

Speaker Mute

03/11/2008 - Version 1.1

Installation

Base Installation

If you merely require that the internal speakers of a computer be muted at all times, as is the case with many lab environments, then the base installation of Speaker Mute will most likely suffice for your environment.

To Install Speaker Mute:

1. Download the latest version of Speaker Mute available at <http://ryanharter.com>.
2. Double click on the Speaker Mute Installer package and follow the instructions.

- Note: A restart will be required to fully install Speaker Mute.

Support Application Installation

Sometimes you may wish for the ability to temporarily disable Speaker Mute. This can be accomplished either graphically (simpler, good for smaller deployments), or via the command line (better for larger deployments, scriptable).

To Disable Speaker Mute graphically:

1. Download the latest version of “Disable Speaker Mute.app” available at <http://ryanharter.com>.
2. Save the application to /Applications/Utilities/. (Optional)
3. Double click Disable Speaker Mute.app and enter an administrator’s password.

To Enable Speaker Mute graphically:

1. Download the latest version of “Enable Speaker Mute.app” available at <http://ryanharter.com>.
2. Save the application to /Applications/Utilities/. (Optional)
3. Double click Enable Speaker Mute.app and enter an administrator’s password.

To Disable Speaker Mute from the command line:

1. Log in as an administrator (or via ssh) and open Terminal.app. (Found in / Applications/Utilities/)
2. Type the following:

```
sudo launchctl unload \  
/Library/LaunchDaemons/com.ryanharter.speakermute.plist
```

To Enable Speaker Mute from the command line:

1. Log in as an administrator (or via ssh) and open Terminal.app. (Found in / Applications/Utilities/)
2. Type the following, then hit return:

```
sudo launchctl unload \  
/Library/LaunchDaemons/com.ryanharter.speakermute.plist
```

Administering Speaker Mute

Concepts

Command Line Administration

You should be familiar with the Mac OS X command line. A knowledge of basic commands and the ability to navigate the file system should suffice.

Remember: If you have questions about a command, just type `man <command>` to view the man (short for manual) page for that particular command.

Plists

Most Mac OS X applications, including Speaker Mute, store their preferences in plists (short for “property list”). A basic understanding of how plists work is required to take advantage of Speaker Mute’s customizable options.

For more information about plists, please read [Mac OS X 10.4: Reading .plist preference files](#).

Note: This also applies to Mac OS X 10.5.

The Speaker Mute plists

Speaker Mute is has been designed to be completely customizable via plists. These plists do not exist by default, however. Should you choose to take advantage of the new functionality of Speaker Mute, you will need to create them.

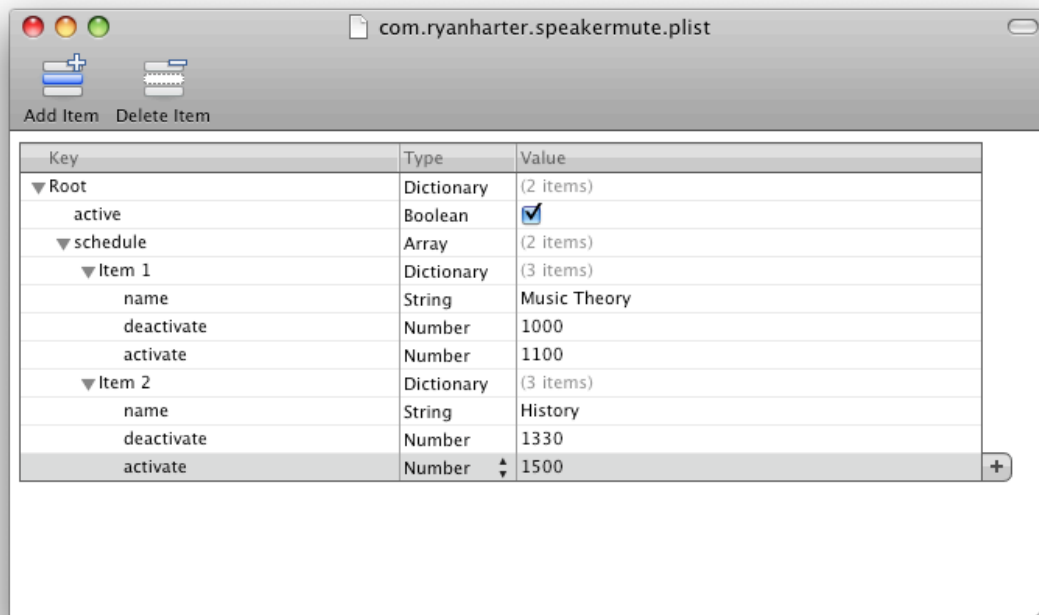
Note: If these plists don't exist Speaker Mute will default to always active, and the default messages.

[com.ryanharter.speakermute.plist](#)

This plist, located at `/private/var/root/Library/Preferences/`, controls the activation schedule for Speaker Mute. Because schedules can become very complex, you must edit the xml files by hand, use Plistbuddy, or use Property List Editor (available for free as part of the Xcode Suite).

Creating a Speaker Mute plist

1. Open Property List Editor and create a new file named `com.ryanharter.speakermute.plist`.
2. Add a new child to the Root dictionary called "active" of type Boolean.
3. Add another child called "schedule" and make this an Array.



4. Add Dictionary items to this array for every time you would like Speaker Mute to deactivate containing a name (string) key, a deactivate (Number) key, and an activate (Number) key.

Plist keys in more depth

active

The “active” key is a simple boolean that determines whether Speaker Mute should be active or not. If this value is missing, it defaults to ‘true’.

In the future, this will be the method of activating and deactivating Speaker Mute. For the time being, this can be used if you want to disable Speaker Mute for an extended period of time. (The previously mentioned methods for deactivating Speaker Mute are only temporary, Speaker Mute will reactivate under certain circumstances, like a reboot.)

schedule

The “schedule” array contains all of the scheduled deactivations and reactivations for Speaker Mute.

name

The “name” key is merely for convenience, it is not utilized by Speaker Mute. This can contain any descriptive name you choose.

deactivate

The “deactivate” key is what does the real work. This key should be a Number (int), and should be the 24-hour representation of the time you would like Speaker Mute to deactivate. For example, if you would like Speaker Mute to deactivate at 4pm you would enter 1600.

activate

The “activate” key does just what it says. This key should be a Number (int), and should be the 24-hour representation of the time you would like Speaker Mute to reactivate. This value uses the same format as the “deactivate” key above.

Note: When scheduling a “shut-down” period for Speaker Mute, note that “deactivate” and “activate” cannot “wrap” around midnight.

For instance, if you would like to deactivate Speaker Mute between the hours of 8pm and 6am, this would require two schedules, one from 2000 to 2359, and another from 0000 to 0600.

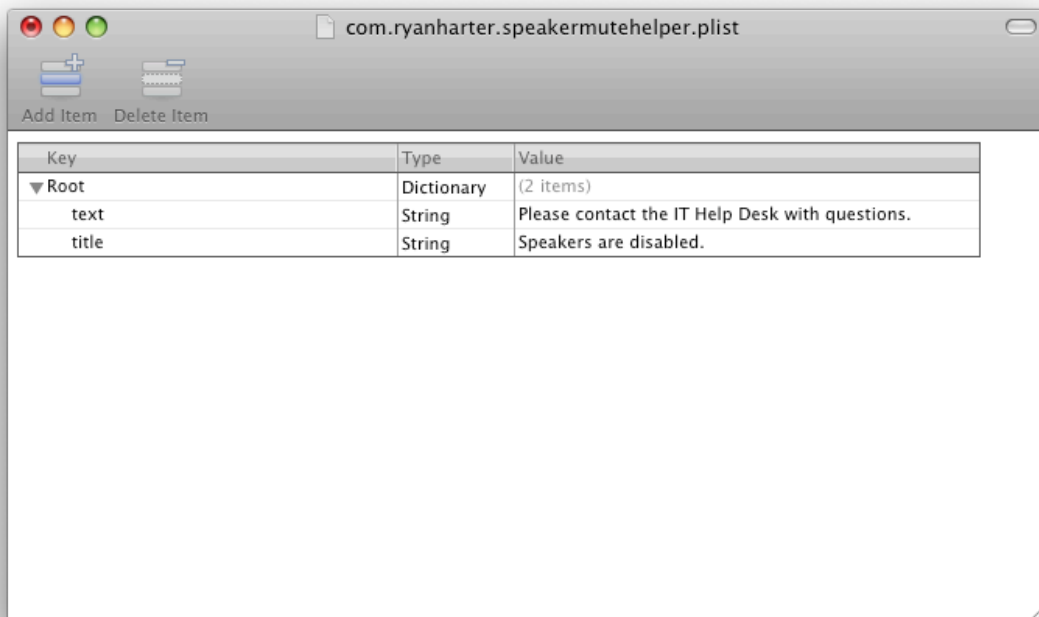
[com.ryanharter.speakermutehelper.plist](#)

This plist, located at `/private/var/root/Library/Preferences/`, controls the title and message that are displayed in the Speaker Mute notification window. This plist is editable in much the same way as the one above.

Creating a Speaker Mute plist

1. Open Property List Editor and create a new file named `com.ryanharter.speakermutehelper.plist`.
2. Add a new child to the Root dictionary called “title” of type String and enter whatever you would like as the Title of the Speaker Mute notification.
3. Add another child called “text”, also of type String, and enter a more in depth message for Speaker Mute.

This plist is fairly self explanatory.



Contact Information

If you have any questions regarding Speaker Mute, please check the website at <http://ryanharter.com>.

Alternatively, you can always reach me anytime at ryan@ryanharter.com.