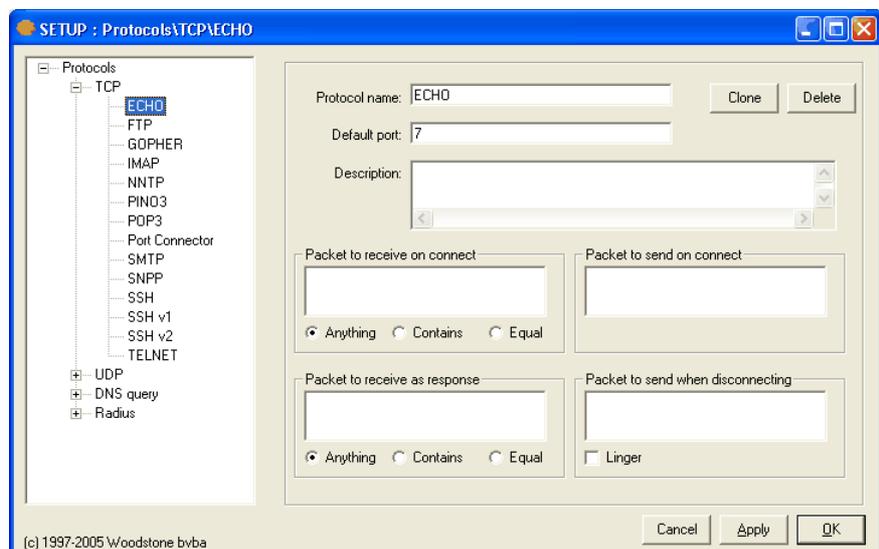
Named

Enter the name for the group of settings.

Add

Click to add the name to the tree. The name appears as a branch of the tree under the specific protocol that you selected. You can now click the new branch of the tree to create specific settings for the name that you created.

When you click a branch of the tree under TCP, the following options appear. The entries depend on the name in the tree that you have selected, such as FTP, Gopher, or a name that you created.



Protocol Name

Displays the name of the protocol settings.

Clone

Duplicates the settings. Click the button to copy the settings and enter a name for the new group of settings.

Delete

Deletes the settings.

Default Port

Displays the default port of the protocol settings.

Description

Displays a description for the protocol settings.

In any of the following fields, you can enter a non-printable character by typing the hexadecimal version of that character. The correct syntax is `\xab` where `ab` is a two-digit hexadecimal representation of the character. For example, you can type the following:

`\xff` for `char(255)` or a `ÿ`

`\x0d` for `char(13)` or a colon

Packet to Receive on Connect

Enter the packet the protocol settings can receive.

On the Internet, the network breaks messages into parts of a certain size in bytes called packets. Each packet carries the information that moves the packet to its destination: the sender's IP address, the receiver's IP address, information that tells the network how many packets this email message has been broken into, and the number of this particular packet. The packets carry the data in the protocols that the Internet uses: Transmission Control Protocol/Internet Protocol (TCP/IP). Each packet contains part of the body of your message. A typical packet contains perhaps 1,000 or 1,500 bytes.

Anything

Allows the computer to receive any packets.

Contains

Click this and enter the item in **Packet to Receive on Connect**.

Equal

Click this and enter the item in **Packet to Receive on Connect**.

Packet to Send on Connect

Enter the packet the protocol settings can send.

Packet to Receive as Response

Enter the packet the protocol settings can receive as a response.

Anything

Allows the computer to receive any packets.

Contains

Click this and enter the item in **Packet to Receive as Response**.

Equal

Click this and enter the item in **Packet to Receive as Response**.

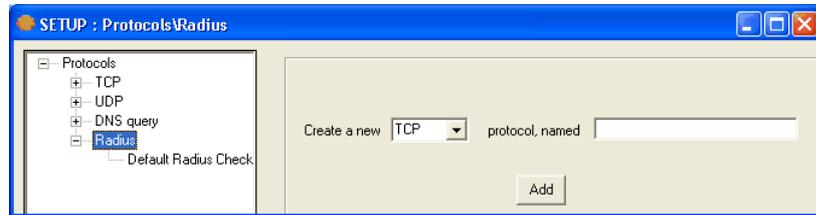
Packet to Send when Disconnecting

Enter the packet the protocol settings can send when disconnecting.

Linger

Click this check box to ensure the connection is active until all the data is sent.

UDP (Protocols Dialog Box)



You can create settings for each protocol under a unique name:

- TCP
- UDP
- DNS Query
- Radius

Create a New ___ Protocol

Select the type of protocol for which you want to create a new setting.

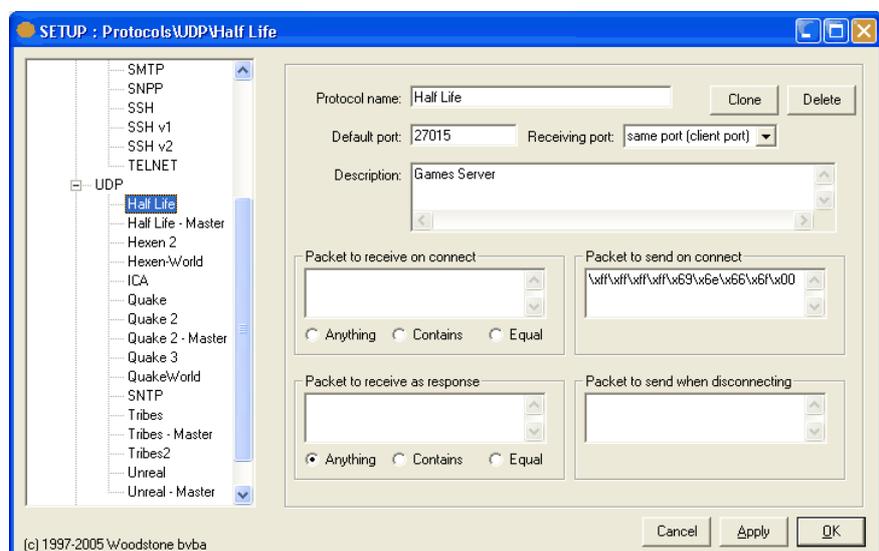
Named

Enter the name for the group of settings.

Add

Click to add the name to the tree. The name appears as a branch of the tree under the specific protocol that you selected. You can now click the new branch of the tree to create specific settings for the name that you created.

When you click a branch of the tree under TCP, the following options appear. The entries depend on the name in the tree that you have selected, such as Half Life or a name that you created.



Protocol Name

Displays the name of the protocol settings.

Clone

Duplicates the settings. Click the button to copy the settings and enter a name for the new group of settings.

Delete

Deletes the settings.

Default Port

Displays the default port of the protocol settings.

Receiving Port

Select an option in the dropdown list to receive the data back on another port other than the default port. The initial communication is client (client_port) to server (server_port) in which the client_port is a random port above 1024; the connection sends data back from the server (server_port) to the client (client_port).

You can now receive the data back to port +1, port -1, the same port (client port), or the same port (server port).

- **Same port (client port)** - Result comes back from the server on the client port.
- **Port +1** - Result comes back from the server on the server port +1. For example, if you set the client port as 67 and select **Port +1** in the dropdown list, the result comes back on the client port 68, being server port +1.
- **Port -1** - Result comes back from the server on the server port -1. For example, if you set the client port as 67 and select **Port -1** in the dropdown list, the result comes back on the client port 66, being server port -1.
- **Same port (server port)** - Result comes back from the server on the server port.

Description

Displays a description for the protocol settings.

In any of the following fields, you can enter a non-printable character by typing the hexadecimal version of that character. The correct syntax is \xab where ab is a two-digit hexadecimal representation of the character. For example, you can type the following:

\xff for char(255) or a ÿ

\x0d for char(13) or a colon

Packet to Receive on Connect

Enter the packet the protocol settings can receive.

On the Internet, the network breaks messages into parts of a certain size in bytes called packets. Each packet carries the information that moves the packet to its destination: the sender's IP address, the receiver's IP address, information that tells the network how many packets this email message has been broken into, and the number of this particular packet. The packets carry the data in the protocols that the Internet uses: Transmission Control Protocol/Internet Protocol (TCP/IP). Each packet contains part of the body of your message. A typical packet contains perhaps 1,000 or 1,500 bytes.

Anything

Allows the computer to receive any packets.

Contains

Click this and enter the item in **Packet to Receive on Connect**.

Equal

Click this and enter the item in **Packet to Receive on Connect**.

Packet to Send on Connect

Enter the packet the protocol settings can send.

Packet to Receive as Response

Enter the packet the protocol settings can receive as a response.

Anything

Allows the computer to receive any packets.

Contains

Click this and enter the item in **Packet to Receive as Response**.

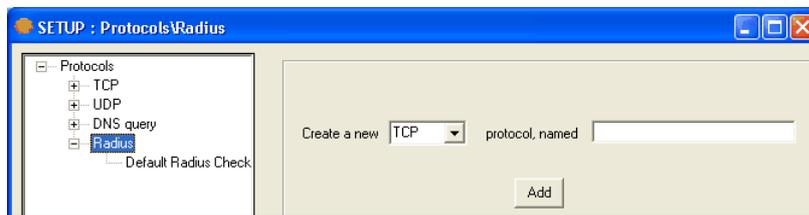
Equal

Click this and enter the item in **Packet to Receive as Response**.

Packet to Send when Disconnecting

Enter the packet the protocol settings can send when disconnecting.

DNS Query (Protocols Dialog Box)



You can create settings for each protocol under a unique name:

- TCP
- UDP
- DNS Query
- Radius

Create a New ___ Protocol

Select the type of protocol for which you want to create a new setting.

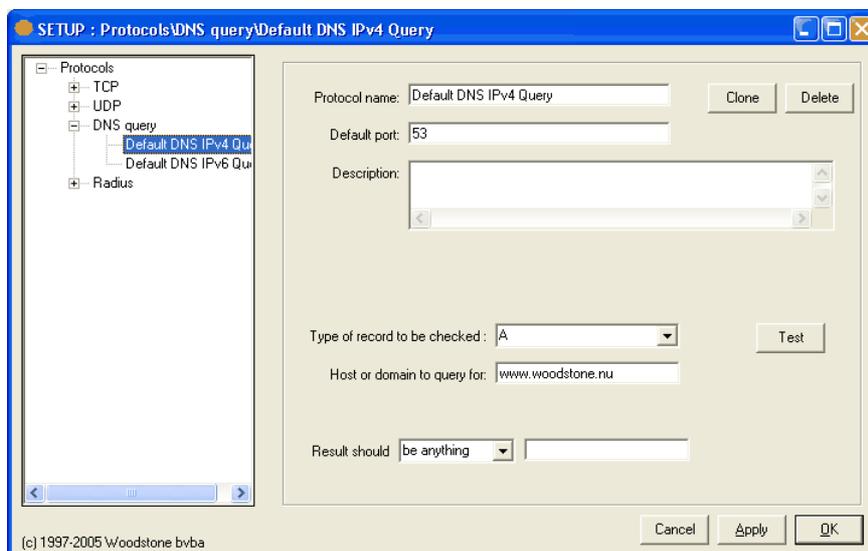
Named

Enter the name for the group of settings.

Add

Click to add the name to the tree. The name appears as a branch of the tree under the specific protocol that you selected. You can now click the new branch of the tree to create specific settings for the name that you created.

When you click a branch of the tree under TCP, the following options appear. The entries depend on the name in the tree that you have selected, such as Default DNS IPv4 Query or a name that you created.



Protocol Name

Displays the name of the protocol settings.

Clone

Duplicates the settings. Click the button to copy the settings and enter a name for the new group of settings.

Delete

Deletes the settings.

Default Port

Displays the default port of the protocol settings.

Description

Displays a description for the protocol settings.

Type of Record to be Checked

Select the type of record from the list:

Select this option:	To check this type of record:
A	Host address. The A-record is the most basic type of DNS record. A- records change domain names such as "www.yourdomain.com" into IP addresses, such as 23.123.40.53. A-records function like hosts files - a straightforward domain name to IP address mapping. A-records are primarily used for computers that share resources on a network.
NS	Authoritative name server. NS-records identify DNS servers responsible for a zone. An NS-record identifies the name of a DNS server, not the IP address.
CName	Domain name aliases. CNAME-records can be used to give a single computer multiple names, or aliases, for each function that the server performs, such as web server, ftp server, and so forth. CNAME-records are also used when a computer or service needs renaming.

SOA	<p>Start of authority.</p> <p>The process returns "Server authority for domain" if the server that you are checking is the authority for the domain that you enter in the Host or Domain to Query for box. Otherwise, when you select the SOA option, the process returns "Server not authority for domain."</p> <p>Each zone contains exactly one SOA-record that contains the zone properties, such as the following:</p> <ul style="list-style-type: none">▪ Name of primary DNS server▪ Mailbox of responsible person▪ Serial number▪ Refresh interval▪ Retry interval,▪ Expire interval.
WKS	<p>Well known services.</p> <p>WKS-records list the well known services, such as TELNET, FTP, or SMTP, that a host provides on a specific IP protocol, such as TCP or UDP.</p> <p>The Well Known Services (WKS)-record lists the Well Known Services a host provides on a particular IP protocol. The common protocols are TCP and UDP.</p>
PTR	<p>Domain name pointer.</p> <p>PTR-records map IP addresses to domain names. These records are considered the opposite of A-records. A PTR-record's name is the IP address written in backward order with "in-addr.arpa." appended to the end.</p>
HINFO	<p>Host information. An HINFO-record indicates the host server type of CPU and operating system. This information can be used by application protocols such as FTP.</p>
MINFO	<p>Mailbox records.</p> <p>Most Internet mail servers only support MX-records. Only use this option if you have specific requirements for this type of record.</p>
MX	<p>Mail exchange.</p> <p>MX-records identify mail server(s) responsible for a domain name. When sending an e-mail to johnsmith@domain.com, your mail server must find the MX-record for domain.com to see which mail server handles mail for domain.com. The mail server then looks up the A-record for the mail server to connect to that IP address.</p>
AAAA	<p>Absolute IPv6 host address. See the following description for A6-records.</p>

A6 IPv6 host address.

IPv6 is the future replacement for the current IP address system, IPv4. IPv4 addresses are 32-bits long and support a limited number of addresses. Not every system supports IPv6. IPv6 addresses are 128-bits long and are written hexadecimal numbers.

An A6-record is used to specify the IPv6 address, or part of the IPv6 address, for a host. A6-records expand the functionality of A and AAAA-records by adding support for aggregation and renumbering.

SRV Location of service.

The process returns the server host name for the domain that you specify in the **Host or Domain to Query for** box. SRV-records are often used with different directory servers such as Lightweight Directory Access Protocol (LDAP) and Windows 2000 directory services. SRV-records can also be used for advanced load balancing and to specify specific ports for services.

Test

Click to test the settings.

Host or Domain to Query for

Enter the URL or name of the domain or host for the check.

Result Should _____

Select from **Be Anything**, **Contain**, **Exactly Be**, or **Not Contain**. Enter the text that should result.

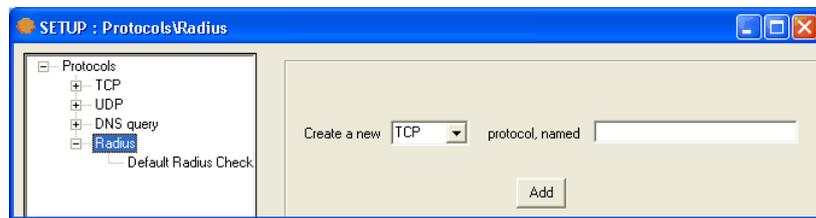
If you select **Be Anything**, you do not need to enter a string in the box.

If you select **Contain**, the query finds any of the string that you enter in the box.

If you select **Exactly Be**, the query finds the exact string that you enter.

If you select **Not Contain**, the query finds anything that does not contain the string you enter. This option is useful if you want to check whether a host is listed in a spam blocking database, such as Spamcop. For example, in the **Host or Domain to Query for** box, you can enter 4.3.2.1.bl.spamcop.net. In the **Result Should** list, you can then click **Not Contain** and enter 127.0.0 in the box. This checks to see if a host with an IP address of 1.2.3.4 is within the spam blocking database.

Radius (Protocols Dialog Box)



You can create settings for each protocol under a unique name:

- TCP
- UDP
- DNS Query
- Radius

Create a New ___ Protocol

Select the type of protocol for which you want to create a new setting.

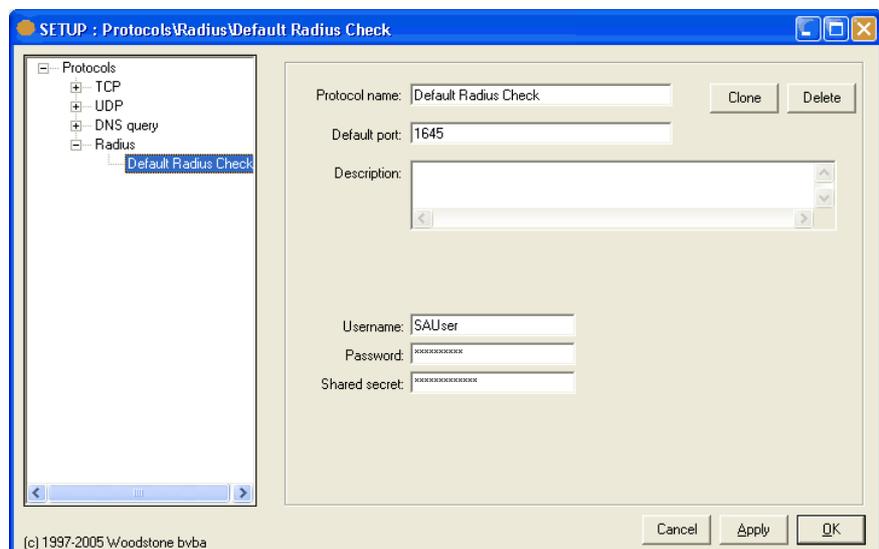
Named

Enter the name for the group of settings.

Add

Click to add the name to the tree. The name appears as a branch of the tree under the specific protocol that you selected. You can now click the new branch of the tree to create specific settings for the name that you created.

When you click a branch of the tree under TCP, the following options appear. The entries depend on the name in the tree that you have selected, such as **Default Radius Check** or a name that you created.



Protocol Name

Displays the name of the protocol settings.

Clone

Duplicates the settings. Click the button to copy the settings and enter a name for the new group of settings.

Delete

Deletes the settings.

Default Port

Displays the default port of the protocol settings.

Description

Displays a description for the protocol settings.

Username

Enter the user name.

Password

Enter the password.

Shared Secret

Enter the appropriate shared secret. A shared secret is a text string that serves as a password between:

- A Radius client and Radius server.
- A Radius client and a Radius proxy.
- A Radius proxy and a Radius server.

CHAPTER 5

Register, View, and Help Menus

You can complete the following actions from the **Register, View, and Help** menus:

- Register the product. If you have already registered, you cannot see this menu.
- Show and hide various components of the Main window.
- Access online Help and the Servers Alive web site.

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Register Menu

This menu appears only in the unregistered version of Servers Alive. Use this command to register Servers Alive when you receive your email containing the appropriate information.



Name

Enter your name.

Company

Enter the name of your company. This entry is optional.

Registration Code

Enter the registration code that you received in email from Servers Alive.

Buy Now

Click this button to purchase Servers Alive at the *Servers Alive web site* (<http://www.woodstone.nu/salive/purchase.asp>).

View Menu

You can use the **View** menu to hide or show the following:

- **Host ID Column**
- **Last Checktime Column**
- **Roundtrip Column**
- **Response Column**
- **Status Column**
- **Pretty Name Column**
- **Host Name Column**
- **Check Description Column**
- **Priority Column**
- **Status Icons within Tree**
- **Hide Status Frame**

The status frame is right under the menu bar. It shows how many entries were up, down, and in maintenance during the last check cycle.

- **Show EDIT Buttons**

The edit buttons are below the entry list (**Add, Edit, Delete, Setup, About, Exit**).

Help Menu

Use this menu to access online Help or go to the Servers Alive web site.

If you click **Help > About**, you can see information about Servers Alive. On the **About** box under the **OK** button, a button called **Upgrade** appears, if you have the Standard edition of Servers Alive. If you click this button, the **Registration** dialog box appears, allowing you to enter the Version 4 Enterprise registration code. If you are running the non-registered version, also known as freeware, or Enterprise edition, you cannot see this button.

To get additional information about a dialog box or command, select the menu command and press F1 on the keyboard. Or, you can open a dialog box and press F1.

External Checks: Error Level

One of the nicest options available in Servers Alive is the ability to write your own custom checks and have them included in the check cycle. These checks can do any task that you are capable of programming, and many people in the Servers Alive community have made external checks that are available for you to use. Woodstone bvba has also provided external checks for you to use.

To use Servers Alive to write external checks, see *External (Errorlevel)* (on page 175).

Writing External Checks

External checks can be written in any language. They can be compiled programs, interpreted scripts, or a simple batch file. There are only a few requirements for an external check. The external check must not rely on user input, and it must return an errorlevel to Servers Alive. Servers Alive uses the returned error level to determine if the check succeeded or failed.

Woodstone bvba Supplied Checks

Woodstone bvba has supplied example external checks. They are located in a subdirectory of the Servers Alive install directory called \External. In that directory you can find the executable for each check, and a small text file that describes the check. Following is a short description of each check. Please read the associated text file for more details.

CheckODBC - Checks an ODBC data source. It will attempt to connect to a data source with parameters you give to it. It does not attempt to read or write any data from the data source.

Countfiles - Connects to a path you supply, such as a network share, and returns an errorlevel equal to the number of files/directories that match your pattern criteria. The pattern is a standard file name wildcard pattern (such as *.* , *.log, or text?.txt).

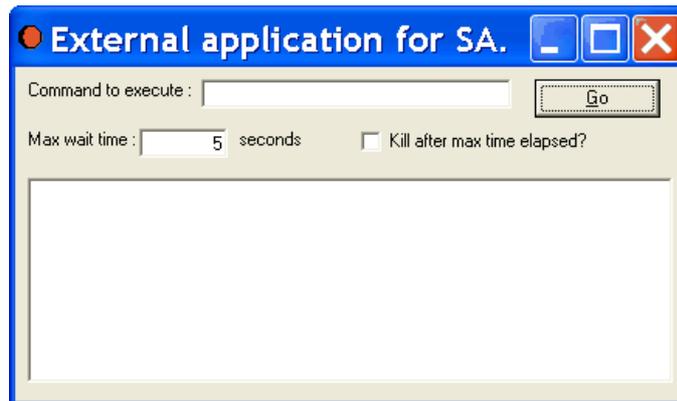
SATelnet - Automates connecting to a TCP port, reading data, and passing in commands. This is ideal for checks where you need to connect to the Telnet port of a remote computer, log in, issue some commands, and evaluate the result. For information on the many options available in this external check, please read the associated text file.

SMTP2POP3 - Provides a more detailed check of a mail server than checking to see if the SMTP and POP3 ports are open. This application, when properly configured, sends an email through the SMTP server, and

then collects that same email through the same or a different POP3 server. This verifies that the entire mail delivery process is functioning.

External Checking Without Using Servers Alive

If you want to test an external check that you wrote without the use of Servers Alive, you can use **Checkerrorlevel.exe**. This small tool is installed by the Servers Alive setup program in the Servers Alive directory. It runs your application and shows you the errorlevel that your application returns.



Command to Execute

Enter the command.

Max Wait Time

Enter the amount of time to wait until the command executes.

Kill After Max Time Elapsed?

Click this check box if you want the check stopped after the maximum time.

External Check Samples: COM-based Checks

You can install the Servers Alive external check samples by downloading them from *the Servers Alive web* site (<http://www.woodstone.nu/salive/addons.asp>).

The external check samples include the following COM-based checks:

- COM ODBC, also referred to as ODBC Query Addon (comodbc.dll).
- Remote DF COM, also referred to as *NIX Diskspace Check (comnixdsk.dll).
- Remote PS COM, also referred to as *NIX Process Check (comnixpro.dll).
- FileSize check (comfilesize.dll).
- Notes Check, also referred to as NotesDB Check (comnotesdb.dll).
- SMTP2POP3 COM, also referred to as Mailflow Check (comsmtp2pop3.dll).
- FileFirstLine Check (comfilefirstline.dll).

After you download the external check sample, browse to the directory where you downloaded the sample and double-click the .exe file to install the sample. The sample automatically installs to the appropriate directory \salive.

Once you have installed the sample, you can take the following steps to use it.

- 1 Open Servers Alive.
- 2 Create an existing entry by clicking the **Add** button and entering the appropriate settings on the **General** tab.
- 3 On the **Check** tab, select **External COM** in the **Check To Use** list.
- 4 In the list below **Check To Use**, select the COM sample that you want to use, such as one of the following entries:
 - **ODBC Query Addon**
 - ***NIX Diskspace Check**
 - ***NIX Process Check**
 - **FileSize Check**
 - **Mailflow Check**
 - **NotesDB Check**
 - **FileFirstLine Check**

- 5 Click the **Configure button** to enter the appropriate settings for each check.

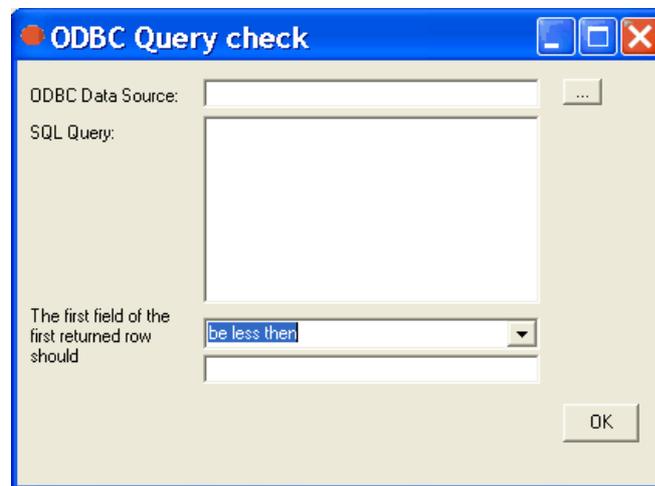
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Remote DF COM (*NIX Diskspace Check).....	288
Remote PS COM (*NIX Process Check)	290
FileSize Check	292
Notes Check (NotesDB Check)	294
SMTP2POP3 COM (Mailflow Check).....	296
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COM ODBC (ODBC Query Addon)

The ODBC Database Monitoring addon monitors database connectivity and accessibility using local data sources and SQL queries. The addon verifies that your databases are functioning and responding correctly.

To activate this COM check, add an entry to Servers Alive and, on the **Check tab** (on page 134) of the **Add/Edit Entry** dialog box, select **External COM** in the **Check to Use** list. You can then select **COM ODBC** on the dropdown list and click the **Configure** button to specify the settings on the following dialog box.



ODBC Data Source

Enter the connection string for the Open Database Connectivity (ODBC) database. Click the browse button to open the **Create Database Connection String dialog box** (on page 61) and select a data source.

SQL Query

Enter the query in standard SQL syntax.

The First Field of the First Returned Row Should

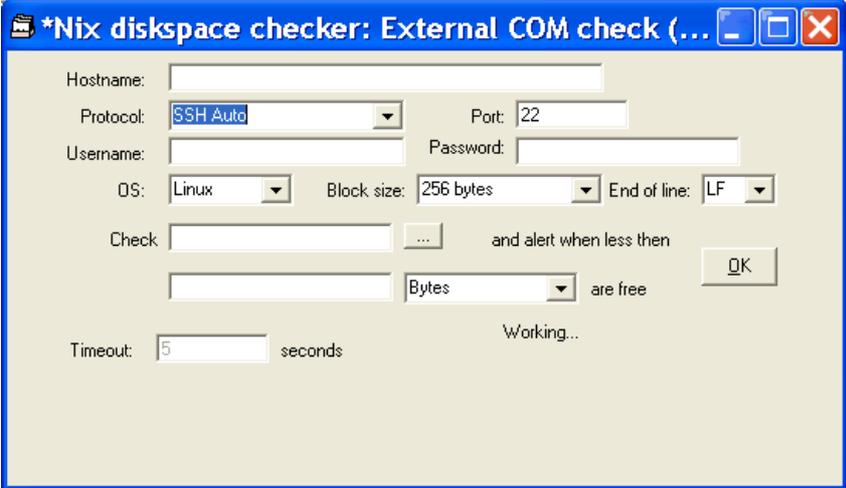
Enter the value that matches the conditional criteria for the first field of the first row that is returned from the query.

Remote DF COM (*NIX Diskspace Check)

The Remote DF COM addon monitors disk space on a remote system hard drives. Some of the operating systems include UNIX, Linux, and BSD. The addon uses an encrypted SSH connection to the remote system. You must have SSH access to the remote system.

If the addon does not work correctly with your current variation of *NIX, please contact **Woodstone support** (mailto:support@woodstone.nu). We can assist you in adding support for your variation of *NIX.

To activate this COM check, add an entry and, on the **Check tab** (on page 134) of the **Add/Edit Entry** dialog box, select **External COM** in the **Check to Use** list. You can then select **Remote DF COM** on the dropdown list and click the **Configure** button to specify the settings on the following dialog box.



The screenshot shows a dialog box titled "*Nix diskspace checker: External COM check (...)" with a blue title bar. The dialog contains the following fields and controls:

- Hostname: [Text input field]
- Protocol: [SSH Auto] (dropdown menu)
- Port: [22] (text input field)
- Username: [Text input field]
- Password: [Text input field]
- OS: [Linux] (dropdown menu)
- Block size: [256 bytes] (dropdown menu)
- End of line: [LF] (dropdown menu)
- Check: [Text input field] ... and alert when less than [Text input field] Bytes [dropdown menu] are free
- Timeout: [5] seconds
- Working... (text)
- OK (button)

Hostname

Enter the name of the server you are checking.

Protocol

Select the SSH protocol: **SSH1**, **SSH2**, or **Auto**.

Port

Enter the port number to use for the check. The default is 22.

Username

Enter the user name for the server that you are checking.

Password

Enter the password for the account.

OS

Select the operating system for the server. Some of the available operating systems include the following: **Linux, BSD, Solaris, Sun OS (before 5.0)**, and more.

Block Size

Specify the file size, or block size, in **256, 512, 1024, or 2048** bytes. Larger block sizes make the files easier to read.

End of Line

Select what type of character at the end of each line: **CR**, or carriage return, **LF**, line feed, or **CRLF**, both carriage return and line feed.

Check ___ And Alert When Less Than ___ ___ Are Free

Set the conditionals for Servers Alive to alert you when a certain number of specific processes are running. To specify the process, click the browse button to connect to the SSH server. You can then enter a specific number and specify the unit in bytes, kilobytes, megabytes, gigabytes, terabytes, or a percentage. For example, you can enter 1 gigabyte. The check alerts you when a specific number in units is free.

Timeout

Displays the maximum time in seconds that Remote DF COM should wait before a check. Timeout indicates the amount of time Servers Alive waits to receive a command from another system. You can set this value on the **Check tab** (on page 134) of the **Entries** dialog box.

Remote PS COM (*NIX Process Check)

The Remote PS COM addon monitors processes on a remote system. Some of these systems can include UNIX, Linux, or BSD. The addon uses an encrypted SSH connection to the remote system.

To activate this COM check, add an entry to Servers Alive and, on the **Check tab** (on page 134) of the **Add/Edit Entry** dialog box, select **External COM** in the **Check to Use** list. You can then select **Remote PS COM** on the dropdown list and click the **Configure** button to specify the settings on the following dialog box.

Hostname

Enter the name of the server that you want to check.

Protocol

Select the SSH protocol: **SSH1**, **SSH2**, or **Auto**.

Port

Enter the port number to use for the check. The default is 22.

OS

Select the operating system for the server: **Linux**, **BSD**, **Solaris**, or **HP UX**.

Column

Specifies the number of the column in which to check data: 1 through 15.

End of Line

Select what type of character at the end of each line: **CR**, or carriage return, **LF**, line feed, or **CRLF**, both carriage return and line feed.

Alert When ___ Instances of ___ Are Running

Set the conditionals for Servers Alive to alert you when a certain number of specific processes are running. You can select **At least** or **Less than** and then specify up to 15 instances of the process. To specify the process, click the browse button to connect to the SSH server.

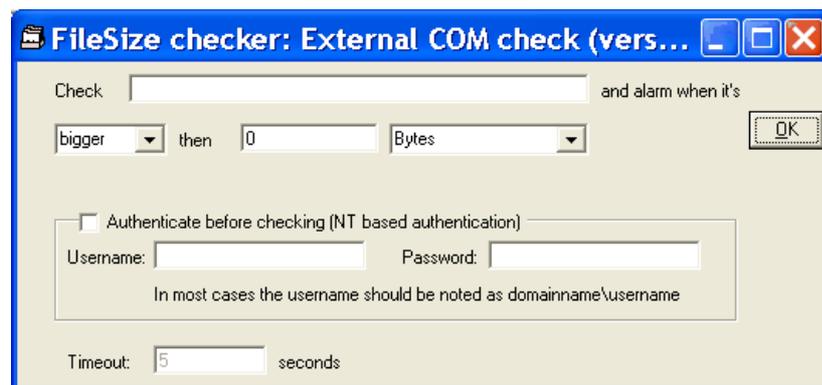
Timeout

Displays the maximum time in seconds that Remote PS COM should wait before a check. Timeout indicates the amount of time Servers Alive waits to receive a command from another system. You can set this value on the **Check tab** (on page 134) of the **Entries** dialog box.

FileSize Check

The FileSize Check addon monitors the size of a file on a remote server.

To activate this COM check, add an entry and, on the **Check tab** (on page 134) of the **Add/Edit Entry** dialog box, select **External COM** in the **Check to Use** list. You can then select **FileSize Check** on the dropdown list and click the **Configure** button to specify the settings on the following dialog box.



Check ____ **and Alarm When It's** ____ **Than** ____

Enter the name of the file that you want to check. The name of the file must be in the following format:

```
\\<server name>\<directory>\<filename>.
```

For example, you can enter the following path:

```
\\server\share\directory\subdirectory\file.ext
```

You must then specify whether the software sends an alarm when the file is bigger or smaller than the size you specify. You can enter the number of bytes, kilobytes, megabytes, gigabytes, or terabytes.

Authenticate Before Checking (NT Based Authentication)

Click to ensure the software authenticates with the server using user name and password that you specify. This occurs before the software executes the command. This authentication is based on Windows NT.

The user performing the service check needs to have at least power user or administrator rights on the computer that is checked. If you do not have sufficient rights, you can specify another user name, usually in the form <domain name>\<user name>, and password of a user with power user or administrator rights on the computer that is checked.

User Name

Enter the user name as <domain name>\<user name>.

Password

Enter the password for the account.

Timeout

Displays the maximum time in seconds that FileSize Check should wait before a check. Timeout indicates the amount of time Servers Alive waits to receive a command from another system. You can set this value on the *Check tab* (on page 134) of the **Entries** dialog box.

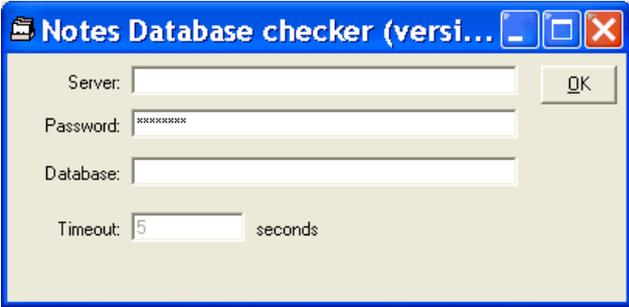
Notes Check (NotesDB Check)

The Notes™ Check addon reports whether a Lotus Notes®/Domino™ database is available or not. Lotus Notes databases can serve as the center of your daily communication. You can have your email, calendar, to do list, contacts, and more items, in one convenient spot.

A Notes client must be installed on the computer that is running Servers Alive and the Notes Check addon. The Notes client must be running with a valid user ID and password on the system. The addon uses the user ID, or client ID/certificate, of the person using the Notes client. Thus, the user running Servers Alive must have rights to the directory where the user ID is stored.

If you get an error indicating "ActiveX object can't be created", then, at the MS-DOS prompt, browse to the directory where NLSXBE.DLL is located. At the prompt, type REGSVR32 NLSXBE.DLL and press Enter on the keyboard.

To activate this COM check, add an entry and, on the **Check tab** (on page 134) of the **Add/Edit Entry** dialog box, select **External COM** in the **Check to Use** list. You can then select **Notes Check** on the dropdown list and click the **Configure** button to specify the settings on the following dialog box.



The screenshot shows a dialog box titled "Notes Database checker (versi...". It has a standard Windows-style title bar with minimize, maximize, and close buttons. The dialog contains the following fields and controls:

- Server:** A text input field.
- Password:** A text input field with masked characters (asterisks).
- Database:** A text input field.
- Timeout:** A text input field containing the number "5", followed by the text "seconds".
- OK:** A button in the top right corner.

Server

Enter the name of the server you are checking.

Password

Enter the password for the user account.

Database

Enter the name of the database.

Timeout

Displays the maximum time in seconds that Notes Check should wait before a check. Timeout indicates the amount of time Servers Alive waits to receive a command from another system. You can set this value on the *Check tab* (on page 134) of the **Entries** dialog box.

SMTP2POP3 COM (Mailflow Check)

The SMTP2POP3 COM addon uses only basic authentication. The addon sends an email using the SMTP protocol to a mail server. The addon then attempts to collect that same email using POP3 from a server, although not necessarily the same server. The addon can then verify that the mail server and mail flow are functioning properly.

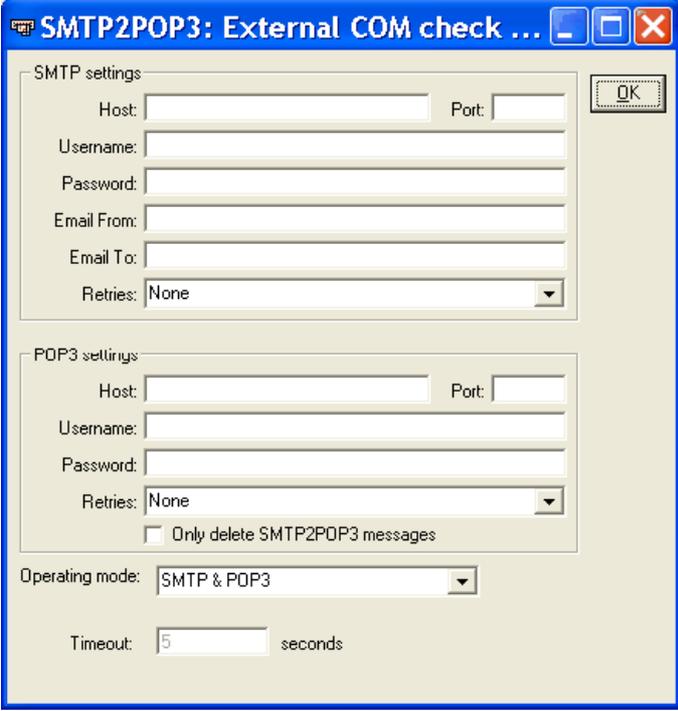
The SMTP2POP3 COM addon works within two cycles. If operating in SMTP and POP3 mode, on the first cycle, cycle_N, the software sends an email using SMTP and completes one of the following actions:

- On the next cycle, cycle_N+1, the software tries to retrieve the email using POP3.
- If sending the email fails in the first cycle, cycle_N, the software tries to send another email on the next cycle, cycle_N+1.

If operating in SMTP mode, the software tries to send an email.

If operating in POP3 mode, the software tries to retrieve an email sent using SMTPPOP3 COM.

To activate this COM check, add an entry and, on the *Check tab* (on page 134) of the **Add/Edit Entry** dialog box, select **External COM** in the **Check to Use** list. You can then click **SMTP2POP3** on the dropdown list and click the **Configure** button to specify the settings on the following dialog box.



The screenshot shows a configuration dialog box titled "SMTP2POP3: External COM check ...". It is divided into two main sections: "SMTP settings" and "POP3 settings".

SMTP settings:

- Host: [text box] Port: [text box]
- Username: [text box]
- Password: [text box]
- Email From: [text box]
- Email To: [text box]
- Retries: [dropdown menu] (set to None)

POP3 settings:

- Host: [text box] Port: [text box]
- Username: [text box]
- Password: [text box]
- Retries: [dropdown menu] (set to None)
- Only delete SMTP2POP3 messages

Operating mode: [dropdown menu] (set to SMTP & POP3)

Timeout: [text box] (set to 5) seconds

An "OK" button is located in the top right corner of the dialog box.

SMTP Settings

Host

Enter the mail host as a NetBIOS name, DNS name or IP address; for example, HERMES, mail.domain.com, or 123.45.67.89.

Port

Enter the port number. The default port number is 25.

The **User Name** and **Password** are needed only if the SMTP server requires authentication when you send an email.

User Name

Enter the user name.

Password

Enter the password for the SMTP server.

Email From

Enter a name or a fully-qualified domain name; for example, serversalive@company.com. Your entries depend on the way your SMTP server is configured; most SMTP servers require a FROM name that looks like a valid email address, such as salive@domain.com. If you have trouble, please contact your mail server administrator for the appropriate settings.

Email To

Enter the email address to which the message should be delivered, such as person@company.com.

Retries

Enter the number of times to try sending the message, up to three retries.

POP3 Settings

Host

Enter the mail host as a NetBIOS name, DNS name or IP address; for example, HERMES, mail.domain.com, or 123.45.67.89.

Port

Enter the port number. The default port number is 110. You must set the port of the POP3 server correctly because the port number is different for SSL security. By default, POP3 uses port 110 and POP3 with SSL uses port 995.

User Name

Enter the user name for the POP3 server.

Password

Enter the password for the account.

Email From

Enter a name or a fully-qualified domain name; for example, `serversalive@company.com`. Your entries depend on the way your POP3 server is configured; most POP3 servers require a FROM name that looks like a valid email address, such as `salive@domain.com`. If you have trouble, please contact your mail server administrator for the appropriate settings.

Email To

Enter the email address to which the message should be delivered, such as `person@company.com`.

Retries

Enter the number of times to try sending the message, up to three retries.

Only Delete SMTP2POP3 Messages

Click this box to delete only SMTP2POP3 messages. Otherwise, all messages are deleted.

Operating Mode

Select whether to use SMTP, POP3, or both protocols.

Timeout

Displays the maximum time in seconds that SMTP2POP3 should wait before a check. Timeout indicates the amount of time Servers Alive waits to receive a command from another system. You can set this value on the *Check tab* (on page 134) of the **Entries** dialog box.

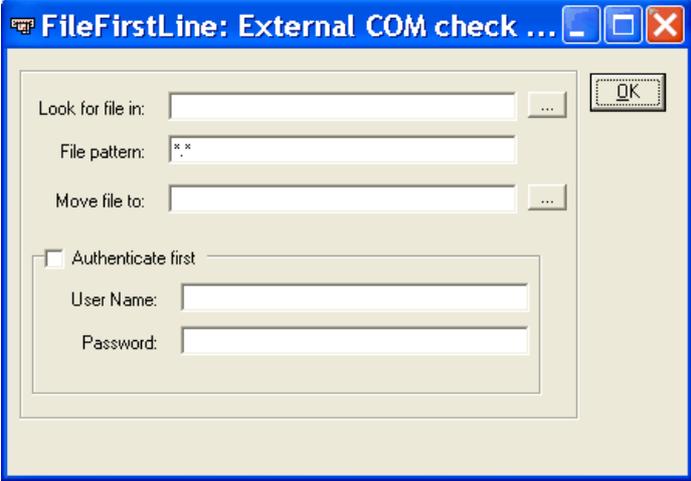
FileFirstLine Check

The FileFirstLine Check addon looks for a file in the directory that you specify, including directories on a remote server. The addon checks for a file that matches the criteria you enter in the **File Pattern** box. If the addon finds the file matching the criteria, it moves the file to another directory that you specify. The addon also returns the first 160 bytes of the file to Servers Alive with the %e parameter.

If the addon finds a file or detects a problem with the parameters, such as a non-existent directory, the condition is reported as down.

If you request authentication, then the addon authenticates using the user name and password for the directory or server that you enter in the **Look for File In** box.

To activate this COM check, add an entry and, on the **Check tab** (on page 134) of the **Add/Edit Entry** dialog box, select **External COM** in the **Check to Use** list. You can then click **FileFirstLine Check** on the dropdown list and click the **Configure** button to specify the settings on the following dialog box.



The screenshot shows a dialog box titled "FileFirstLine: External COM check ...". It contains the following fields and controls:

- "Look for file in:" text box with a browse button (...)
- "File pattern:" text box containing "*.*"
- "Move file to:" text box with a browse button (...)
- An "OK" button in the top right corner.
- An unchecked checkbox labeled "Authenticate first".
- Below the checkbox, "User Name:" and "Password:" text boxes.

Look for File In

Enter the directory in which you want the FileFirstLine Check to look. You can enter a directory path or a path to a remote server, such as \\server\share\directory.

File Pattern

Enter the filename criteria, such as a file extension, for the file that the addon should check for. You can enter a wildcard.

Move File To

Enter or browse to the directory where the file should be moved. You can enter a directory path or a path to a remote server directory, such as \\server\share\directory.

If the check can find the file, the software moves the file to the directory that you enter and returns the first 160 bytes of the file to Servers Alive through the %e parameter.

Authenticate First

Click to use authentication on the remote server. If you click this check box, the check authenticates first using the user name and password for the remote server that you specify in the **Look for File In** box.

Username

Enter the user name for the remote server account.

Password

Enter the password for the remote server account.

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