

Servers Alive Administrator's Guide

Version 4

Revision Date: February 15, 2003

Woodstone® bvba



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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.

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

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

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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.

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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.

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CHAPTER 1

Introduction

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 centralized location and report their status. It supports many generalized tests applicable to servers of all types, along with specialized tests for certain types of services. When it detects that a server or service has become unavailable it is capable of reporting this condition in a variety of ways. It can even act to 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. They rely on it 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 version.

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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Getting Started in the Main Window	7
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Installation

Servers Alive has the following requirements for installation:

- 1 Windows® 2000 (Professional or Server edition), NT® (Workstation or Server edition), ME, 98, and XP.
- 2 Network Interface Card
- 3 TCP/IP

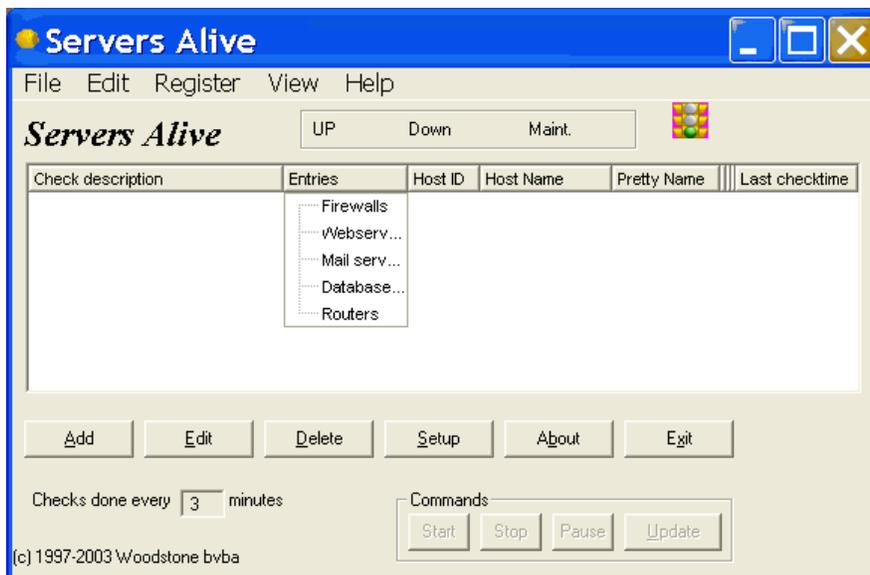
You can purchase two different versions of Servers Alive:

- The Standard version accepts 1000 entries.
- The Enterprise edition accepts 5000 entries and provides logging capabilities to an ODBC-compliant database.

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, 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 MS 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: <http://www.woodstone.nu/salive> (<http://www.woodstone.nu/salive>). 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. There is only one version of the software, regardless of whether you use it for ten or less entries or whether you have purchased a full license.

Installing Servers Alive

Once you have downloaded the software package and saved it to a convenient location, launch the installation 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 installation program asks you for a location where it can install the software, which you can set to any location you want. 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 you install it on is running Windows NT, 2000, or XP. The Setup process detects your operating system and the service automatically installed, if the process does not detect Windows NT, 2000, or XP. 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 Servers Alive is installed, it also installs a few companion applications that you can use to extend the functionality of Servers Alive. A subdirectory called **External** includes some 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 some applications in the main Servers Alive directory that you can use to create your own external checks. For more information, reference the *External Checks* (on page 237) section.

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 e-mail with the required name, company, and registration Code when you purchase the software. If you do not have a registration code, please send an e-mail to support@woodstone.nu (mailto:support@woodstonebvba.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 dependences, and to 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

The Main window displays the following columns:

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

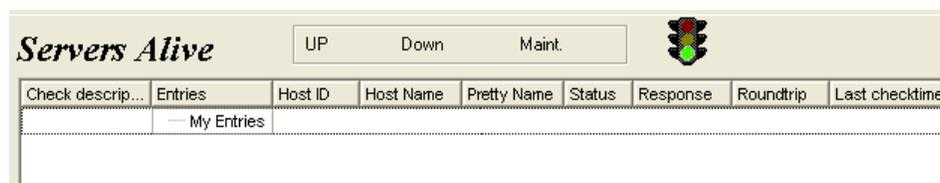


Figure 1: Main Window
(1)

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.

- Click and 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 Status Icons within Tree.

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\DBUConsulting\Servers
Alive\StartUp\No_confirmation_for_Drag_and_Drop (dword)
```

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 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.

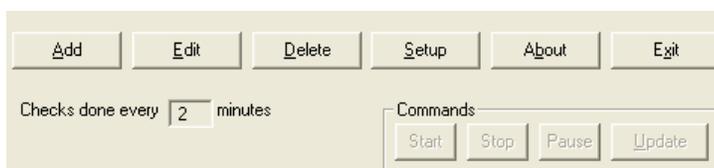


Figure 2: Main Window
(2)

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 **My Entries** and right-click. Select **Add Group** on the shortcut menu. You can also rename a group by selecting My Entries or another group that you created 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**.

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 set how often the software checks the servers by entering the seconds or minutes that you want in the **Checks Done Every __ Seconds/Minutes** box. You can set whether this box displays seconds or minutes. To do this, click **File > Setup**. In the Setup tree, click **General > Startup**. You can enter the number by clicking **Setup > Misc** in the Setup tree.

Start, Stop, Pause, and Update Buttons

There are four command buttons in the lower right-hand corner of the Servers Alive interface, 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.

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, 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. There is currently no process to produce reports based on this information.

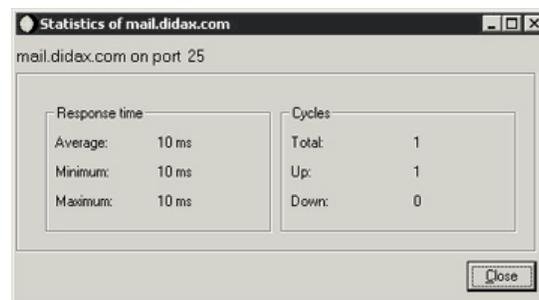


Figure 3: Main Window
(3)

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 some 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.

Sound

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

Technical Support

E-mail

Limited e-mail support is available from *support@woodstone.nu* (mailto:support@woodstonebvba.nu).

Full guaranteed technical support is subject to a Woodstone bvba support license. For current prices and conditions, please e-mail *support@woodstone.nu* (mailto:support@woodstonebvba.nu).

Mailing List

This list is very helpful. To sign up for the list, go to *http://www.woodstone.nu/salive/subscribe.html* (http://www.woodstone.nu/salive/subscribe.html).

What's New?

Servers Alive has the following new features:

- 1** The two different versions of Servers Alive provide different logging capabilities:

The Standard version accepts 1000 server entries.

The Enterprise edition accepts 5000 entries and provides logging capabilities for an ODBC database.

- 2** The Setup dialog box is easier to use. It displays a tree view for all options.
- 3** The Winsock checks are now protocol-oriented; they are no longer port-oriented. For example, in Version 3.3, if you run a check on port 25, the check is always SMTP. Now, in Version 4, you can select the protocol and define the port that you want.
- 4** Each entry item can now have many different alerts, each with its own settings.
- 5** Servers Alive now arranges hosts in the Main window in the correct order for the dependencies to work properly. 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.

CHAPTER 3

File Menu

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

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Introduction to the File Menu

The File menu has the following commands:

- **File** - open a new list of entries.
- **Import Old Hostfile** - open a host file saved in earlier versions of Servers Alive.
- **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.

Setup Dialog Box (Main Window)



Figure 4: Setup (Main)
(1)

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**

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

Alerts

The **Alerts** tab 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:

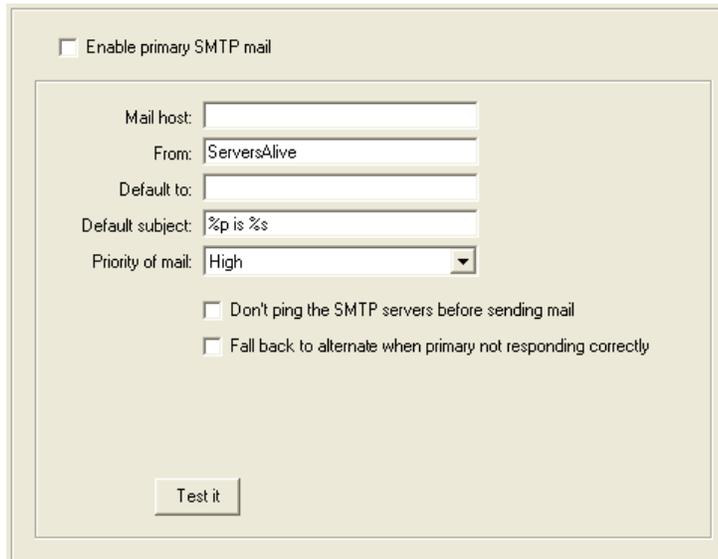
- Sending an e-mail (SMTP) saying what is down
- Paging you with a numeric or alphanumeric warning
- Executing a program
- Playing a sound
- Creating a web or WAP page
- Restarting an NT service

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.

SMTP

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



The screenshot shows a dialog box titled "Primary" with a light beige background. At the top, there is a checkbox labeled "Enable primary SMTP mail". Below this, there is a large rectangular area containing several input fields and a dropdown menu. The fields are: "Mail host:" (empty), "From:" (containing "ServersAlive"), "Default to:" (empty), "Default subject:" (containing "%p is %s"), and "Priority of mail:" (a dropdown menu set to "High"). Below these fields are two more checkboxes: "Don't ping the SMTP servers before sending mail" and "Fall back to alternate when primary not responding correctly". At the bottom center of the dialog box is a button labeled "Test it".

Figure 5: Primary (1)

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.

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 e-mail address, such as **salive@domain.com**. If you have trouble, please contact your mail server administrator for the appropriate settings.

To

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

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.

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.

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 e-mail 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/stops checking, it can also send an e-mail, using the settings of the primary SMTP server. Before sending e-mail to an SMTP server, Servers Alive pings the server and only sends e-mail 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 e-mail is not sent. You can disable this ping-before-send feature to get around this. All e-mail sent by Servers Alive is by default sent as URGENT e-mail (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)

SMTP Timeout

There is another parameter called SMTP\Timeout that 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

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)

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}
- {stime} hh:mm format
- {saversion} Servers Alive version number
- {0d} Carriage return character
- {0a} New line character

Advanced Settings for the SMTP Primary Tree: DUN and ESMTP

DUN entry to use:

Username:

Password:

Domain:

Use authentication:

Username:

Password:

POP3 server:

Figure 6: Primary (2)

Servers Alive uses your LAN (network) connection to send the mail to your SMTP server. Servers Alive can also do this via 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 drop down 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 **Yes** in **Use Authentication**, and then type in the user name and password.

Servers Alive also supports ESMTP and POP3 authentication.

Alternate

Enable alternate SMTP mail

Mail host:

From:

Default to:

Default subject:

Priority of mail:

Don't ping the SMTP servers before sending mail

Fall back to primary when alternate not responding correctly

Figure 7: Alternate (1)

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.

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 e-mail address, such as **salive@domain.com**. If you have trouble, please contact your mail server administrator for the appropriate settings.

To

Enter an e-mail address, such as **person@company.com**. To send the message to several e-mail addresses, separate the addresses with a comma; for example, **user1@company.com,user2@company.com**.

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.

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.

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).

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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

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)

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}
- {stime} hh:mm format
- {saversion} Servers Alive version number
- {0d} Carriage return character
- {0a} New line character

Advanced Settings for the SMTP Primary Tree: DUN and ESMTP

DUN entry to use:	<input type="text" value="LAN"/>
Username:	<input type="text"/>
Password:	<input type="text"/>
Domain:	<input type="text"/>
Use authentication:	<input type="text" value="no"/>
Username:	<input type="text"/>
Password:	<input type="text"/>
POP3 server:	<input type="text"/>

Figure 8: Primary (2)

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

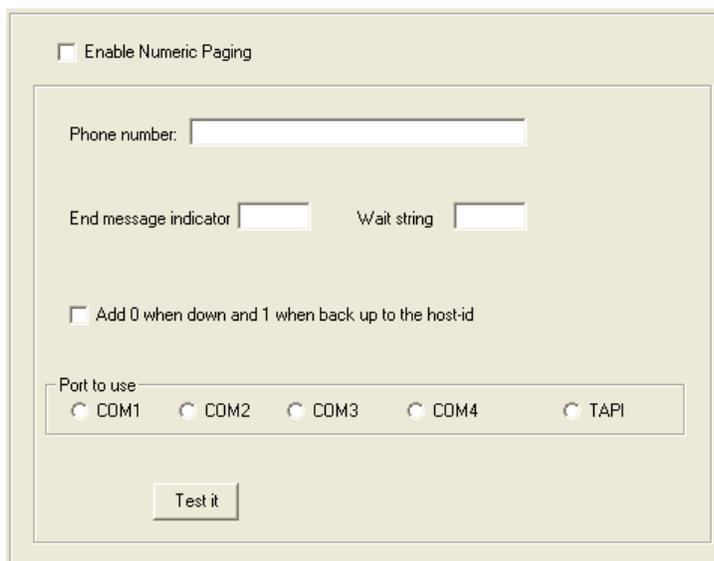
Servers Alive sends SMTP mail through your usual LAN connection (__LAN__). You can, however, force Servers Alive to dial into a remote network before sending mail to an SMTP server. To do this, you first must configure the correct Dial-up Networking settings in Windows. You can then select them using the appropriate drop down 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 **Yes** in **Use Authentication**, and then type in the user name and password.

Servers Alive also supports ESMTP and POP3 authentication.

Numeric Paging



The screenshot shows a configuration window titled "Numeric Paging". At the top, there is a checkbox labeled "Enable Numeric Paging" which is currently unchecked. Below this, there is a text input field for "Phone number:". Underneath the phone number field, there are two more text input fields: "End message indicator" and "Wait string". Below these fields is another checkbox labeled "Add 0 when down and 1 when back up to the host-id", which is also unchecked. At the bottom of the dialog, there is a section titled "Port to use" with five radio button options: "COM1", "COM2", "COM3", "COM4", and "TAPI". A "Test it" button is located at the very bottom center of the dialog box.

Figure 9: Numeric Paging (1)

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 some 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 enabled 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.

Alpha Paging - SMS

Figure 10: Alpha Paging
- SMS (1)

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

One of the most common methods of alerting is alphanumeric paging. You can send small alerts to your alphanumeric pager detailing exactly what has gone 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** 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 <http://www.woodstone.nu/salive/pagersettings.asp> (<http://www.woodstone.nu/salive/pagersettings.asp>). Woodstone bvba takes no responsibility for the accuracy of the supplied information, but it might be helpful.

Baud rate

Choose a setting that is appropriate for your service provider.

Devices

SMSC No

Enter the phone number of your service provider's 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 look at the list at

<http://www.woodstone.nu/salive/pagersettings.asp> (<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.

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

Audio

The screenshot shows a window titled 'Audio' with a light beige background. At the top, there is a checkbox labeled 'Enable audio alarm (can be disabled for individual servers)'. Below this is a text box labeled 'File to play:' with a small '...' button to its right. In the center, there is another checkbox labeled 'Beep via the speaker'. At the bottom, there is a button labeled 'Test it'.

Figure 11: Audio (1)

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 some 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

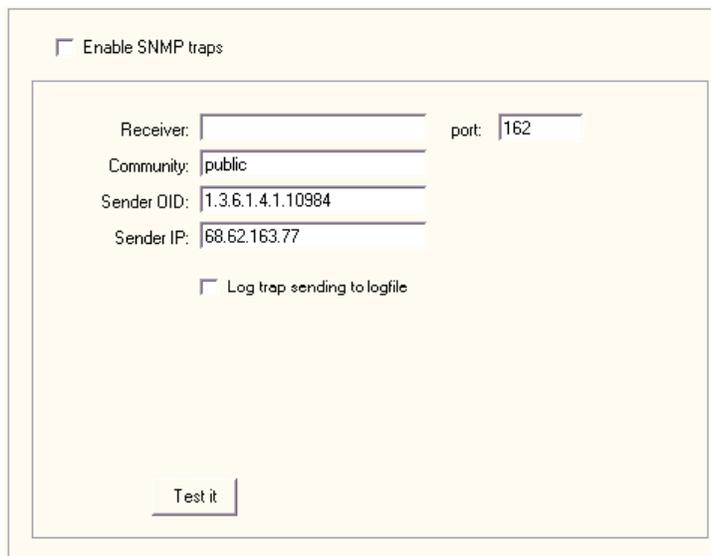
Tests the settings. You should receive a test page. Remember to click the **Apply** button first, or Servers Alive uses the previous settings.

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

SNMP Trap



The image shows a configuration dialog box for SNMP traps. At the top, there is a checkbox labeled "Enable SNMP traps" which is currently unchecked. Below this, there is a large rectangular area containing several input fields: "Receiver:" (empty), "Community:" (filled with "public"), "Sender OID:" (filled with "1.3.6.1.4.1.10984"), and "Sender IP:" (filled with "68.62.163.77"). To the right of the "Receiver:" field is a "port:" label followed by a text box containing "162". Below the input fields is another checkbox labeled "Log trap sending to logfile" which is also unchecked. At the bottom center of the dialog box is a button labeled "Test it".

Figure 12: SNMP Trap
(1)

SNMP Trap

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

Receiver

Indicates the name of the destination host

Community

Enter a community string to use in the traps that the software sends in the **Community** box.

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.

Log Trap Sending to Logfile

Writes the event to a file.

Port

Indicates the destination port for sending traps.

Test It

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

Other Mail

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

Figure 13: Other Mail
(1)

Servers Alive can natively send mail via 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. See the *Other Mail* (on page 159) section for more information.

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.

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)

Within this "othermessage" value you can use the following 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

%c for the complete host/check description

%e for extra info (for a URL checking this could contain 404 Not Found as the error message)

%a for additional info (for a ping check this will be the round trip time)

%i for hosted (used for numeric paging)

{0d} for chr(13) – carriage return

{0a} for chr(10) – line feed

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

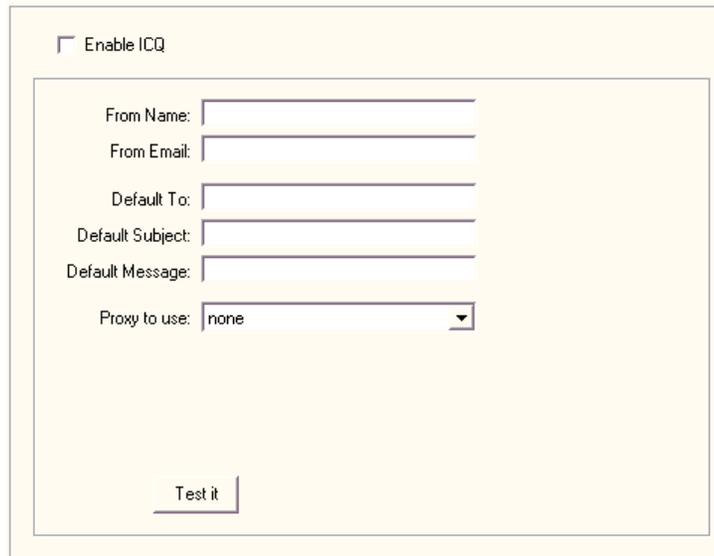


Figure 14: ICQ (1)

When Servers Alive sends an ICQ™ alert, it sends an ICQ page. 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.

Enable ICQ

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

From Name

Enter the name that you want to appear on the alert message as the sender. ICQ does not have to recognize the name.

From Email

Enter the e-mail account from which you want to send the alert.

Default To

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

Default Subject

Enter a subject for the message.

Default Message

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

Proxy to Use

Specify the proxy for the alert message.

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.

MSN Messenger

Enable MSN

From (MSN Username):

FROM (MSN password):

Default To: ...

Default Message:

Figure 15: MSN Messenger (1)

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.

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.

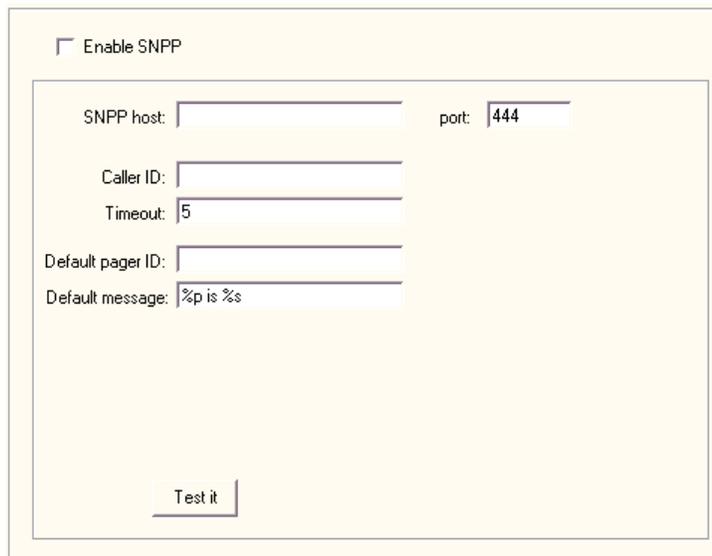
Default Message

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

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.

SNPP (Network Paging)



The image shows a configuration dialog box for SNPP (Network Paging). At the top left, there is a checkbox labeled "Enable SNPP" which is currently unchecked. Below this, there is a large rectangular area containing several input fields. The first row has "SNPP host:" followed by an empty text box and "port:" followed by a text box containing "444". The second row has "Caller ID:" followed by an empty text box. The third row has "Timeout:" followed by a text box containing "5". The fourth row has "Default pager ID:" followed by an empty text box. The fifth row has "Default message:" followed by a text box containing "%p is %s". At the bottom center of the dialog box, there is a button labeled "Test it".

Figure 16: SNPP
(Network Paging) (1)

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.

Caller ID

Enter the called 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.

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.

Logging

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

- The Standard version accepts 1000 entries.
- The Enterprise edition accepts 5000 entries and provides logging capabilities to an ODBC-compliant database.

Logfile

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

To File (Logfile)

Figure 17: Logfile (1)

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.

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 by changing 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 safe guard the Servers Alive logs against missing data due to power failures or critical OS errors, you can request that Servers Alive close the log file after each write 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 after each write (not the default).

To Database (Logfile)

Enable database logging

ODBC connection string: ...

Table:

Create table

This feature is only available in the ENTERPRISE version

Figure 18: To Database (Logfile) (1)

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

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 51) and select a data source.

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.

Create Database Connection String Dialog Box

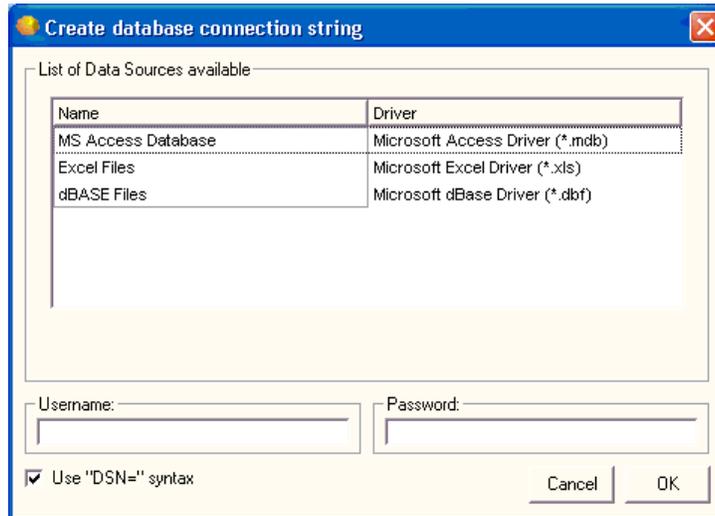


Figure 19: Create Database Connection String Dialog Box (1)

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 used to log 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

Figure 20: Syslog (1)

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 <http://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 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 syslog message with TCP to the remote syslog server. Most of the time this is accomplished 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.

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

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, if you have the Enterprise edition, a database. You can set options for either of these two features.

To File (Statistical Logging)

Figure 21: To File (Statistical Logging) (1)

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.

To Database (Statistical Logging)

Export statistical logging to database

ODBC connection string: ...

Table:

Create table

Time unit: ▾

This feature is only available in the ENTERPRISE version

Figure 22: To Database (Statistical Logging) (1)

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 51) and select a data source.

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 was 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.

Interchange Data

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)

Export interchange data to file

File name: ...

Command: ...

Separator: ▼

Fields to include in interchange file

<input type="checkbox"/> Host name	<input type="checkbox"/> Extra info
<input type="checkbox"/> Pretty name	<input type="checkbox"/> Additional info
<input type="checkbox"/> Check info	<input type="checkbox"/> Number of cycles since start

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 file is re-created during each check cycle, so you must get the data after each cycle.

Format of the interchange file:

UID, status, date (yyyymmdd), time (hhmmss), response time

The interchange log file is overwritten 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.

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 check info 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. If you want to use the host ID, instead of the UID, you should add the following registry value:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Interchange\UseID

(string) with a value of 1

To Database (Interchange Data)

Export interchange data to database

ODBC connection string: ...

Table:

Create table

Fields to include in interchange data

Host name Extra info

Pretty name Additional info

Check info Number of cycles since start

This feature is only available in the ENTERPRISE version

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 51) and select a data source.

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.

Check Info

Includes information that is checked. For example, for an SMTP check, the check info 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.

Output

You can specify outputs to an HTML page or a WAP page.

HTML Page

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 what the end result page name is, and then select the HTML template to use. Servers Alive will read through the template after each cycle and use it 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 the header, core, and 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. To sort by status, you would use `<SA_REPORT SORT=STATUS>`. To sort by the type of check, you use `<SA_REPORT SORT=CHECK>`. The default sort is set in the software.

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)

`<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

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.

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>`

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>

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_checkdescription>

<sa_checkresponse> - same as the %e parameter

<sa_hostid>

<sa_uid>

<sa_roundtrip> - same as the %a parameter

<sa_threshold>

<sa_stats_avgtrip> - average roundtrip time of all UP cycles

<sa_stats_maxtrip> - maximum roundtrip time of all UP cycles

<sa_stats_minrtrip> - minimum roundtrip time of all UP cycles

<sa_stats_upcycles> - number of UP cycles

<sa_stats_uptime> - uptime as a percentage

<sa_stats_downtime> - downtime as a percentage

<sa_stats_maintenancetime> - maintenance time as a percentage

<sa_stats_nondowntime> - consecutive uptime

<sa_stats_downcycles> - number of DOWN cycles

<sa_stats_maintenancecycles> - number of MAINTENANCE cycles

<sa_stats_totalcycles> - number of total cycles

<saif>

The most powerful tag is <SAIF>. 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 contiguous 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, and EXTERNAL.
- SA_HOSTNAME – hostname of the entry.
- SA_HOSTID – ID assigned to entry.
- SA_UID – Unique ID assigned automatically to the entry by Servers Alive.

Examples

<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>


```
<!--Add in a comment that notes that Servers Alive generated the page.-->
```

```
<!-- Generator Servers Alive version <sa_version> via template....-->
```

```
<p>
```

```
<TABLE WIDTH="762" cellpadding="4">
```

```
<TR><TD WIDTH="32" align="center"><FONT face="verdana"
size="2"><B>Up?</TD>
```

```
<TD width="20" align="center"><FONT face="verdana"
size="2"><B>ID</TD>
```

```
<TD width="130" align="center"><FONT face="verdana"
size="2"><B>Host</TD>
```

```
<TD width="280" align="center"><FONT face="verdana"
size="2"><B>Host Check</TD>
```

```
<TD width="80" align="center"><FONT face="verdana"
size="2"><B>Parameter</TD>
```

```
<TD width="70" align="center"><FONT face="verdana"
size="2"><B>Actual</TD>
```

```
<TD width="145" align="center"><FONT face="verdana"
size="2"><B>Time of Last Status Change</TD>
```

```
</FONT>
```

```
</TR>
```

```
<!--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>
```


Default Page

Figure 23: Default Page
(1)

Servers Alive creates HTML pages, but does not serve the pages using the built-in web server.

Publish This Web Page

Click this check box to enable Servers Alive to create one or more HTML pages after every check cycle.

Add

Click to enter the name of a web page.

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 FTP

Uploads the page to your web server with File Transfer Protocol (FTP). Click to enter the required information.

FTP Server

Enter the name of the FTP server.

Remote Name

Enter the name of the remote server.

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.

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 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 via 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.

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

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

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 above 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)

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/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 is substituted for the normal words.

All the above 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

Enable WAP output

All hosts with status (small): ...

All hosts with status (large): ...

Only down hosts (small): ...

Only down hosts (large): ...

The "small" pages only contain the name of the host and the status of the host.

Upload them via FTP

FTP server: Remote dir.:

Username: Password:

PASV

Figure 24: WAP Page
(1)

Servers Alive is the first monitoring platform to support alerting via 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 in 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 there is no direct link 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 It Via FTP

Uploads the page to your server with File Transfer Protocol (FTP). Click to enter the required information.

FTP Server

Enter the name of the FTP server.

Remote Name

Enter the name of the remote server.

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 GUI 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 via 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

General

The General settings for Setup include the following:

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

Proxy Settings

The image shows a screenshot of the 'Proxy Settings' dialog box in Servers Alive. It contains two identical sections, each with a 'Proxy Server' header. Each section has a 'Server name:' text box, a 'Port:' text box, a 'Use Proxy Authentication' checkbox, a 'Username:' text box, a 'Password:' text box, and a 'Use NTLM proxy authentication' checkbox. The 'Use Proxy Authentication' checkbox is checked in both sections.

Figure 25: Proxy Settings (2)

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.

Use Proxy Authentication

Click to enable proxy authentication.

User Name

Enter the user name.

Password

Enter the password.

Use NTLM Proxy Authentication

Enables NT LAN Manager (NTLM) Authentication. This allows you to authenticate via an MS Proxy Server using the proprietary NTLM protocol.

Startup Settings

Figure 26: Startup Settings (2)

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 up 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 to make Servers Alive 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.

Don't Cache IP Addresses

Click to ensure that Servers Alive does not cache the IP addresses. By default, the first time Servers Alive checks a host, 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.

Finally, at the bottom you can decide whether Servers Alive uses minutes or seconds as its cycle unit. This time unit determines how long Servers Alive waits between check cycles, which is set on the **Misc branch** (on page 82) of the **Setup** tree.

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.

List of Public Holidays

Enter a list of public holidays. You must use the dd-mm-yy format with a comma delimiter. For example, you can enter 12-25-03 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.

Misc Settings

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"/>

Figure 27: Misc Settings
(2)

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. If the value is 0 (zero), no checking is completed in that time period. Saturday 6pm to 8am means from Saturday 6pm to Sunday 8am. The same logic holds for all others.

Weekday**Saturday****Sunday**

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 205) command.

Built-in Servers

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 some basic management *commands* (on page 91).

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

Figure 28: Built-in Servers (1)

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 the **HTML Page** (on page 62) section. 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.

Telnet Server

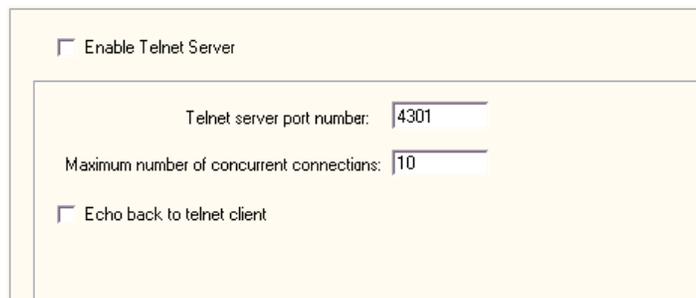


Figure 29: Telnet Server
(1)

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 via 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 some commands that modify the behavior of Servers Alive. Refer to the *Commands* (on page 91) section for a list of commands that the Telnet server understands.

Security

IP Address Access Restrictions

By default all computers will be Granted Access
 Denied Access

Except those listed below

Access	IP Address

Add
Remove
Edit

Password protection

Password protected (full-control)
 Username:
 Password:

Password protected (read-only)
 Username:
 Password:

Figure 30: Security (1)

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

IP Address Access Restrictions

By Default Computers will be

Secures the 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 Telnet server.

Denied Access

Restricts access to all computers. If you select this option, 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 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 Telnet server.

IP Address

Lists the IP address of each computer that is denied or permitted access to the 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 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 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

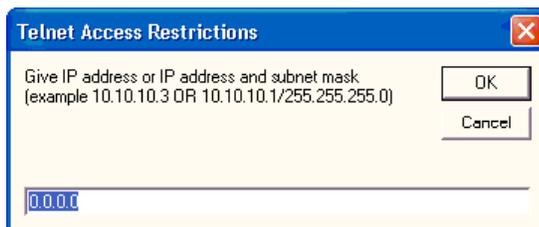


Figure 31:
AccessRestrictions (1)

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

RELEASE IP

Internally Servers Alive converts all host names into IP addresses the first time they are used. This goes for the hosts 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 some very basic help on various Telnet commands.

UPDATE

Accomplishes the same action as clicking the UPDATE button on the main screen 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.

SSH Server

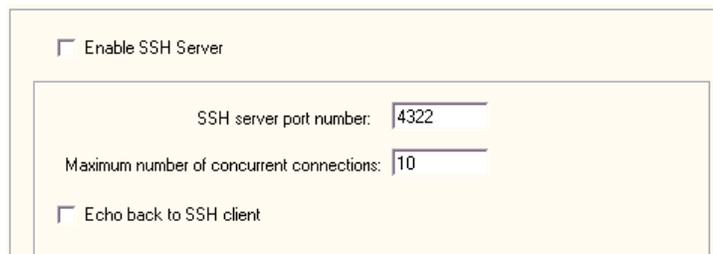


Figure 32: SSH Server
(1)

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 some commands that modify the behavior of Servers Alive. Refer to the *Commands* (on page 91) section for a list of commands that the SSH server understands.

Security

The screenshot shows a 'Security' configuration window. It is divided into 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:

Access	IP Address

 To the right of the table are three buttons: 'Add', 'Remove', and 'Edit'.

Password protection:

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

Figure 33: Security (2)

You can provide some security to the built-in SSH 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 a SSH server are IP address restrictions or password protection.

IP Address Access Restrictions

By Default Computers will be

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

Granted Access

Permits all computers to access the SSH server.

Denied Access

Restricts access to all computers. If you select this option, 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 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 SSH server.

IP Address

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

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.

SNMP Trap Receiver

Figure 34: SNMP Trap Receiver (1)

Enable SNMP Trap Receiver

Click to enable Simple Network Management Protocol (SNMP) traps.

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.

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 this option, 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 selected in **By Default Traps from All Computer 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.

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Entries.....	103
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Find

In a long list of hosts, you can click **Edit > Find** on the Main window to quickly locate a specific entry.



Figure 35: Find (1)

Find What

Enter the pretty name of the entry and then click OK.

Entries

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 version, 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 following fields and options:

- Server name or IP(X) address: [Text box]
- Pretty name: [Text box]
- Host ID: [Text box] Include this entry in the check cycles
- Depends on: [Dropdown: <none>] being [Dropdown: up]
- Group membership: [Dropdown: My Entries]
- Remark: [Text box]
- Connect via: [Dropdown: _LAN_]
- Keep connection active
- Buttons: Cancel, Add

Figure 36: Entries (1)

General

The screenshot shows a dialog box titled "Entries" with a blue title bar and a close button (X) in the top right corner. Below the title bar are five tabs: "General", "Check", "Alert", "Output", and "Schedule". The "General" tab is selected and highlighted. The main area of the dialog contains several input fields and controls:

- Server name or IP(X) address:** A text input field.
- Pretty name:** A text input field.
- Host ID:** A text input field, followed by a checked checkbox labeled "Include this entry in the check cycles".
- Depends on:** A dropdown menu showing "<none>" and a "being" dropdown menu showing "up".
- Group membership:** A dropdown menu showing "My Entries".
- Remark:** A text input field.
- Connect via:** A dropdown menu showing "LAN_" and a "Configure" button.
- Keep connection active:** An unchecked checkbox.

At the bottom right of the dialog are two buttons: "Cancel" and "Add".

Figure 37: General (1)

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, e-mail, 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 e-mail.

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 for you, however.

Include This Entry in the Check Option

Click the check box 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 do this 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.

Depends On

Select a server name from the list.

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.

By default, Servers Alive connects to the host using the Normal LAN connection (__LAN__), but Servers Alive can also create a dial-up connection to an external network before completing the check. After the check, Servers Alive disconnects from the external network.

This feature is available only if DUN (Dial-up Networking) is installed on the computer running Servers Alive. To use this feature effectively, Servers Alive must make the connection completely unattended. For that reason, you must have the dial-up entry save passwords.

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.

Configure

Click to configure the item that you select in the **Connect Via** list.

Keep Connection Active

Click the check box to keep the connection active after the check is completed.

Check

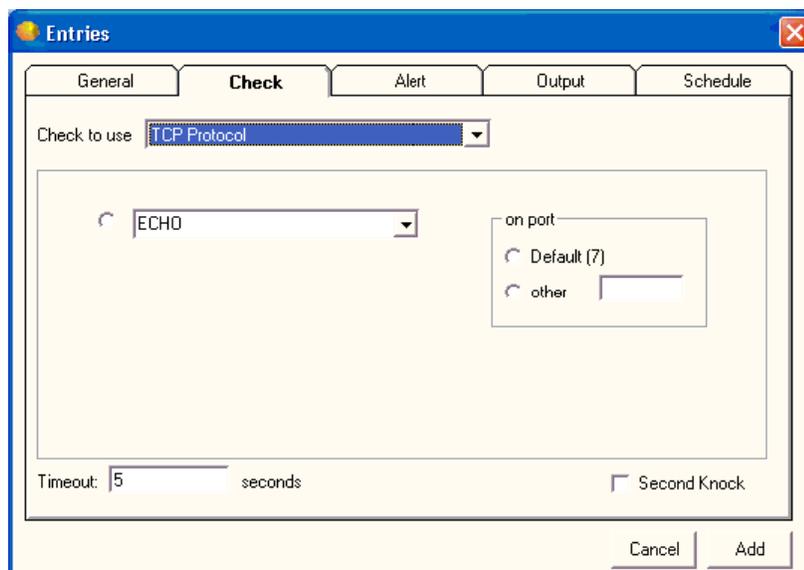


Figure 38: Check (1)

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.

TCP Protocol

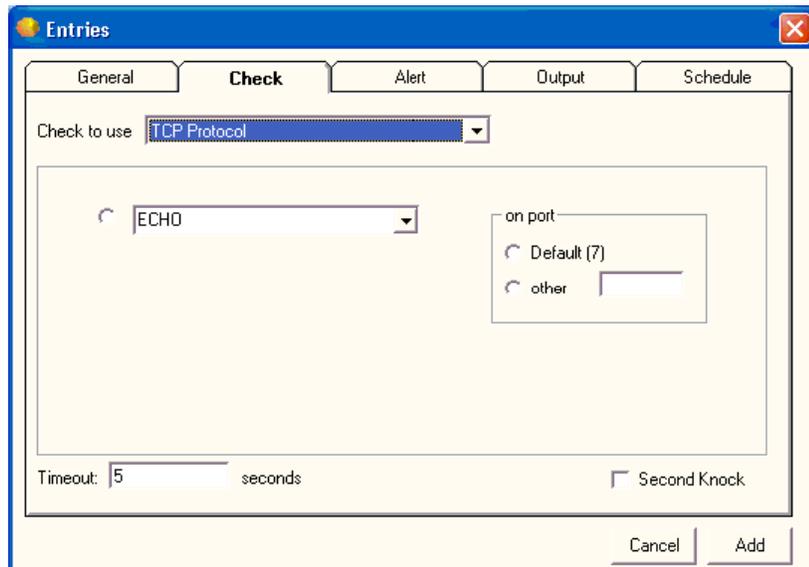


Figure 39: Check (1)

You can define your own protocol and the corresponding port by clicking **Edit > Protocol** (on page 221) in the Main window.

Check to Use

Select the protocol that you want to use.

Next, 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 TCP service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

UDP Protocol

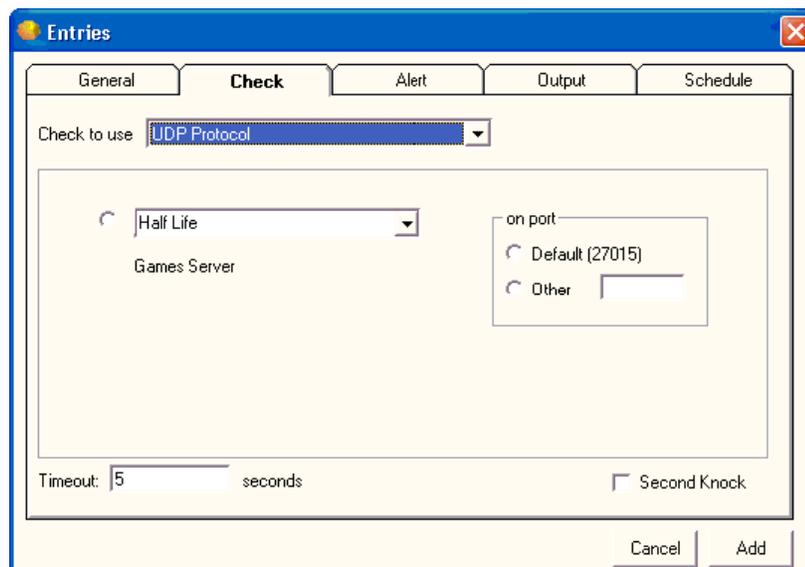


Figure 40: UDP Protocol (1)

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 www.dnagames.net (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 221) in the Main window.

Check to Use

Select the protocol that you want to use.

Next, 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 TCP service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

DNS Protocol

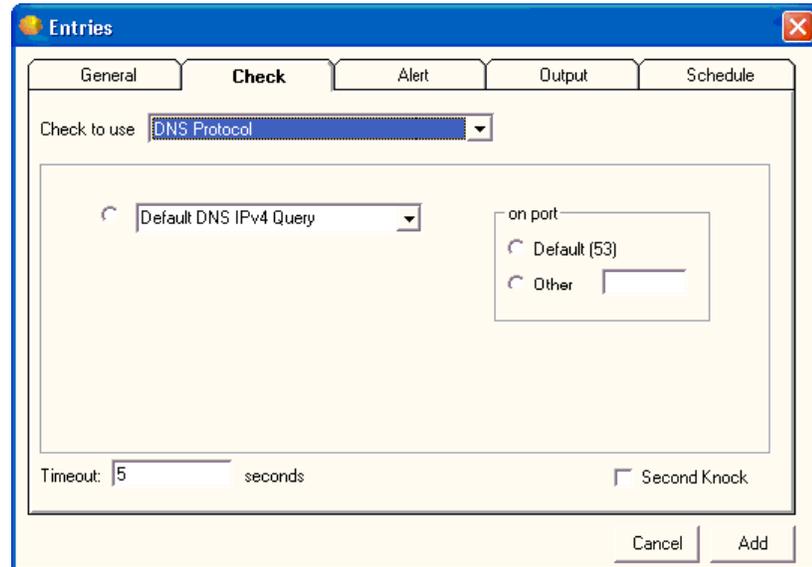


Figure 41: DNS Protocol (1)

You can define your own protocol and the corresponding port by clicking **Edit > Protocol** (on page 221) in the Main window.

Check to Use

Select the protocol that you want to use.

Next, 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 TCP service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

Radius Protocol

The screenshot shows the 'Entries' dialog box with the 'Check' tab selected. The 'Check to use' dropdown menu is set to 'RADIUS Protocol'. Below this, there is a section for selecting a specific check, with 'Default Radius Check' selected. To the right of this section is a 'on port' section with two radio button options: 'Default (1645)' and 'Other'. The 'Default (1645)' option is selected. At the bottom of the dialog, there is a 'Timeout' field set to '5' seconds and a 'Second Knock' checkbox which is unchecked. The 'Cancel' and 'Add' buttons are visible at the bottom right.

Figure 42: Radius Protocol (2)

You can define your own protocol and the corresponding port by clicking **Edit > Protocol** (on page 221) in the Main window.

Check to Use

Select the protocol that you want to use.

Next, 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 TCP service that is not on the list or is using a non-standard port. You must then supply the port number.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

Ping

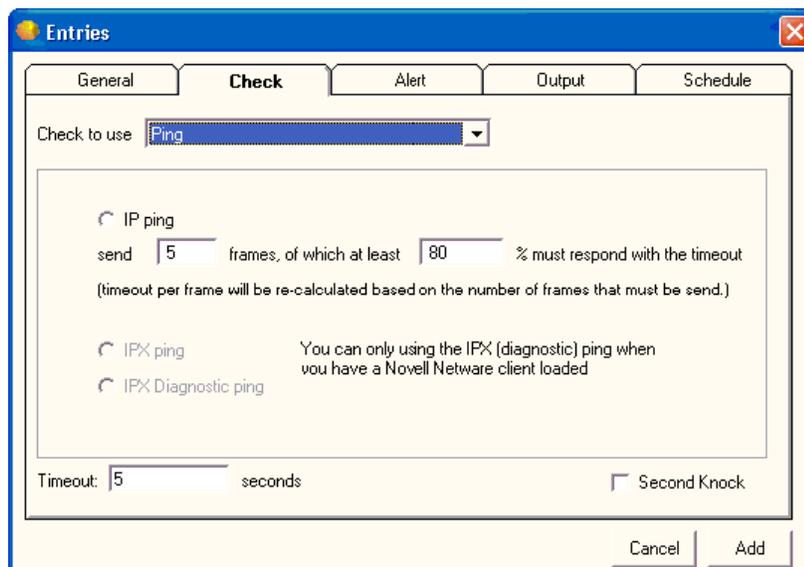


Figure 43: Ping (3)

Check to Use

Select the protocol that you want to use.

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. Servers Alive uses the functionality of the Novell Netware client for that, which you must install separately.

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 __ Seconds

Enter the length of time for the timeout in seconds.

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.

NT Service

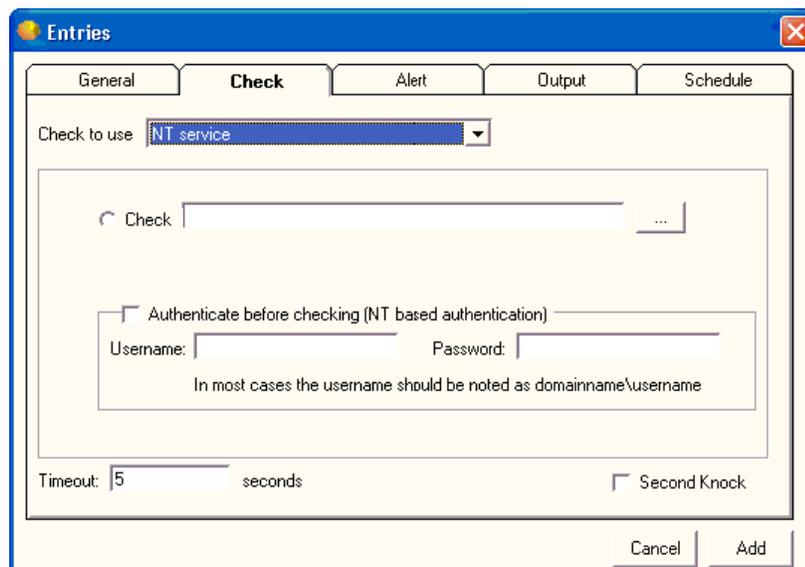


Figure 44: NT Service
(1)

Servers Alive can perform various checks specific to Windows NT and 2000. It can check 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 Windows NT/2000 specific checks, it 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.

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 to Use

Select the protocol that you want to use. Servers Alive checks to see if a service is running.

Check

Click this radio button and then click the browse button to open the *Services Running On Dialog Box* (on page 121). 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 __ Seconds

Enter the length of time for the timeout in seconds.

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.

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 to 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 User not allowed to log on to this computer.
- 1330 The specified account password has expired.
- 1331 Account currently disabled.
- 1722 The RPC server is unavailable.

Normally Servers Alive de-authenticates at the end of any check cycle that incorporates authentication. If for some reason 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.

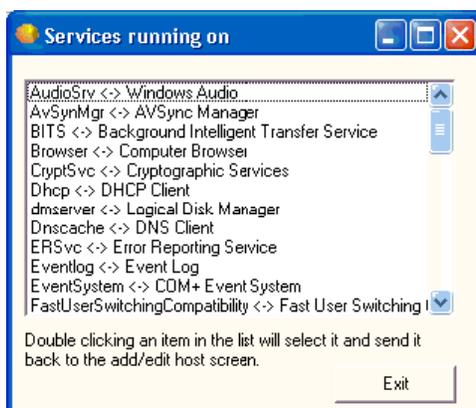
If any error code found within this comma separated list occurs during the authentication phase, Servers Alive still sees the authentication as being successful. This is not a guarantee that the check as such will pass too.

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.**



NT Process

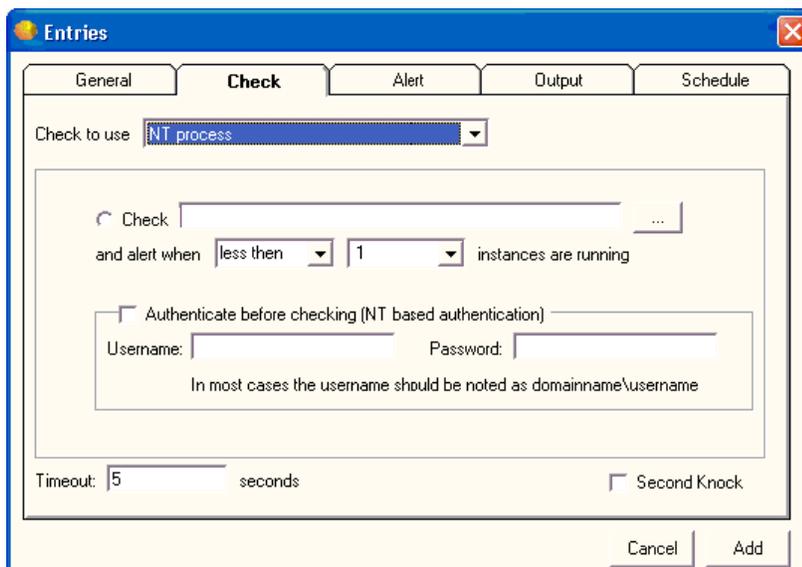


Figure 45: NT Process
(1)

Servers Alive can perform various checks specific to Windows NT and 2000. It can check NT process 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.

Servers Alive can only check for Windows NT processes if Servers Alive is running on a computer that runs Windows NT or Windows 2000.

In order for Servers Alive to do the various Windows NT/2000 specific checks, it 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.

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 dialog box. On the right side, select the check condition. Servers Alive can alert you when there is less than or at least x number of the specified processes running. This is commonly used to alert when the Dr. Watson process is running (indicating an error).

Check to Use

Select the protocol that you want to use.

Check

Click this radio button and then click the browse button to open the **Processes Running On Dialog Box** (on page 125). 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 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 __ Seconds

Enter the length of time for the timeout in seconds.

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.

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 to 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 User not allowed to log on to this computer.
- 1330 The specified account password has expired.
- 1331 Account currently disabled.
- 1722 The RPC server is unavailable.

Normally Servers Alive de-authenticates at the end of any check cycle that incorporates authentication. If for some reason 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.

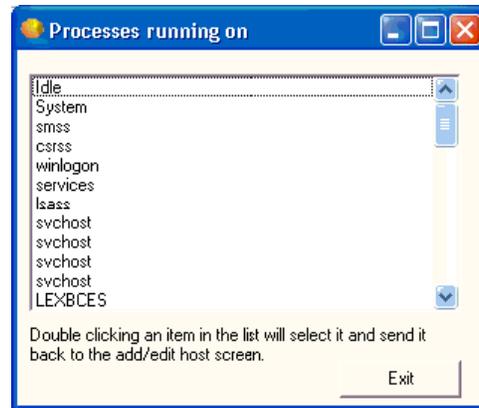
If any error code found within this comma separated list occurs during the authentication phase, Servers Alive still sees the authentication as being successful. This is not a guarantee that the check as such will pass too.

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.**



NT Perfmon

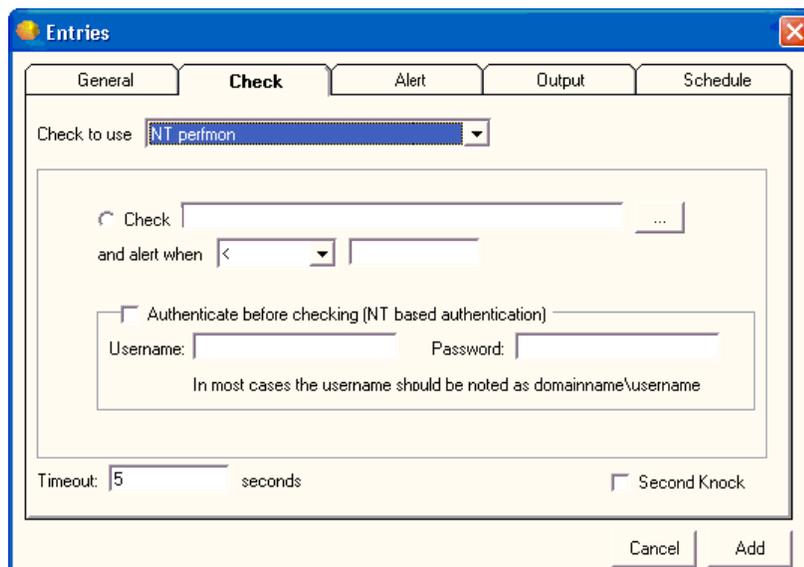


Figure 46: NT Perfmon
(1)

Servers Alive can perform various checks specific to Windows NT and 2000. It can check NT performance counters 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 do the various Windows NT/2000 specific checks, it 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.

Check to Use

Select the protocol that you want to use.

Check

Click this radio button and then click the browse button to open the **Select Counter Dialog Box** (on page 129). 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 __ Seconds

Enter the length of time for the timeout in seconds.

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.

The perfmon check sometimes fails (or gives weird values) due to timing issues with the performance counters retrieval DLL. By default the timeout is set to 1000ms, you can change it by creating the following registry entry and giving it a value between 1 and 10000 (milliseconds). Remember it is in ms and the default is already 1000, so you should try it 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 to 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 User not allowed to log on to this computer.
- 1330 The specified account password has expired.
- 1331 Account currently disabled.
- 1722 The RPC server is unavailable.

Normally Servers Alive de-authenticates at the end of any check cycle that incorporates authentication. If for some reason 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.
```

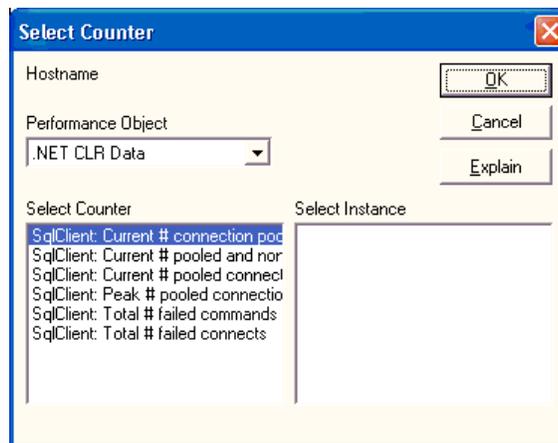
If any error code found within this comma separated list occurs during the authentication phase, Servers Alive still sees the authentication as being successful. This is not a guarantee that the check as such will pass too.

```
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.**



Diskspace

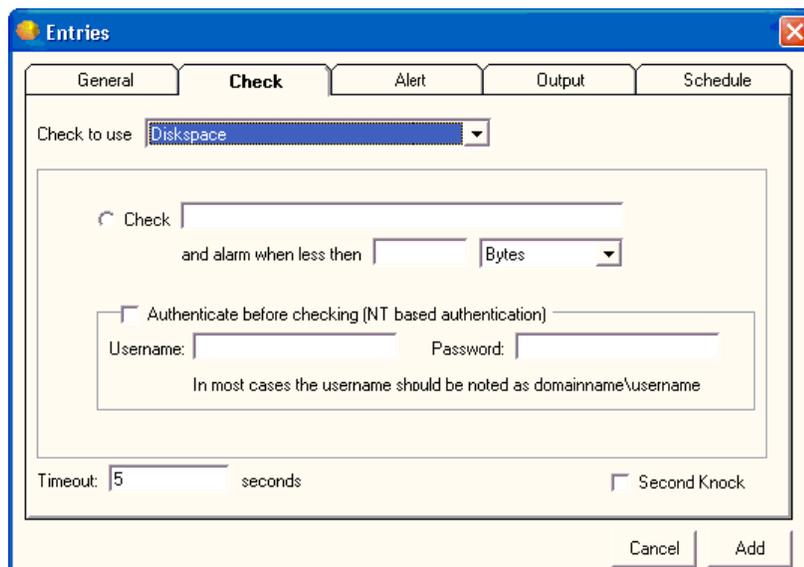


Figure 47: Diskspace (1)

Servers Alive can check if there is enough disk space left on a specific Windows network share. The name of the resource must be given as \\server\share.

Servers Alive sends you an alarm when the free space is less than x.

X can be given as:

- 25 meaning 25 Bytes
- 25 kb meaning 25 Kilobytes
- 25 mb meaning 25 Megabytes
- 25 gb meaning 25 Gigabytes
- 25 tb meaning 25 Terabytes

You can also use percentages in your disk checks. If you want an alarm when less than 5% of the disk space is available, then use "5 %" in the text box. The space between the number and the percent sign is very important.

Check to Use

Select the protocol that you want to use.

And Alarm When Less Than ____ ____

Enter the conditions for performing the check.

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 __ Seconds

Enter the length of time for the timeout in seconds.

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.

The exact byte value of kb/mb/gb/tb can be changed in the registry.

Values to add/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 will choose 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.

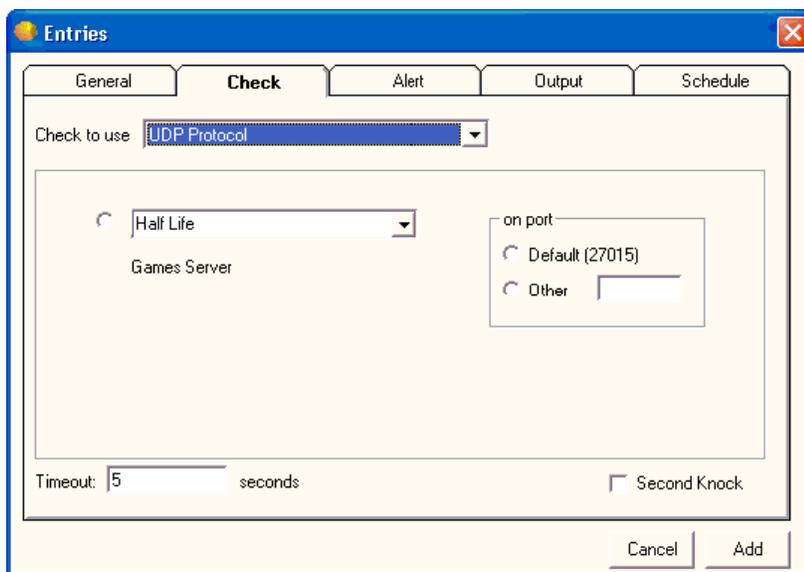
HKLM\SOFTWARE\DBU Consulting\Servers Alive\StartUp\ForcedDriveLetter (string value)

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 (default MB)

URL (HTTP/HTTPS)



Servers Alive can perform a URL (Universal Resource Locator) check based on the HTTP (web) and HTTPS (secure web) protocol.

A URL should be something like:

- `http://www.mydomain.com/sub-dir/page.html`
- `https://www.mydomain.com/sub-dir/page.html`

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 tab of the setup.

Please note that the only authentication Servers Alive supports for URL checking is basic authentication. The other common method, NTLM, is undocumented and non-standard, so it is not supported.

Check to Use

Select the protocol that you want to use.

Then, in the next boxes, you can enter the conditional settings to perform the check. For both the HTTP and the HTTPS check, Servers Alive can also check if the content of the retrieved page is correct or not. To use this functionality you must use the Should contain or Shouldn't contain clause in combination with a word or sentence that should or should not be in the retrieved web page.

In the content check string you can have a portion that is dynamic based on the current date. To do this, add a string that is surrounded by { and } and contains some of the following key words:

dd	day
mm	short month (01)
yy	short year (02)
Mmmmlong	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”.

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 or choose to use :0 as the proxy entry. 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.

With Cookies

Select to use cookies in the check. Some web pages send cookies to the client before serving the page that you requested. If the page you're checking needs the cookies, you should select this check box. In these cases, cookies are session settings that the web server is sending the client.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

Servers Alive performs the "contains" check in a case-sensitive way. 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)

If you want to specify a different user agent string, you can add or edit the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\DBU Consulting\Servers Alive\Proxy\UserAgent (string)

The Securityflags key controls how Servers Alive responds to various SSL certificate problems. By default, it maintains the maximum secure response to SSL certificate issues and can cause checks to fail. You can change the Securityflags key to vary this response.

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

The following flags are defined, as specified in hexadecimal notation. They can be ordered together to exclude multiple conditions. The values must be entered as hexadecimal values.

&H00000001	Ignore time validity status of certificate.
&H00000002	Ignore time validity status of CTL.
&H00000004	Ignore non-nested certificate times.
&H00000010	Allow unknown Certificate Authority.
&H00000020	Ignore wrong certificate usage.
&H00000100	Ignore unknown certificate revocation status.
&H00000200	Ignore unknown CTL signer revocation status.
&H00000400	Ignore unknown Certificate Authority revocation status.
&H00000800	Ignore unknown Root revocation status.
&H00008000	Allow test Root certificate.
&H00004000	Trust test Root certificate.
&H80000000	Ignore non-matching CN (certificate CN not-matching server name).

Usually, Servers Alive uses one set of UserAgent/SecurityFlag/AdditionalHeaders 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 editing the entries file directly.

An example without additional parameters:

```
#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:

```
#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 3 types of additional parameters

- USERAGENT

- HTTPSECURITYFLAGS
- ADDITIONALHEADERS

Example that uses 2 of the parameters:

```
#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.

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 is between the <BODY and </BODY> tags.

```
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, 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)
```

URL (RTSP/MMS)

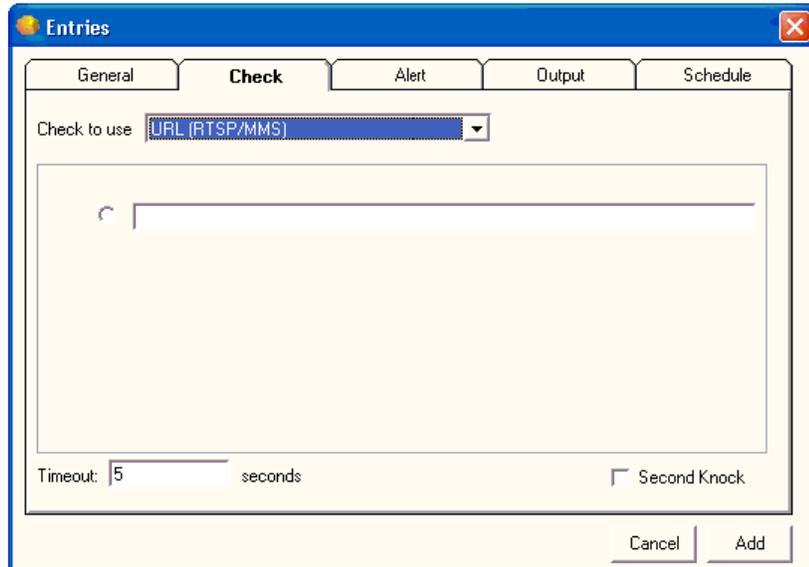


Figure 48: URL (RTSP/MMS) (1)

Servers Alive can perform a URL (Universal Resource Locator) check based on the MMS (Microsoft media server) or RTSP (streaming audio) protocol. Servers Alive supports the use of cookies.

Check to Use

Select the protocol that you want to use.

Next, enter the conditionals for the check.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

Database (Microsoft SQL)

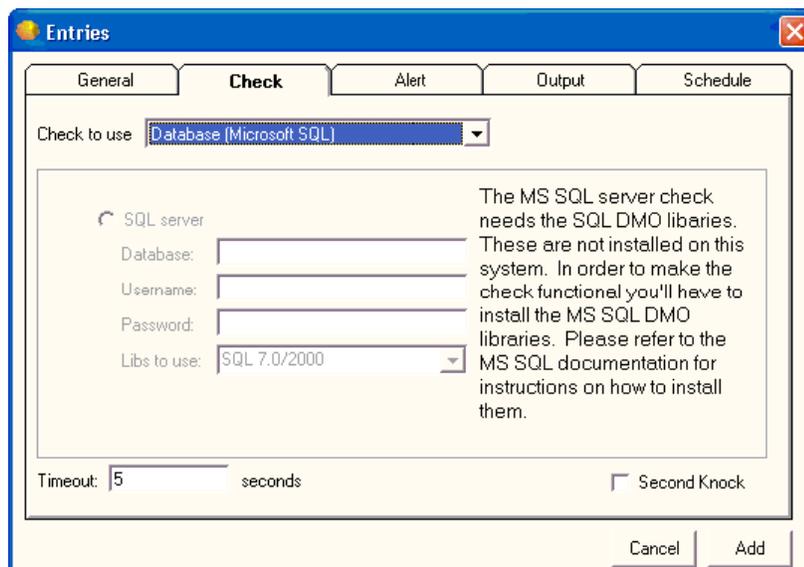


Figure 49: Database (Microsoft SQL) (1)

Servers Alive works only with Microsoft SQL, and not any other third party SQL server.

Servers Alive can check for the availability of a Microsoft SQL server database. To perform this check, it uses the functionality provided by 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 MS 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's name is the hostname. If you have both multiple clients installed you can select which client Servers Alive should use.

Check to Use

Select the protocol that you want to 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.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

Database (Oracle)

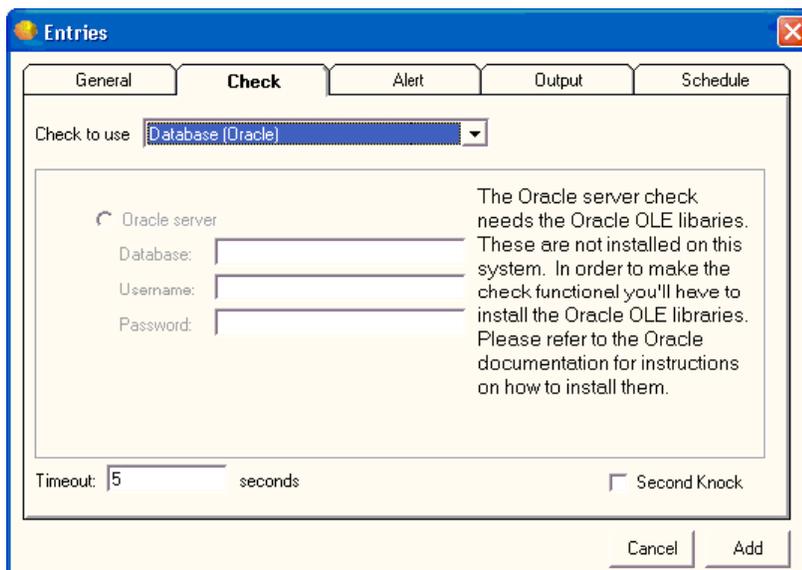


Figure 50: Database (Oracle) (1)

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 and Oracle 8i, and Oracle 9i clients. With Oracle 9i, 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.

Check to Use

Select the protocol that you want to use.

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.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

Netware

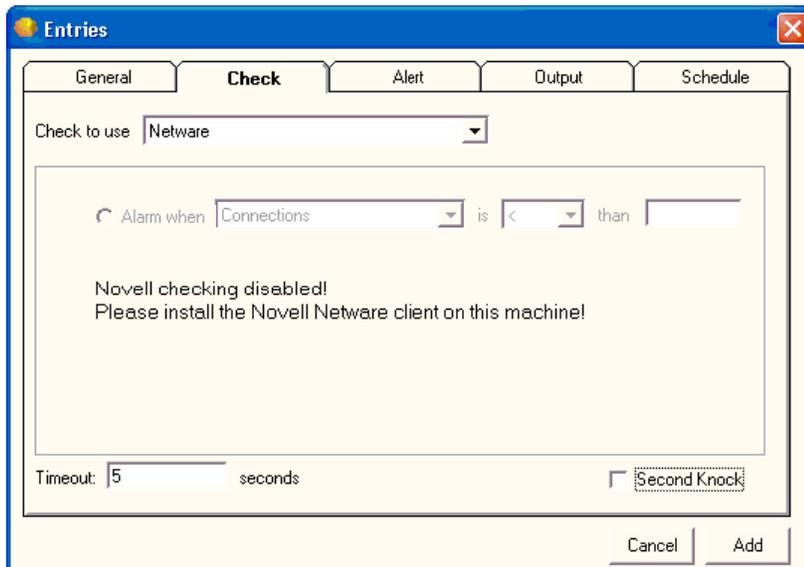


Figure 51: Netware (1)

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, it uses the functionality of 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 utilization 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 below (<), above (>), 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.

Check to Use

Select the protocol that you want to use.

Alarm When ____ **is** ____ **Than** _____

Enter the conditional settings for the check.

Timeout __ **Seconds**

Enter the length of time for the timeout in seconds.

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.

SNMP

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 input fields and dropdown menus: a 'Check' field, a dropdown for 'and alert when the result' (set to 'is < than'), a 'Community string' field, and a 'Retries' dropdown (set to 'none'). At the bottom, there is a 'Timeout' field (set to '5') and a 'Second Knock' checkbox. The 'Cancel' and 'Add' buttons are at the bottom right.

Figure 52: SNMP (1)

Servers Alive can check the status of a device or host with the Simple Network Management Protocol (SNMP). It checks if a certain OID is one of the following:

- Is less than
- Is greater than
- Is equal to
- Is different from (<>)
- Contains a value
- Doesn't contain a value

You must enter the community string for the SNMP check for authentication purposes. By default, on most SNMP systems, this is PUBLIC; but it can be different on your systems.

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 a MIB file that contains all the OIDs for the device.

Check to Use

Select the protocol that you want to use.

Check ____

Enter the name of the OID that you want to check.

And Alert When the Result _____

Enter the conditional settings for the check.

Community String

Enter the appropriate community string for the server. An SNMPv1 community string serves as a password.

Retries

Select the number of retries that you want to allow.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

External COM

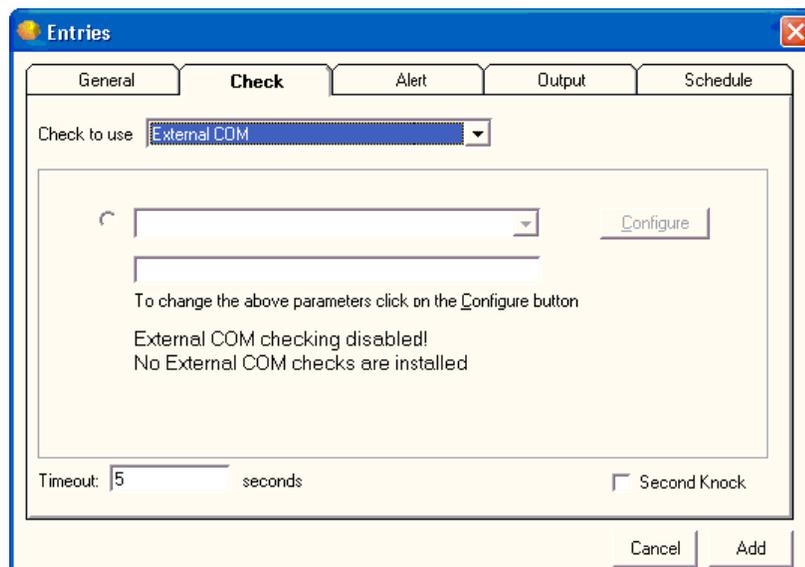


Figure 53: External COM (1)

Check to Use

Select the external COM check that you want to use.

Configure

Click the Configure button to change the parameters.

Timeout __ Seconds

Enter the length of time for the timeout in seconds.

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.

External (Errorlevel)

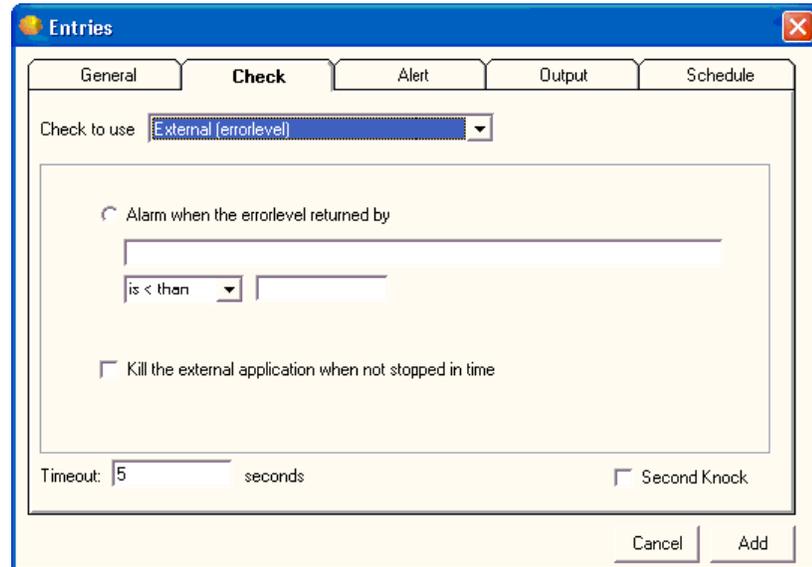


Figure 54: External (Errorlevel) (2)

Servers Alive has a lot of 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 the following 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
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will be the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed

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 the *External Checks* (on page 237) section.

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 __ Seconds

Enter the length of time for the timeout in seconds.

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.

Alert

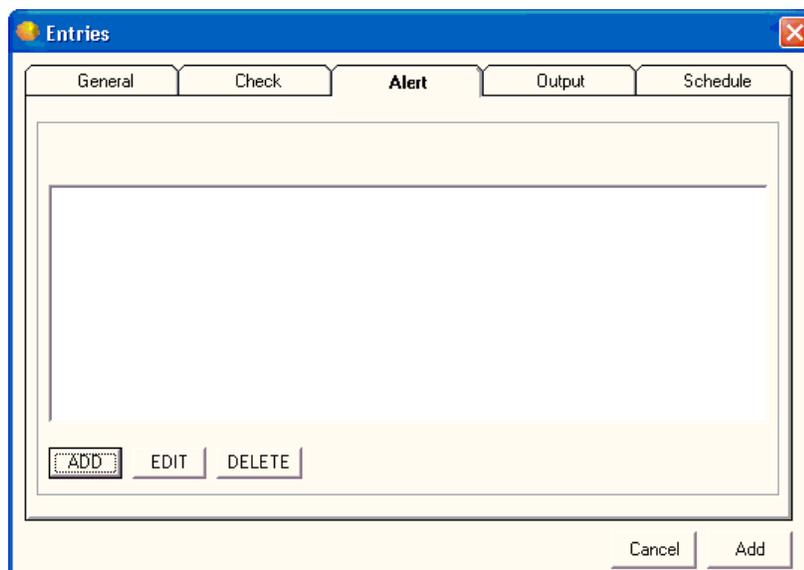


Figure 55: Alert (7)

Servers Alive supports a rich variety of alerting mechanisms. It supports various e-mail 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.

Use the following buttons to add, edit, or delete alert settings:

- **Add**
- **Edit**
- **Delete**

If you select an option that requires a page to be sent, 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, disconnects from the paging company, re-connects to the paging company, sends the second page, disconnects, and so forth.

Many of the alerts incorporate keywords to describe a server's state. By default, it uses the words "up" and "down", but this can be changed through the registry. Under HKLM\SOFTWARE\DBU Consulting\Servers Alive>Status is a list of single letter keys. 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\P1 = “-” (string)
- HKLM\SOFTWARE\DBU Consulting\Servers Alive>Status\P5 = “+” (string)

Send SMTP Mail (Primary) (Add/Edit Alert Dialog Box)

Figure 56: Send SMTP Mail (Primary) (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the Add button on the Alert tab of the Entries dialog box.

SMTP (Simple Mail Transfer Protocol) alerting is probably the most common alerting used. SMTP is used to send e-mail messages to you when a down condition is detected. 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 e-mail 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.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

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 semicolon. To enter specific information, such as an IP or e-mail 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, like (person). When using a team definition, enclose the team name in curly braces, like {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 154)

Select a Team to Add Dialog Box (on page 154)

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 checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed
-

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

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)
```

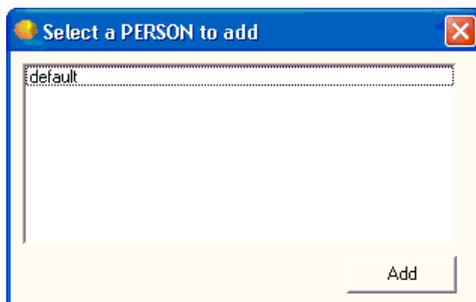
To remove the date/time from the mails, you must add or edit the following registry entry:

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

You can add a person to appear as the recipient of an alert.

To open this dialog box, click the following items on 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**



You can add a team to appear as the recipient of an alert.

To open this dialog box, click the following items on 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**

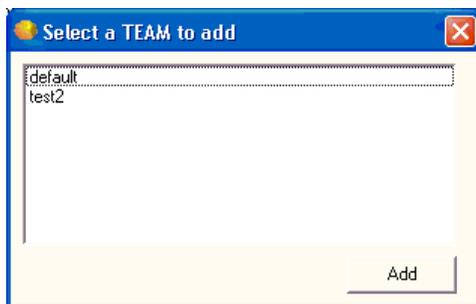


Figure 57: Select a Team to Add Dialog Box (1)

Send SMTP Mail (Alternate) (Add/Edit Alert Dialog Box)

Figure 58: Send SMTP Mail (Alternate) (Add/Edit Alert Dialog Box) (2)

To access this dialog box, click the Add button on the Alert tab of the Entries dialog box.

SMTP (Simple Mail Transfer Protocol) alerting is probably the most common alerting used. SMTP is used to send e-mail messages to you when a down condition is detected. 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 e-mail 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.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

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 semicolon. To enter specific information, such as an IP or e-mail 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, like (person). When using a team definition, enclose the team name in curly braces, like {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 154)

Select a Team to Add Dialog Box (on page 154)

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 checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed
-

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

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

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.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

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 checktime
- %d for the date
- %u for the unique ID of the host

- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed
-

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

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.

One paging option is Alphanumeric paging or SMS messaging. In order to send a page to your pager or GSM, Servers Alive needs the phone number, or PIN number, of the pager or GSM. You must also specify the message that Servers Alive sends to the pager/GSM.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

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 semicolon. To enter specific information, such as an IP or e-mail 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, like (person). When using a team definition, enclose the team name in curly braces, like {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 154)

Select a Team to Add Dialog Box (on page 154)

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 checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed
-

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Send Network Page (SNPP) (Add/Edit Alert Dialog Box)

Figure 59: Send Network Page (SNPP) (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** dialog box.

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 154)

Select a Team to Add Dialog Box (on page 154)

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 checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will be the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Numeric Page (Add/Edit Alert Dialog Box)

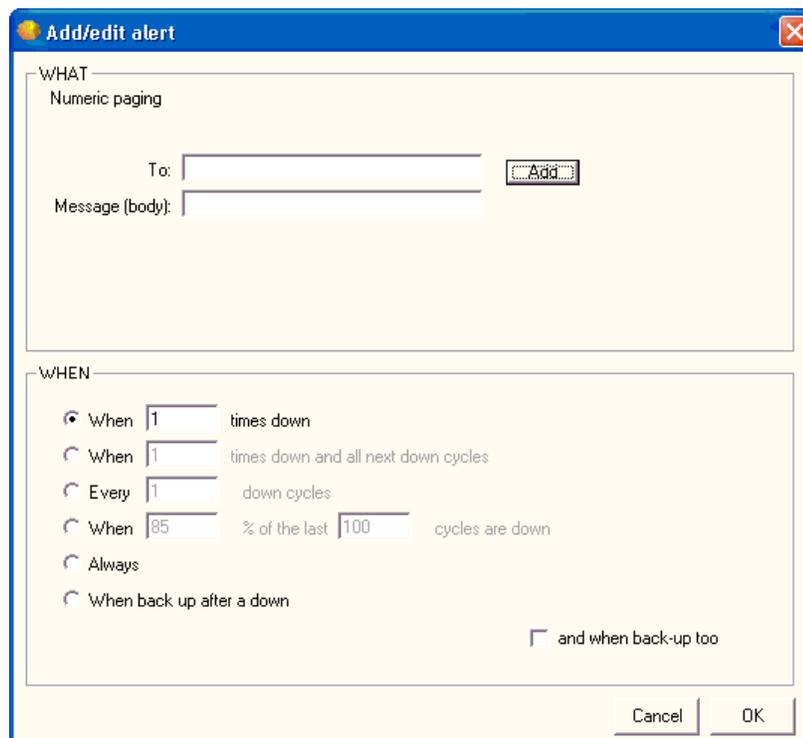


Figure 60: Numeric Page (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the Add button on the Alert tab of the Entries 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.

Since numeric paging is not based on a real protocol, it is not considered 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/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.

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 semicolon. To enter specific information, such as an IP or e-mail 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, like (person). When using a team definition, enclose the team name in curly braces, like {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 154)

Select a Team to Add Dialog Box (on page 154)

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 checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will be the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed
-

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Execute Command (Add/Edit Alert Dialog Box)

Add/edit alert

WHAT

Execute a command

Normal command [EXE/BAT/...]

Command:

WHEN

- When 1 times down
- When 1 times down and all next down cycles
- Every 1 down cycles
- When 85 % of the last 100 cycles are down
- Always
- When back up after a down

and when back up too

Cancel OK

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** 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 three 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.
- Reboot a Windows computer. You can specify a user name and password to use to reboot the Windows computer.

Servers Alive records in the logs that a reboot was successful as long as the software was able to send the reboot command successfully. Servers Alive does not verify that the computer actually reboots correctly. If part of the operating system does not respond correctly, the system cannot reboot despite receiving a reboot command.

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 there is a firewall between Servers Alive and the remote server, please contact your firewall administrator for assistance.

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 the following variables in your command. They are replaced with the associated information before the command is issued.

- %h for the host name
- %p for the pretty name
- %s for the status
- %t for the last checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will be the round trip time)

- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Sound (Add/Edit Alert Dialog Box)

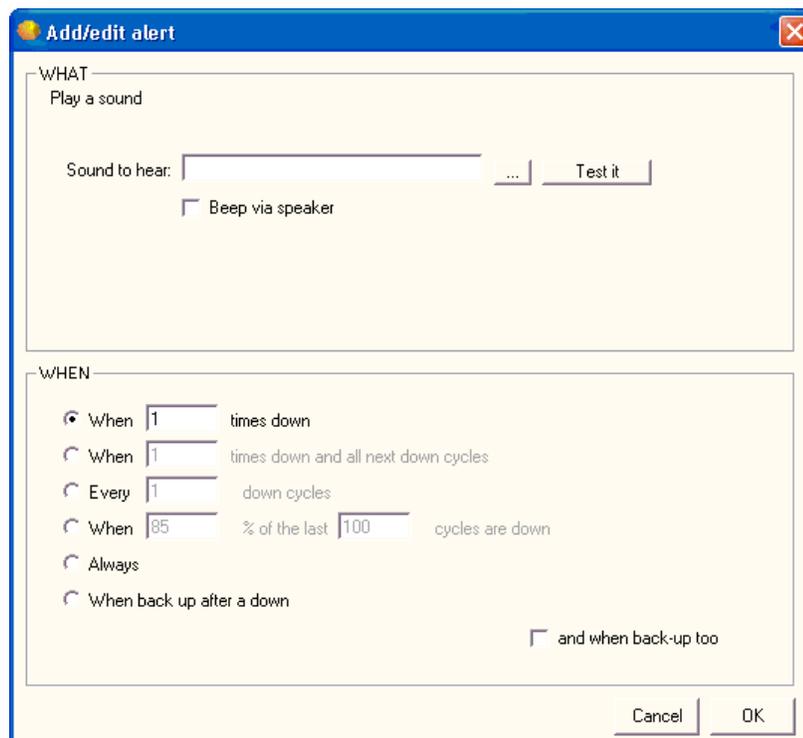


Figure 61: Sound (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** 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.

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Send ICQ Message (Add/Edit Alert Dialog Box)

Figure 62: Send ICQ Message (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the Add button on the Alert tab of the Entries dialog box.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

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 semicolon. To enter specific information, such as an IP or e-mail 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, like (person). When using a team definition, enclose the team name in curly braces, like {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 154)

Select a Team to Add Dialog Box (on page 154)

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 checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will be the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed
-

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

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.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

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 semicolon. To enter specific information, such as an IP or e-mail 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, like (person). When using a team definition, enclose the team name in curly braces, like {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 154)

Select a Team to Add Dialog Box (on page 154)

You can also add an MSN contact with the *Select an MSN Contact to Add* (on page 181) dialog box.

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 checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will be the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed
-

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which the server is not operating.

Always

Select to send an alert whenever a server is down.

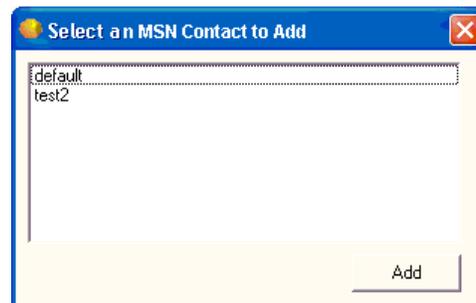
When Back Up After a Down

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 e-mail 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.

You can add an MSN contact.



Send WinPOPUP Message (Add/Edit Alert Dialog Box)

Figure 63: Send WinPOPUP Message (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the Add button on the Alert tab of the Entries dialog box.

WHAT

Displays the type of alert that you selected by clicking the **Add** or **Edit** button on the **Alert** tab.

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 semicolon. To enter specific information, such as an IP or e-mail 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, like (person). When using a team definition, enclose the team name in curly braces, like {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 154)**Select a Team to Add Dialog Box** (on page 154)

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 these variables:

- %h for the host name
- %p for the pretty name
- %s for the status
- %t for the last checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will be the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Send SNMP Trap (Add/Edit Alert Dialog Box)

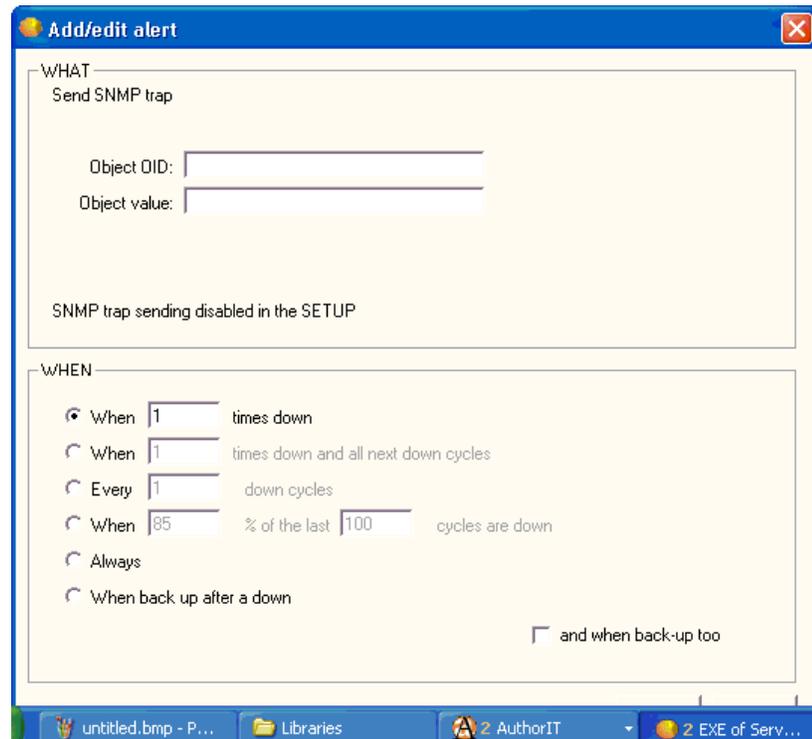


Figure 64: Send SNMP Trap (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** 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.

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Do an SNMP SET (Add/Edit Alert Dialog Box)

Figure 65: Do an SNMP SET (Add/Edit Alert Dialog Box) (1)

To access this dialog box, click the **Add** button on the **Alert** tab of the **Entries** 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.

WHEN

Select one of the following options to determine when the alert message is sent. 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

Specify that Servers Alive sends the alert message when the server is down the number of times that you specify.

When __ Times Down and All Next 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

Specify 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 in which 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 e-mail 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.

Output

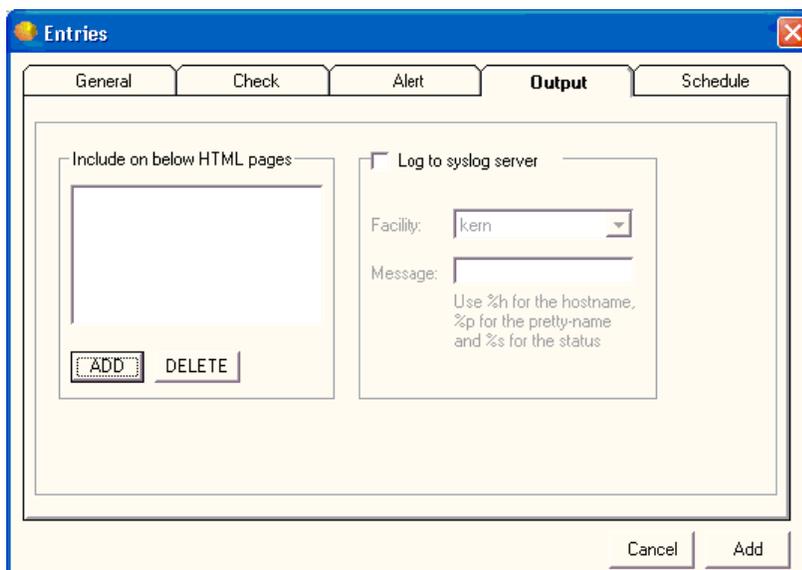


Figure 66: Output (1)

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 <http://www.kiwisyslog.com> (<http://www.kiwisyslog.com/>).

Include on Below 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.

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 the following variables:

- %h for the host name
- %p for the pretty name
- %s for the status
- %t for the last checktime
- %d for the date
- %u for the unique ID of the host
- %c for the complete host/check description
- %e for extra info (for a URL checking this could contain 404 Not Found as error message)
- %a for additional info (for a ping check this will the round trip time)
- %i for hostid (used for numeric paging)
- {0d} for chr(13) – carriage return
- {0a} for chr(10) – line feed

Add HTML Page

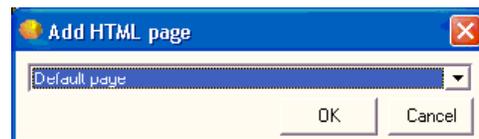


Figure 67: Add HTML Page (2)

Select the HTML page from the list and click **OK**.

Schedule

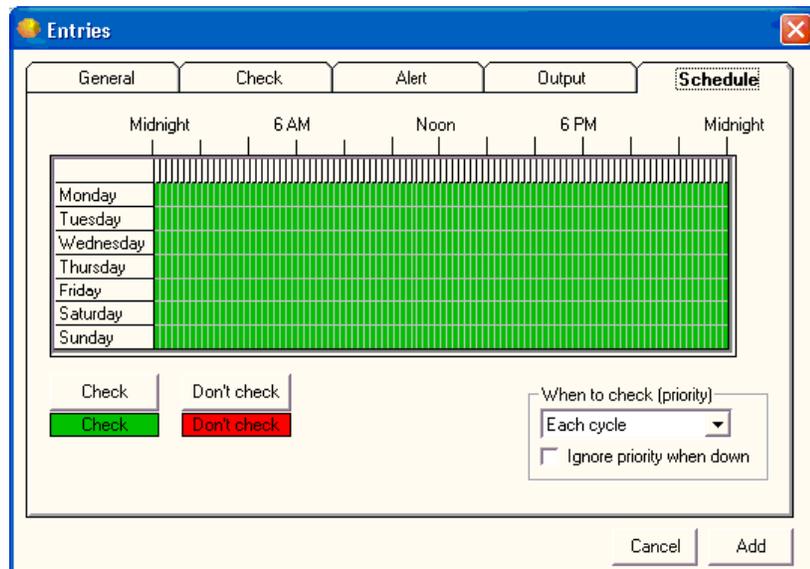


Figure 68: Schedule (2)

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 it needs to 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 finer 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.

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 that needs changing.

Import Hosts

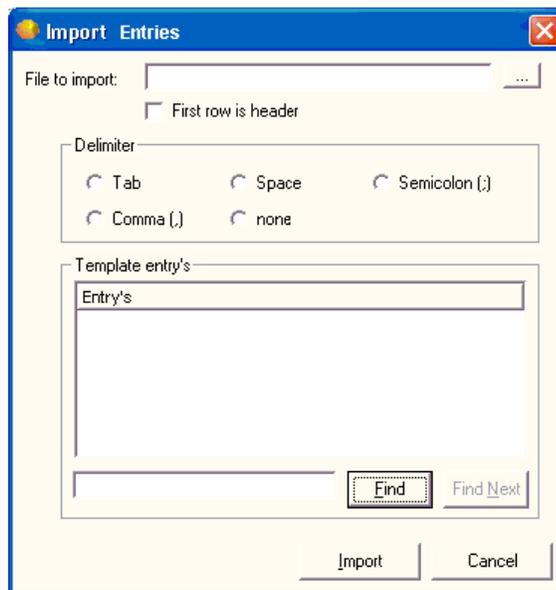


Figure 69: Import Hosts
(2)

You can click **Edit > Import Hosts** to import a host entry.

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, it 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

Select an entry in the Main window and then click **Edit > Edit** to change the settings of a specific host. You can change the settings on the **Entries dialog box** (on page 103).

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 backup your entry listing on a regular basis. To do this, click **File > Save As**.

Delete All

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 backup your entry listing on a regular basis. To do this, click **File > Save As**.

Global Change (Replace)

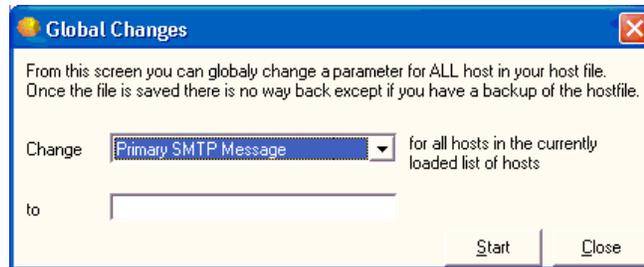


Figure 70: Global Change (2)

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...
- NT service check password
- NT process check password
- Pager number
- Syslog message
- NT performance check password
- NT service check username
- NT process check username
- NT performance check username
- Alpha paging enabled
- Primary SMTP subject
- Alternate SMTP subject
- Disk space check username
- Disk space check password

To

Enter the new value for the parameter that you selected in the **Change** list.

Start

Click when you are ready to make changes.

People

The screenshot shows a dialog box titled "People" with a blue header bar. Below the header are five tabs: "Person", "SMTP", "Pager", "ICQ", and "MSN". The "Person" tab is active. The main area contains a "Select person:" dropdown menu with "default" selected, and "Add" and "Delete" buttons. Below this is a "Name:" text field with "default" entered. A checkbox labeled "Person is active (works or is on holiday?)" is checked. There is a large "Remarks:" text area. Below the remarks area is a checkbox labeled "A public holiday should be considered as a Sunday" which is unchecked. At the bottom left is an "NTUserID:" text field. At the bottom right is an "OK" button.

Figure 71: People (3)

If you click **Edit > People**, you can add people and set up settings for SMTP, paging, ICQ messages, and MSN messages for each person.

Person

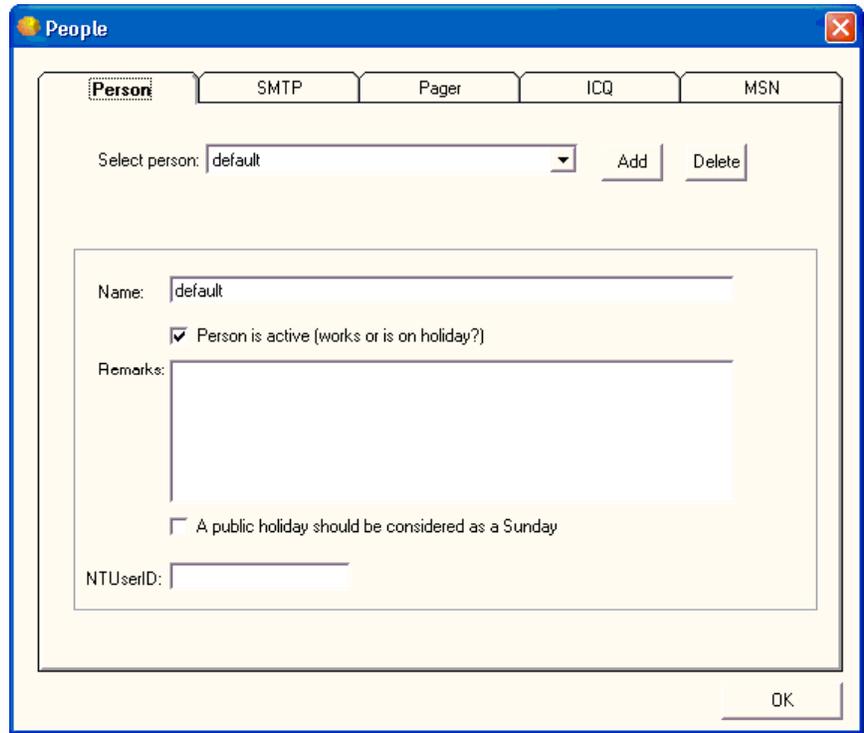


Figure 72: Person (1)

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 the *People and Teams Example* (on page 217).

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** (on page 207) 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.

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.

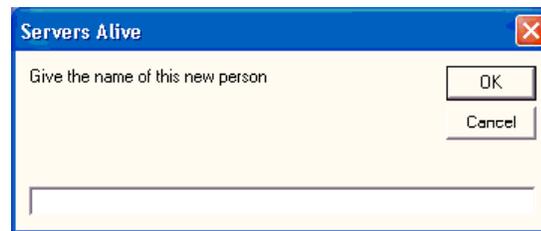


Figure 73: Add Dialog Box (1)

This 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.

SMTP

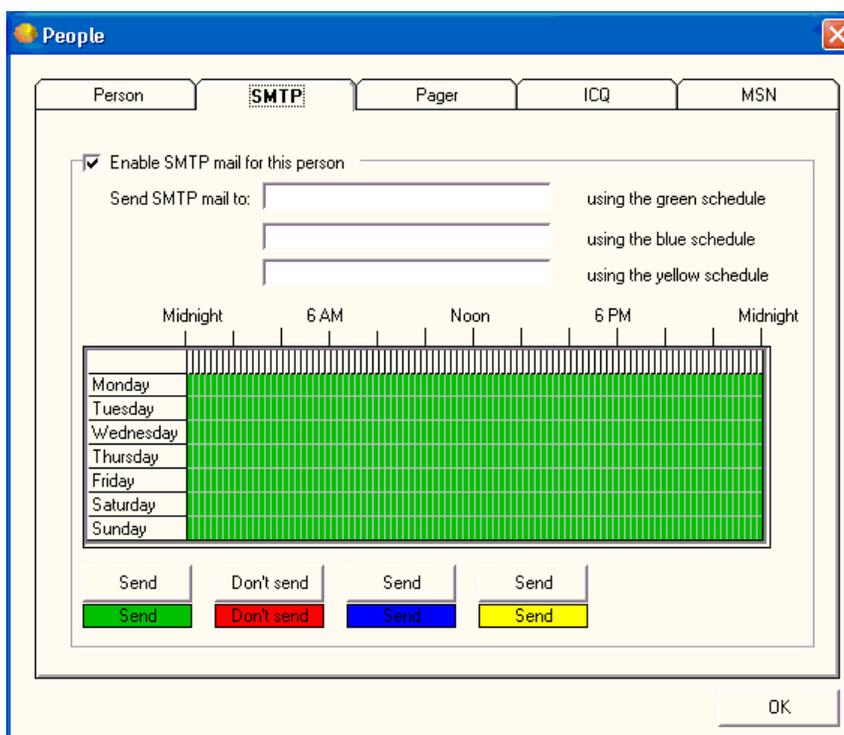


Figure 74: SMTP (1)

Enable SMTP Mail for This Person

Click to send SMTP messages to the person that you selected on the **Person** tab.

Send SMTP Mail To _____ Using the Green Schedule

Enter the e-mail address that you want to use for the green schedule on the grid.

In each of the **Send SMTP Mail To** boxes, you can enter several addresses separated by commas. For example, you can enter **Janesmith@serversrus.com,johnsmith@serversrus.com**.

Send SMTP Mail To _____ Using the Blue Schedule

Enter the e-mail address that you want to use for the blue schedule on the grid.

Send SMTP Mail To _____ Using the Yellow Schedule

Enter the e-mail 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 finer 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.

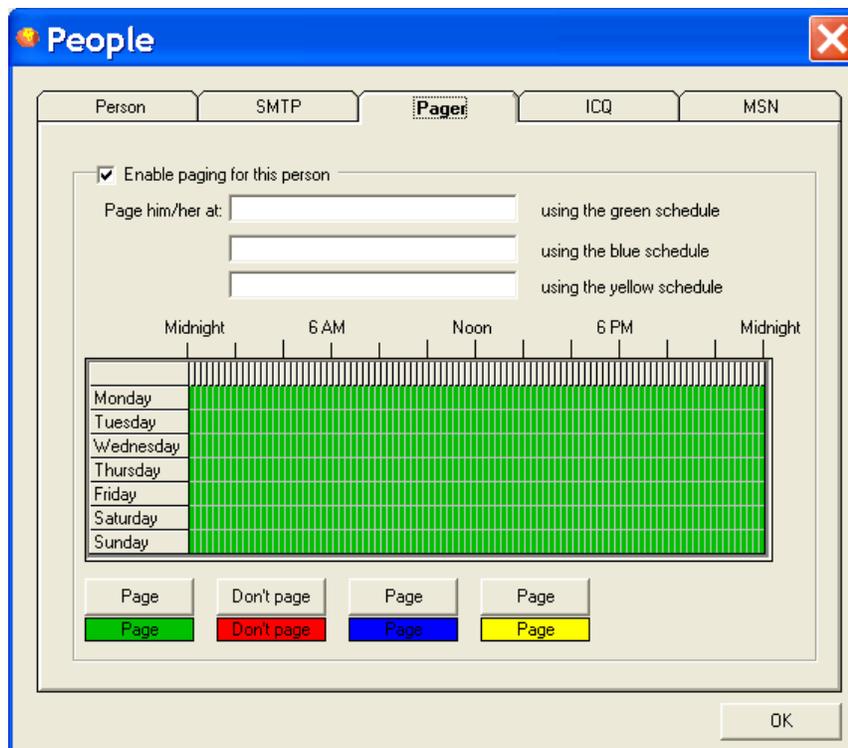
Send

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



Enable Paging for This Person

Click to send SMTP messages to the person that you selected on the **Person** tab.

Page Him/Her At _____ Using the Green Schedule

Enter a number.

In each of the **Page Him/Her** boxes, you can enter several numbers separated by semi-colons with no dashes. for example, you can enter **7723895,7723896**.

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 finer 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.

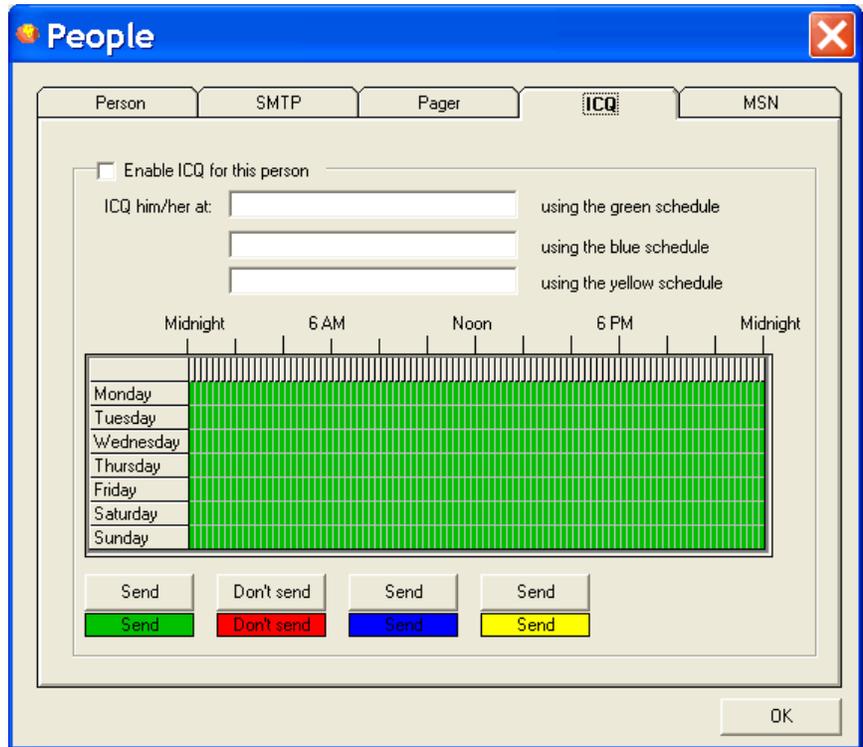
Send

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



Enable ICQ for This Person

Click to send SMTP messages to the person that you selected on the **Person** tab.

ICQ Him/Her At _____ Using the Green Schedule

Enter an ICQ number.

In each of the **ICQ Him/Her** boxes, you can enter ICQ numbers separated by commas. For example, you can enter **1233333,12111**.

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 finer 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.

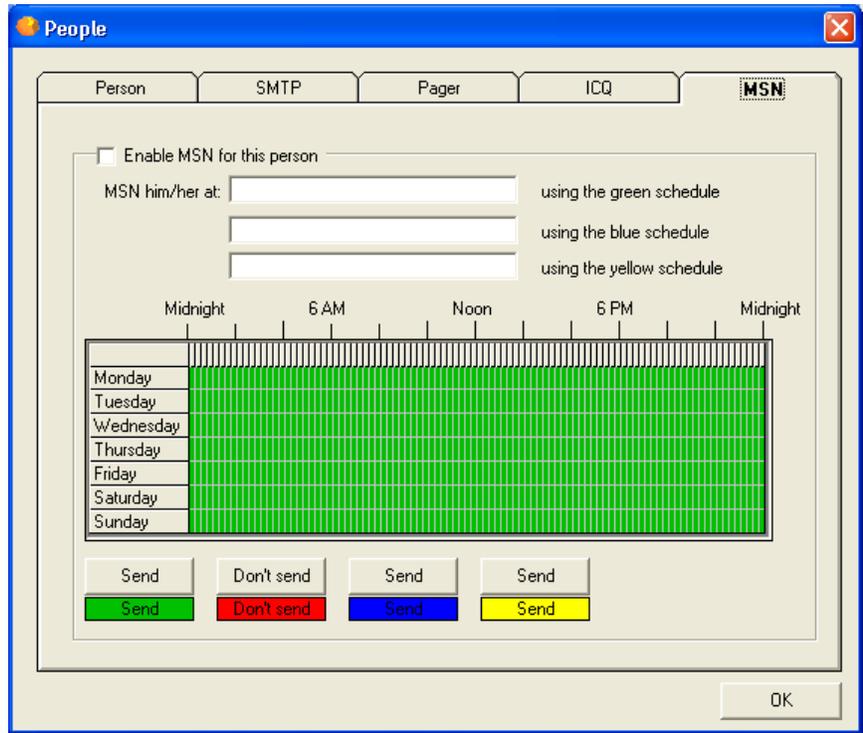
Send

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



Enable MSN for This Person

Click to send SMTP messages to the person that you selected on the **Person** tab.

MSN Him/Her At _____ Using the Green Schedule

Enter an MSN address.

In each of the **MSN Him/Her** boxes, you can enter MSN addresses separated by commas. For example, you can enter **johnsmith@msn.com,janesmith@msn.com**.

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 finer 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.

Teams

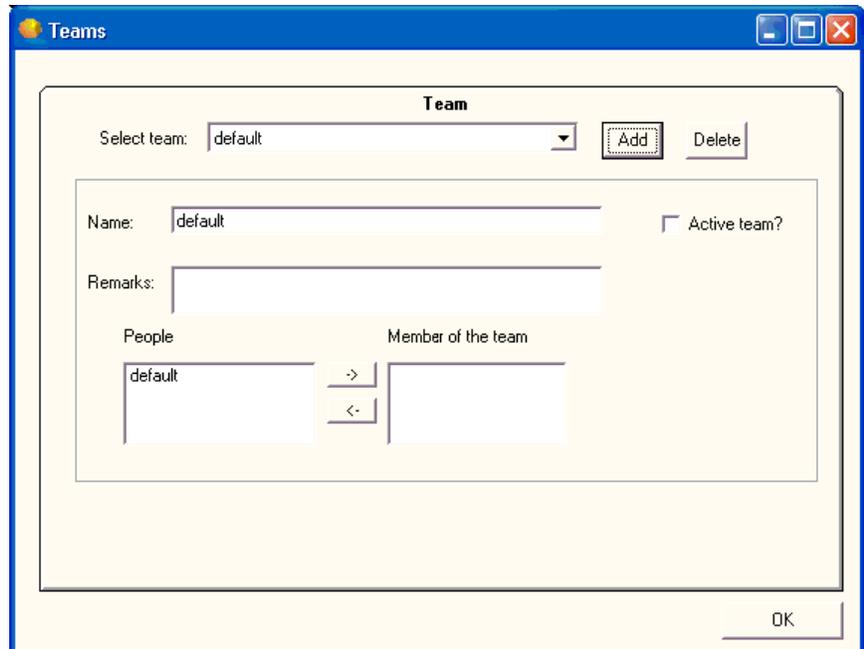


Figure 75: Teams (1)

Servers Alive has a great 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 the *People and Teams Example* (on page 217).

When using a person entry, you can enclose the person's name in parentheses, like (person). When using a team definition, enclose the team name in curly braces, like {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.

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 e-mailed. 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 the *Startup Settings* (on page 80) for more information.

People

Person | SMTP | Pager | ICQ | MSN

Select person: susan [v] Add Delete

- default
- bob
- jack
- kathy
- susan

Name: susan

Person is active (works or is on holiday?)

Remarks:

A public holiday should be considered as a Sunday

NTUserID: []

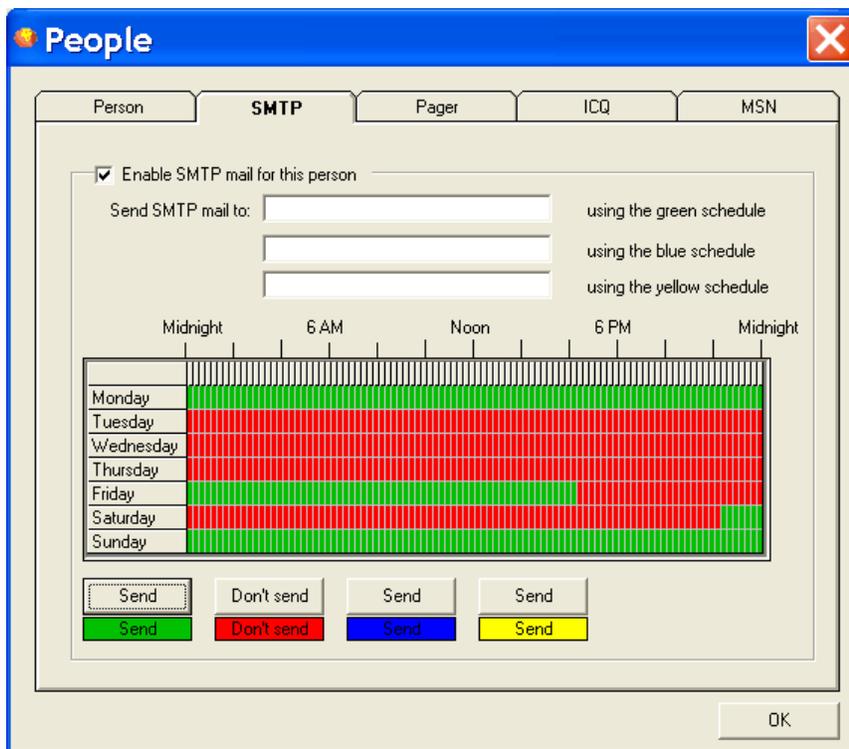
OK

Next you must set up each person's e-mail and pager schedule. Select Bob and then select the **SMTP** tab.

First, you should check the **Enable SMTP Mail for this Person** box and enter an e-mail address for Bob. By default, Bob is scheduled to receive e-mail 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 e-mails 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.

Protocols

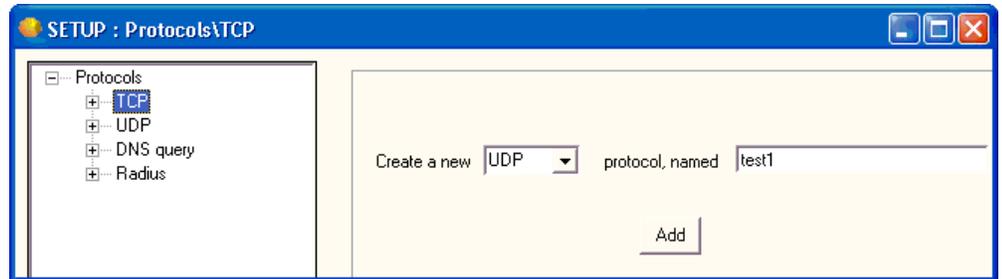


Figure 76: Protocols (1)

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

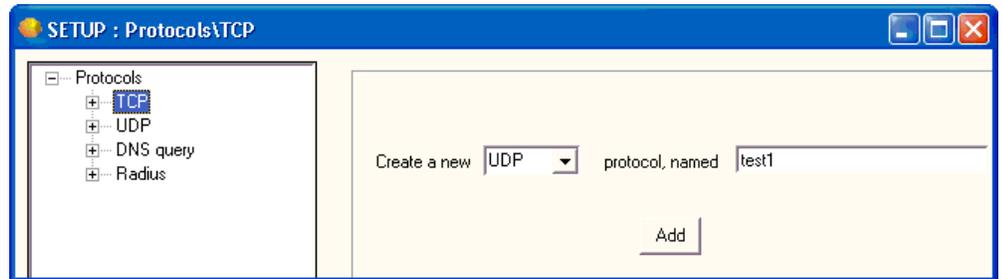


Figure 77: Protocols (1)

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:

Default port:

Description:

Packet to receive on connect

Anything Contains Equal

Packet to send on connect

Packet to receive as response

Anything Contains Equal

Packet to send when disconnecting

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.

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 e-mail 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.

UDP

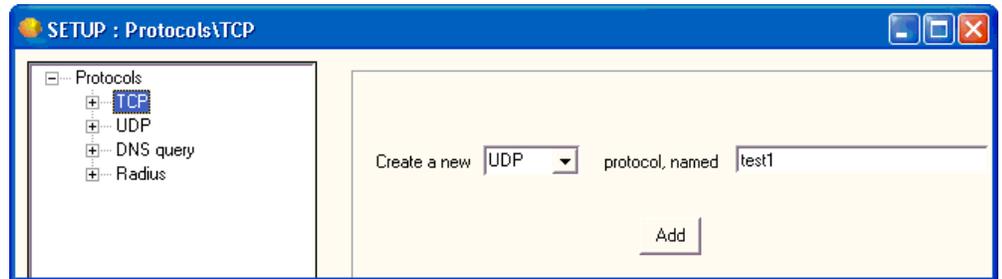


Figure 78: Protocols (1)

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: Half Life Clone Delete

Default port: 27015

Description: Games Server

Packet to receive on connect

Packet to send on connect: \xff\xff\xff\xff\x69\x6e\x65\x66\x00

Anything
 Contains
 Equal

Packet to receive as response

Packet to send when disconnecting

Anything
 Contains
 Equal

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.

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 e-mail 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

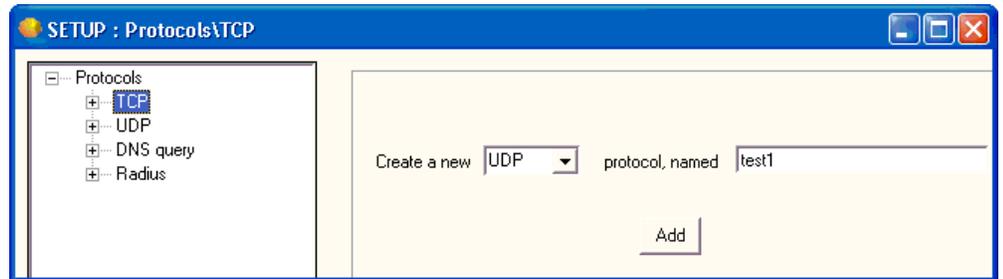


Figure 79: Protocols (1)

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.

The screenshot shows a configuration window for a protocol. It contains the following fields and controls:

- Protocol Name:** A text input field containing "Default DNS IPv4 Query". To its right are "Clone" and "Delete" buttons.
- Default port:** A text input field containing "53".
- Description:** A large text area with scrollbars, currently empty.
- Type of record to be checked:** A dropdown menu with "A" selected.
- Host or domain to query for:** A text input field containing "www.woodstone.nu". To its right is a "Test" button.
- Result should:** A dropdown menu with "be anything" selected, followed by an empty text input field.

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.

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**, **Exactly Be**, or **Contain**. Enter the text that should result.

Radius

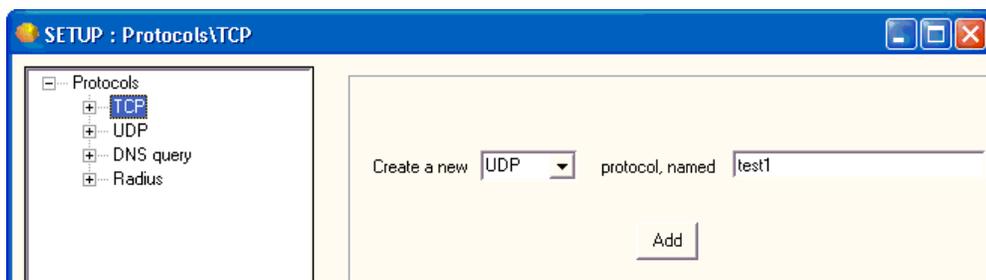


Figure 80: Protocols (1)

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:

Default port:

Description:

Username:

Password:

Shared secret:

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 do the following from the **Register**, **View**, and **Help** menus:

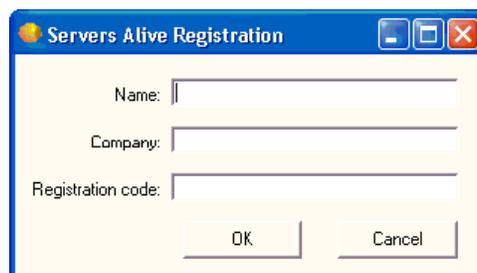
- Register the product. If you have already registered, you cannot see this menu.
- Show and hide various components of the Main window.
- Access online Help and the Servers Alive web site.

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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 e-mail 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 e-mail from Servers Alive.

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
- Status Icons within Tree
- Hide Status Frame
- Show EDIT Buttons

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. 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, in which you can enter the Version 4 Enterprise registration code. If you're 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.

CHAPTER 6

External Checks

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 some external checks for you to use.

To use Servers Alive to write external checks, see the *External (Errorlevel)* (on page 147) section.

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 some example external checks to you. 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 its use. Following is a short description of what each does. 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.

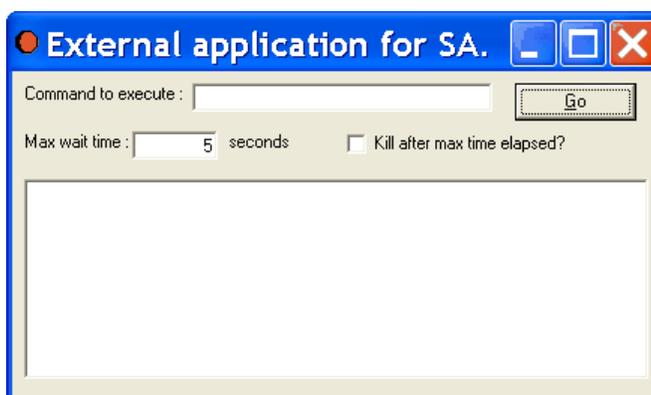
Countfiles - Connects to a path you supply, such as a network share, and returns an errorlevel equal to the number of files/directories that match your pattern criteria. The pattern is a standard file name wildcard pattern (such as *.* , *.log, or text?.txt).

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 machine, 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 will, when properly configured, send an e-mail through the SMTP server, and then collect that same e-mail 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.

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