# STASCOM HELP FILE

Last modified: 16/9/2016

Author: Jacques Stassen

Support: Email the author

## [USING THE HELP FILE](#_USING_THE_HELP)

In order to use navigation through this document similar to a web page, i.e. navigating by headings or links, do the following:

1. Using NVDA:
* Enable browse mode by pressing NVDA+spacebar;
* Move by headings pressing the letter “h”
* To get a list of links in the document, press NVDA+F7, pressing enter on the desired link to move to that part of the document.
1. Using JAWS for Windows:
* Enable browse mode by pressing JAWS-key+z;
* Move by headings pressing the letter “h”;
* To get a list of links in the document, press JAWS-key+F7, pressing enter on the desired link to move to that part of the document.

## SUPPORTED OPERATING SYSTEMS

The setup program will determine the version of your operating system, as well as if it is a 32 or 64 bit architecture. The appropriate version of Stascom will be installed based on the information retrieved, i.e. a 32 bit version for a Windows 32 bit installation, likewise, a 64 bit version for a 64 bit Windows. Stascom should run on any version of Windows, XP or later, but the supported Windows versions are Windows 7 and Windows 10.

## INTRODUCTION

The Stascom program currently consists of six utilities, namely:

[Hour Chime](#_HOUR_CHIME)

[Thunderbird hotkeys](#_THUNDERBIRD_FOLDER_VIEW)

[Sound Manager](#_SOUND_MANAGER)

[Password Generator](#_PASSWORD_GENERATOR)

[Word count](#_WORD_COUNT)

[Automated day and night volume adjustment](#_AUTOMATED_DAY_/)

## [INSTALLING OR REMOVING THE PROGRAM](#_INSTALLING_OR_REMOVING)

The installation program, “Stascom setup.exe”, can be run to install or update the program. It is a requirement that the setup program is run as administrator, as to allow the program to create the required folders under Program Files, as well as to copy the necessary files to these locations. To do this, press shift+F10 on the setup file, then arrow to “run as administrator,” and hit enter. Once the installer has completed, the latest version of Stascom will automatically be active. Should the most recent version of the program already be present on the user’s system, setup will return with a message that the latest version is already installed, asking if the user wishes to re-install the same version. Alternatively the setup program provides removal of Stascom and all the associated configuration from your system.

The six utilities in Stascom and their functions are explained below.

## HOUR CHIME

Audio announcements are, by default, given on the hour from 7 o’clock in the morning until 9 o’clock in the evening. These default settings can be changed via the settings dialogue explained later in this document, in other words, the user can be very specific about which hours of the day or night an hour chime should sound. Should the system be used in an environment where the announcements are not desirable, such as on a laptop used in a meeting room, these announcements can be disabled using the options dialogue, see the section on customisation for all available options. Please note that the last toggle of enabling or disabling this feature will remain in effect, also after a re-boot of the system.

## THUNDERBIRD HOTKEYS

In the e-mail client, Mozilla Thunderbird, the hotkey control+Windows+j will jump between three different folder views, i.e. favourite folders, unread folders and all folders. To use this feature successfully it is assumed that the user has set some folders as favourite folders. A practical example where this feature is handy is when quickly checking which folders have unread mail, or to view mail in all folders, after which the user can go back to favourite folder view, which is seen as the default. The last used folder view set with this keystroke will remain in effect, also after a re-boot of the system.

The hotkey, control+Windows+p, will toggle to the next profile in Thunderbird, provided that the Profile Switch add-on has been installed. Do not use this keystroke if you do not have this add-on installed and configured, as it will not work correctly.

The hotkey control+Windows+u will empty the trash folder for the account with focus.

Use the options dialogue explained later in this document to enable or disable the Thunderbird hotkeys.

## SOUND MANAGER

The purpose of the automated functions of Sound Manager is to recover audio output under the following circumstances:

1. Master volume becomes muted, at which point the utility will automatically unmute the default audio device.

2. Volume level of the master output on the default audio device drops below 20 percent, in which case it will automatically be set to the pre-defined recovery volume output, see the section on customisation for more detail.

No keystroke is assigned for the recovery features, as they are constantly being monitored, so recovery will take place automatically. The user may not even be aware that sound has been recovered, but the last recorded correction by Stascom can be checked with the assigned hotkey, control+Windows+F2, which will, amongst other detail, provide feedback on sound recovery.

To test the automation, from the run dialogue, enter "sndvol" without the quotes and press enter. This will bring up the mixer dialogue where output levels for your audio device can be adjusted, as well as muting of the master volume and other applications running on your system at the time. Feel free to either lower the master volume below 20 percent, or muting the master volume. Stascom will immediately unmute the master output or increase the volume to the pre-defined recovery volume in the event that it has been dropped below 20 percent.

### SOUND MANAGER HOTKEYS

The following hotkeys can be used with Sound Manager:

1. Control+Windows+F5 will provide the master volume output and mute status of your default sound card. This window will also display the name of the default playback device. Three buttons appear at the bottom of this window, i.e. “open audio mixer settings”, microphone info and “close.” As could be expected, the first button will display your audio mixer options where various playback and recording settings can be adjusted, the second button displays input level for the recording device, microphone, and its mute status, while the third button will close the window. A quick note on the second button, if a microphone is not detected, or configured, the information shown here will simply report as “not found.” In rare situations the microphone info button will crash the program. This appears to be linked to specific audio devices and / or drivers used.

2. Control+Windows+UpArrow will increase master volume by 5% with each keystroke. Ascending tones will be heard to indicate the volume levels as it is increased. A dialogue will inform the user if the maximum volume level of 100% is reached.

3. Control+Windows+DownArrow will decrease the master volume by 5% with each keystroke. A descending tone will be heard to indicate the output level being lowered. A minimum level of 20% is allowed with this keystroke as to avoid a situation where sound output cannot be heard. A dialogue informing the user will be generated when 20 percent volume output has been reached. Pressing this keystroke when volume is set lower than 20% by an application or Windows will set output to the minimum level of 20 percent.

### SOUND MANAGER DISCLAIMER

It should be noted that the sound module cannot recover audio output if your audio hardware is faulty, or the drivers used with your audio device is not up to date, or fully compatible with the operating system you are using. Stascom may also not be able to correctly retrieve audio mixer detail with the hotkey control+Windows+F2 if you are using a generic sound driver, or if the drivers are not fully compatible with your operating system.

## PASSWORD GENERATOR

This utility generates what, in any language, can be considered a strong password every time the keystroke, control+Windows+F6, is pressed. It generally is a good idea not to use passwords which can easily be deciphered by software programs designed to work out what any given password is for an online shopping or e-mail account, so this utility will assist you in creating a password which cannot be guess by anyone, or easily deciphered by software designed for this purpose.

The algorithm used in this utility will make up a unique password based on the system date and seconds of the system time, which will not be used exactly as retrieved, but instead be mixed as to form a unique string. More importantly, randomly generated letters, digits and punctuation will be combined with the initial string as to form a unique password every time this function is used.

When the hotkey is pressed, it will place the newly generated password on the Windows clipboard, so it can conveniently be pasted into an edit field when, for example, registering a new service or account. After pressing control+Windows+F6, , a verbal notification will be heard that the password has been placed on the Windows clipboard and is ready to be pasted in a destination edit field.

### IMPORTANT NOTE ON PASSWORD GENERATOR

For security reasons the generated password is not stored in a file on your system. After generating a password, it will merely remain on the Windows clipboard until the contents of the clipboard is replaced by different text or a file or files. It therefore is recommended that the user should immediately save this password in a secured database program directly after generating it. I personally recommend KeePass, downloadable from:

[Download KeePass](http://sourceforge.net/projects/keepass/files/KeePass%201.x/1.31/KeePass-1.31-Setup.exe/download?accel_key=77%3A1461823086%3Ahttp%253A//keepass.info/download.html%3Aa5a7552a%2471e8a244f90d2204f6255c02836c1930818103e5&click_id=2d8aa714-0d06-11e6-9879-0200ac1d1d92&source=accel)

## WORD COUNT

When in an editor or browser window, after selecting text, control+Windows+F7 will report the word count for the selected text. This is similar to the functionality in Microsoft Word, where the word count of a document can be seen on the status line. The hotkey used here is not limited to MS Word though, it should work in any window where text is selected. The word count result will be displayed in a message box, which can be dismissed by pressing the “OK” button. The result will also be placed on the clipboard in order to paste it somewhere else.

If no text was selected, this function will return a message stating as much.

### ACKNOWLEDGEMENT

Credit and my thanks goes to Jacob Kruger who gave permission for me to use the routine he wrote in Python to do the background calculation, which really is the core of this function.

## AUTOMATED DAY / NIGHT VOLUME ADJUSTMENT

If enabled, this feature will automatically lower the master volume of your system to the pre-defined output level at the specified time of night, see the section on customisation for more detail. Should the system be used again after this time with a higher volume setting, it will check again at midnight to see if the night-time volume is set for the night, provided that the relevant checkbox for midnight is checked in the options dialogue. The following morning it will be reset at the specified day-time to the output level selected by the user. Making use of this feature will have no negative influence on making automated online recordings during the night, instead it will simply prevent the user from being disturbed should your system produce speech output during the night when an activity is triggered by an application running on your system, such as Windows update or a scheduled radio recording.

## [GENERAL HOTKEYS](#_GENERAL_HOTKEYS)

Prior to supplying the individual hotkeys for the various functions in Stascom, it is worth mentioning that the hotkey, control+Windows+m, will present the user with a dialogue consisting of buttons to the main features of the program. The letter “m” used in this combination can be thought of as a menu to the main features. This keystroke was added for convenience, should the user not wish to memorise the individual hotkeys. Each of the buttons in this dialogue have a corresponding alt combination for quick access, e.g. alt+c to customise settings. The shortcut alt+d can be used to dismiss the dialogue at any time.

The buttons in the above mentioned dialogue correspond to the following functions:

* Customise program settings
* Password creation
* Audio device information
* Open help documentation
* Generate a summary of current settings
* Unload the program from memory
* Version information

The last button in this dialogue, mapped to alt+d, will dismiss the window without triggering any of the functions.

### [HELP FILE](#_HELP_FILE)

Control+Windows+F1 will open the current help file.

### [GETTING A SUMMARY OF YOUR SETTINGS](#_GETTING_A_SUMMARY)

Control+Windows+F2 will present the user with a summary of the program options chosen in the customisation dialogue, see below fffffor more details on this feature. Under the recovery section it will also report the exact day and time of a recovery made, if the feature is enabled and an actual recovery has been made. This report is presented in a read-only edit control. Use standard navigation keys to navigate this window. Should one or more of the features be disabled, this window will inform the user of same, moving on to the next section, where details for that feature is displayed, if indeed enabled. For example, if hour chime is enabled, the hours for which the feature is active will be displayed. Press alt+c to close the report.

### [CUSTOMISING PROGRAM SETTINGS](#_CUSTOMISING_PROGRAM_SETTINGS)

### [OVERVIEW OF SETTINGS](#_OVERVIEW_OF_SETTINGS)

Control+Windows+F3 presents the user with a multi-page dialogue, containing various options to customise the experience with four of the built-in components, namely, Hour Chime, Sound Manager, Automated day / night volume adjustment and Thunderbird. All options given here can be changed to the user’s preference and will subsequently be honoured in program behaviour. To move between the four tab controls, use control+tab and shift+control+tab. The options under the different tab controls are briefly explained as follows:

#### [CHANGING HOUR CHIME SETTINGS](#_CHANGING_HOUR_CHIME)

1. Hour Chime enables / disable a set of radio buttons which will toggle between the two settings. The default is “enabled.”

2. Checkboxes for all 24 hours, allowing the user to specify which hours of the day and / or night time should be announced. The default setting is between 7 in the morning and 9 in the evening.

3. A close button. Press spacebar on this button, or alt+c from anywhere in the dialogue to dismiss the options window.

#### [Changing settings for sound recovery](#_Changing_settings_for)

1. The next tab control provides options for Sound Manager. The first set of controls is radio buttons to either enable or disable this feature. The default setting is “enabled.”

2. A list box where the preferred recovery volume can be set, options are between 40 and 100 percent, with 5 percent increments. The default recovery volume after installation is 60 percent.

3. A close button. Press spacebar on this button, or alt+c from anywhere in the dialogue to dismiss the options window.

#### [CHANGING DAY / NIGHT VOLUME SETTINGS](#_CHANGING_DAY_/)

1. The next tab control provides options for the automated day / night volume adjustment. The first set of controls is radio buttons which provides options to enable or disable this feature. The default setting is “enabled.”

2. A list box where the preferred night volume can be specified, starting at 20 percent up to 50 percent. The default setting after installation is 20 percent.

3. A time control where the preferred night time can be specified. The control caters for hour, minutes and seconds. Use left and right arrows to move between these three fields. When, for example, on minutes, the preferred minutes can also be typed in, rather than using arrows to find the desired setting. The default setting after installation for night time is 21:30:00.

4. A list box where the preferred day volume can be specified, ranging from 50 percent to 100 percent, with 5 percent increments. The default setting after installation is 60 percent.

5. A time control where the preferred day time can be set. The control caters for hour, minutes and seconds. Use left and right arrows to move between these three fields. When, for example, on minutes, the preferred minutes can also be typed in, rather than using arrows to find the desired setting. The default setting after installation for day time is 06:59:00, as to coincide with the default first hour chime of the day at 7 o’clock.

6. A checkbox to specify, if volume has been adjusted after the specified night time, if the program should set it to the desired night volume at midnight.

7. A close button. Press spacebar on this button, or alt+c from anywhere in the dialogue to dismiss the options window.

#### [ENABLING OR DISABLING THE USE OF THE THUNDERBIRD HOTKEYS](#_ENABLING_OR_DISABLING)

1. Radio buttons to either enable or disable use of the provided hotkeys in Thunderbird.

2. A close button. Press spacebar on this button, or alt+c from anywhere in the dialogue to dismiss the options window.

### [IMPORTANT NOTE ON SETTINGS](#_IMPORTANT_NOTE_ON_1)

It should be noted that the settings in the options dialogue are updated and saved dynamically as the user changes them. This means that, when pressing the close button, or alt+c, anywhere in the options dialogue, the desired changes have already been saved for future use.

### [TERMINATING THE PROGRAM](#_TERMINATING_THE_PROGRAM)

Control+Windows+F4 will present the user with a dialogue to terminate all components associated with Stascom. Activate the “yes” button in this dialogue to unload Stascom from memory, or activate the “no button” to keep the program running. To run Stascom again, simply log your system off and on again. Since a shortcut to the main program is present in the startup folder, it will re-launch after a log-on or re-boot.