

# Emacspeak

## The Complete Audio Desktop

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User Manual

**T. V. Raman**

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This manual documents **Emacspeak, The Complete Audio Desktop** and was last updated on 4 September 2021.

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# 1 Copyright

This manual documents Emacspeak, a speech extension to Emacs.

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## 2 Announcing Emacspeak Manual 2nd Edition As An Open Source Project

This is to announce the launch of a new open source project to create a user manual for Emacspeak — an Emacs speech extension that provides a complete audio desktop.

### 2.1 How To Contribute To This Manual

This manual is organized as a series of chapters, with each chapter in a separate file. If you feel capable of contributing to a specific section, send out a message to the Emacspeak mailing list <mailto:emacspeak@cs.vassar.edu>. You can then start adding content to a local copy of the chapter to which you are contributing. When you feel you have something to submit, mail out the file to the emacspeak mailing list — I'll integrate new content as it comes in.

### 2.2 Authoring Guidelines

For this manual to hang together and make sense to the new user at whom it is targeted, contributors need to stick to a consistent style. If you plan to contribute content, you should take some time to read the existing sections — note that many of these are skeletal and the first contributions will be to flesh these sections out.

If you are familiar with texinfo, go ahead and mark up your content using texinfo. If you are not, simply author the documentation you create as plain formatted ASCII. If you do submit files as texinfo source, make sure to validate them at your end first by running the files through `makeinfo` — badly created or malformed texinfo source takes more time to fix than marking up straight text.

### 2.3 Credits

This initial version draws heavily from the original Emacspeak user manual, and includes contributions from Jim Van Zandt and Jason White. Authors who contribute complete sections will be acknowledged here as well as in the specific section they author.

## 3 Background

Emacspeak was originally developed in late 1994 and released as Open Source in May 1995. Since then, the system has been regularly updated every six months to provide an up-to-date *Audio Desktop*. Here is a brief overview of some of the significant aspects of the system, and the lessons learnt from its development and use. The work on Emacspeak was presented at CHI96 and the co-located Assets96 conference in Vancouver, BC. This overview is being written nearly 15 years later to trace the impact of the work.

### 3.1 Speech-Enabling Applications

The underlying thesis behind AsTeR (Audio System For Technical Readings) and later Emacspeak is that information is display-independent. This leads to the insight that producing auditory renderings of information starting from the true source of that information often produces better renderings than those that result from working from a modality-specific representation; thus, attempting to speak visually rendered information can often prove sub-optimal. AsTeR applied these ideas to documents authored in L<sup>A</sup>T<sub>E</sub>X; Emacspeak generalized these ideas to user interfaces.

Emacspeak was therefore designed from the ground-up to enable applications generate their own spoken feedback, rather than having an external software program construct the spoken feedback by responding to events in its environment.

In Emacspeak, theory meets practice to deliver a working implementation; Emacspeak leverages the power of Emacs and its embedded Lisp interpreter to inject spoken feedback into applications that run within Emacs. For a detailed overview on how the *advice* mechanism in Emacs is used, see the original Assets96 paper, as well as the chapter on Emacspeak in the OReilly publication entitled Beautiful Code (<http://emacspeak.sourceforge.net/raman/publications/bc-emacspeak/publish-emacspeak-bc.html>).

### 3.2 Audio Formatting And Aural CSS

AsTeR introduced the notion of *audio formatting* a concept analogous to the well-understood notion of visual formatting. The work on AsTeR coincided with the Web being at its infancy. As the Web evolved to acquire Cascaded Style Sheets (CSS), ideas from AsTeR were used to define Aural CSS as an appendix to CSS1 in 1995. Emacspeak proved an ideal platform to prototype the ideas within Aural CSS — first within the Emacs/W3 browser. Around this time, Emacs itself evolved to support multiple fonts and *font-locking* to implement syntax coloring for various types of content. Emacspeak applied the ideas of audio formatting to create the auditory analog of *font-lock* — Emacspeak calls this *voice locking*.

Voice locking in Emacspeak continues to be a unique feature among systems that provide auditory feedback. Later in 1997, Emacspeak's implementation was overhauled to use Aural CSS for all aspects of voice-locking, rather than just for Web content.

### 3.3 Auditory Icons

Emacspeak augments spoken feedback with short auditory icons that vastly speed up interaction. Combined with audio formatting, the resulting experience is analogous to moving

from a monochrome character-cell display to a high-quality color display — the overall user experience is rich in comparison. This enabled Emacspeak to explore innovative means of auditory communication — as an example, see my Assets-98 paper entitled *Conversational Gestures For The Audio Desktop* that details how one can play Tetris on the Emacspeak desktop.

### 3.4 Summary

The lessons learnt from developing Emacspeak are many — here are a few highlights:

- A model for browsing tabular data — see relevant chapter in my book *Auditory User Interfaces*
- Audio formatting and Aural CSS
- Auditory icons for efficient feedback.
- Web widgets for rapid task completion on the Web.

And many more than will fit this margin.

## 4 Introduction

Emacspeak provides a complete audio desktop by speech-enabling all of Emacs.

In the past, screen reading programs have allowed visually impaired users to get feedback using synthesized speech. Such programs have been commercially available for a long time. Most of them originally ran on PC's under DOS, and have moved over to the Windows environment. However, screen-readers for the UNIX environment have been conspicuous in their absence. Note that this is now changing with the availability of console-level Linux screenreaders such as **speakup**. Such Linux screenreaders provide the same level of UNIX accessibility provided in the late 80's by PC terminal emulators running a DOS screenreader. This means that most visually impaired computer users face the additional handicap of being DOS-impaired — a far more serious problem:-)

Emacspeak is an emacs subsystem that provides complete speech access. It is *not* a screen-reader — rather, it is a complete user environment with built-in speech feedback. Emacspeak has a significant advantage; since it runs inside Emacs, a structure-sensitive, fully customizable environment, Emacspeak has more context-specific information about what it is speaking than its screenreader counterparts. This is why Emacspeak is not a “screenreader”, it is a system that produces speech output.

A Traditional screen-reader speaks the content of the screen, leaving it to the user to interpret the visual layout. Emacspeak, on the other hand, treats speech as a first-class output modality; it speaks the information in a manner that is easy to comprehend when listening.

The basic concepts used by Emacspeak are simple; all interactive Emacs commands have been adapted to provide speech feedback. Hence, you use Emacs as normal; Emacspeak works behind the scene to give audio feedback in addition to updating the screen.

Emacspeak consists of a core speech system that provides speech and audio services to the rest of the Emacspeak desktop; application-specific extensions provide context-specific spoken feedback using these services. Emacspeak currently comes with speech extensions for several popular Emacs subsystems and editing modes. I would like to thank their respective authors for their wonderful work which makes Emacs more than a text editor<sup>1</sup>.

---

<sup>1</sup> I have now been using Emacspeak under Linux as the only source of speech feedback since 1994.

## 5 Installation Instructions

This chapter gives brief and detailed installation instructions for configuring, installing and starting Emacspeak.

### 5.1 Obtaining Emacspeak

Emacspeak is available on the Internet at:

**WWW**     <http://emacspeak.sourceforge.net>

**Git Repository**  
<https://github.com/tvraman/emacspeak>

**Mail List**   [emacspeak@cs.vassar.edu](mailto:emacspeak@cs.vassar.edu)

**List Request**  
[emacspeak-request@cs.vassar.edu](mailto:emacspeak-request@cs.vassar.edu)

The Emacspeak mailing list is maintained by Greg E. Priest-Dorman. If you are using Emacspeak, you should join the list by sending mail to the request address, <mailto:emacspeak-request@cs.vassar.edu>.

### 5.2 Quick Installation

Here are the quick installation instructions. See the next section for detailed installation instructions.

Packages for Linux distributions such as Debian typically become available on the WWW a few weeks or months after a new version is released. The instructions below are for building and installing Emacspeak from the source distribution. If you install one of the prepackaged distributions, use the install instructions that come with that package.

- Obtain the source code — either by downloading the tar.bz2 file for the latest release — or by cloning the git repository.

```
git clone https://github.com/tvraman/emacspeak
```

- Change to the `emacspeak` directory.
- Type `'make config'` to configure the sources.
- Type `'make'` to compile the files.
- Next, decide which text-to-speech engine you will be using, and proceed to install that engine. Your choices are:

- Open Source ESpeak on Linux. Install the ESpeak packages for your system, then compile the Emacspeak ESpeak server by doing:

```
cd servers/native-espeak
make
```

- ViaVoice Outloud (AKA Eloquent). You need to purchase this engine from the voxin site. That purchase will give you install-ready packages for installing the speech engine as well as Emacspeak. See <https://voxin.oralux.net/rss.xml> for the latest packages, and <https://voxin.oralux.net> for the main Voxin Web site.

- On the Mac, you can use the builtin Mac TTS engine — `emacspeak` comes with a speech server for that TTS engine written in Python.
- Having installed and configured the TTS engine of your choice, and having built the associated speech server, set Emacspeak up to use that engine by setting environment variable `DTK_PROGRAM`. If using `bash` as your shell, add the line

```
export DTK_PROGRAM=<engine-name>
```

to your `.bash_profile`.

As an example, to use ESpeak, add

```
export DTK_PROGRAM=espeak
```

- Run it by adding the line

```
(load-file "<emacspeak-dir>/lisp/emacspeak-setup.el")
```

to the top of your `.emacs` file.

In the above, `<emacspeak-dir>` refers to the directory where you unpacked the sources.

See the next section for details on building and testing the speech server.

## 5.3 Building And Testing The Speech Server

### 5.3.1 Speech Servers

Speech servers are located in the `emacspeak/servers` directory.

- ESpeak: `servers/espeak`. This is a TCL script that uses a library built in `servers/native-espeak/`.
- Dectalk: `servers/dtk-exp`. This is a TCL script that does not depend on any native code.
- Outloud: `servers/outloud` or `servers/32-outloud` (for 64-bit machines). This is a TCL script that uses the library built in `servers/linux-outloud`. Note that a checkout from GitHub gives you a prebuilt library — however you will need to purchase the TTS engine from <http://voxin.oralux.net>.
- Mac: `servers/mac`. This is a Python script that binds to the native Mac TTS.

#### 5.3.1.1 Testing The Selected Server.

Once you have picked the TTS engine to use, run the selected server script at a shell prompt, e.g. for the `espeak` engine, execute:

```
./servers/espeak
```

This will result in a TCL prompt. Here, you can test the TTS engine by typing

```
q "this is a test."
d
```

You should hear the TTS engine speak the text.

Type `s` to stop speech. You should see a TCL prompt when you execute it.

Quit this TCL session by typing `C-d` (an end-of-file character).

## 6 Basic Usage.

This chapter gives an overview of how to use Emacspeak; for a full listing of Emacspeak keybindings, see See Section 12.6 [emacspeak], page 54. Note: This documentation should be used in conjunction with the online Emacs info pages that extensively document Emacs itself. These sections briefly describe the speech-enabling extensions. However, they should not be considered a substitute for reading the Emacs manual. How successfully you use Emacspeak will depend on how well you learn your Emacs.

All Emacs navigation and editing commands have been speech enabled. Thus, moving to the next or previous word, line or paragraph results in the text around point being spoken. Exactly how much text is spoken is determined by the amount by which you moved.

In addition, Emacspeak provides basic reading functions that can be invoked to listen to chunks of text without moving.

### 6.1 Emacspeak Overview

Emacspeak provides a small number of core services around which the remainder of the audio interface is constructed. These essential features of the software are briefly outlined in the following paragraphs; the commands by which they can be controlled will be described later in the manual.

Apart from providing a fluent spoken interface to all of Emacs' basic editing functions, Emacspeak also includes software modules which add speech feedback to a range of applications that can be run from within Emacs. In this sense, Emacspeak amounts to much more than a talking text editor; indeed, it can more aptly be characterized as a true “audio desktop”, in which speech is treated as a first-class output modality.

Emacspeak implements a special minor mode, known as “voice lock mode” (see Section 6.5 [Voice-lock], page 16) which uses distinct speech characteristics to provide aural highlighting of specific textual constructs, such as comments in program code, quoted strings and reserved words See (undefined) [Voice Lock], page (undefined). This facility is further extended when Emacspeak is used with the EWW and W3 Web browsers, to enable the semantic and structural distinctions captured by the HTML markup to be communicated efficiently See Section 10.4 [Web Browsing], page 30.

It is often desirable to exercise control over the pronunciation of a word (E.G. a technical term or a reserved word in a programming language) within specific contexts. Emacspeak maintains pronunciation dictionaries for this purpose, which may be customized by the user. Moreover, individual dictionaries can be activated selectively, depending for example on the current major mode or the name of the file which is being visited See Section 12.146 [emacspeak-pronounce], page 168.

In addition to spoken feedback, Emacspeak can generate “auditory icons” — short sound cues which alert the user to significant events, for example the opening or deletion of a file, the completion of an action, the arrival of an electronic mail message or the creation of a completion buffer. Sound cues act as a supplement to the spoken interface, and are especially valuable to the experienced user in facilitating rapid interaction. Note that in order to support auditory icons, the computer must be equipped with sound hardware for which the operating system has been correctly configured See Section 12.173 [emacspeak-sounds], page 174.



## 6.2 Using Emacs Buffers

While typing in an Emacs buffer, hitting space speaks the recently typed word. I use completion all the time; so Emacspeak will speak the completion just inserted as well as the next possible completion. In Emacs, use *M-x load-library RETURN completion RETURN* for loading the completion package.

The standard Emacs prompting functions have also been speech-enabled. Emacs prompts with available lists of completions in response to partial input wherever appropriate — all forms of completion provide speech feedback.

In addition, Emacspeak provides a number of commands for reading portions of the current buffer, getting status information, and modifying Emacspeak's state.

All of the commands are documented in the subsequent sections. They can be classified into types:

- Emacspeak commands for listening to chunks of information. The names of these commands all start with the common prefix `emacspeak-speak-`. All Emacspeak commands are bound to the keymap `emacspeak-keymap` and are accessed with the key `C-e`<sup>1</sup>. Thus, the Emacspeak command `emacspeak-speak-line` is bound to `l` in keymap `emacspeak-keymap` and can be accessed with the keystroke `C-e l`. If for some reason you wish to use some key other than `C-e` as the common keyboard prefix for all Emacspeak commands, set the variable `emacspeak-prefix`.
- The second category of commands provided by Emacspeak manipulate the state of the speech device. The names of these commands start with the common prefix `dtk-` and are bound in keymap `emacspeak-dtk-submap`.

You can access these commands via the prefix `C-e d`<sup>2</sup>. Thus, the command `dtk-set-rate` is bound to `r` in keymap `emacspeak-dtk-submap` and can be executed by pressing `C-e d r`.

Emacs has extensive online help; so does emacspeak. Please use it.

This info manual is only to get you started. You can get a summary of Emacspeak's features by pressing `C-h C-e`

## 6.3 Reading Without Moving

Emacspeak speaks information as you move around within a buffer. How much text is spoken depends on how you move, thus, when you move by words, you hear the current word; when you move by paragraphs, you hear the current paragraph spoken. In addition, the following commands allow you to listen to information without moving point (point is emacs terminology for the editing cursor).

Reading without moving point:

|                    |   |
|--------------------|---|
| <code>C-e c</code> | <code>emacspeak-speak-char</code>   |
|                    | Speak character under point. Pronounces character phonetically unless called with a PREFIX arg. |

<sup>1</sup> C-e is mnemonic for Emacspeak.

<sup>2</sup> Historically, d was mnemonic for Dectalk; note that nothing in Emacspeak is DECTalk specific.

|                         |   |
|-------------------------|---|
| <b><i>C-e w</i></b>     | <b>emacspeak-speak-word</b><br>Speak current word. With prefix ARG, speaks the rest of the word from point. Negative prefix arg speaks from start of word to point. If executed on the same buffer position a second time, the word is spelled instead of being spoken.   |
| <b><i>C-e l</i></b>     | <b>emacspeak-speak-line</b><br>Speaks current line. With prefix ARG, speaks the rest of the line from point. Negative prefix optional arg speaks from start of line to point. Voicifies if option ‘voice-lock-mode’ is on. Indicates indentation with a tone or a spoken cue if audio indentation is in use. Indicates position of point with an aural highlight if option ‘emacspeak-show-point’ is turned on — see command <b>emacspeak-show-point</b> bound to <b><i>C-e C-d</i></b> . Lines that start hidden blocks of text, e.g. outline header lines, or header lines of blocks created by command ‘emacspeak-hide-or-expose-block’ are indicated with auditory icon ellipses. |
| <b><i>C-e UP</i></b>    | <b>emacspeak-read-previous-line</b><br>Read previous line, specified by an offset, without moving. Default is to read the previous line.  |
| <b><i>C-e DOWN</i></b>  | <b>emacspeak-read-next-line</b><br>Read next line, specified by an offset, without moving. Default is to read the next line.  |
| <b><i>C-e p</i></b>     | <b>emacspeak-speak-paragraph</b><br>Speak paragraph. With prefix arg, speaks rest of current paragraph. Negative prefix arg will read from start of current paragraph to point. If voice-lock-mode is on, then it will use any defined personality.   |
| <b><i>C-e r</i></b>     | <b>emacspeak-speak-region</b><br>Speak current region delimited by <i>point</i> and <i>mark</i> . When called from a program, argument START and END specify region to speak.   |
| <b><i>C-e cap R</i></b> | <b>emacspeak-speak-rectangle</b><br>Speak a rectangle of text. Rectangle is delimited by point and mark. When call from a program, arguments specify the START and END of the rectangle.  |
| <b><i>C-e b</i></b>     | <b>emacspeak-speak-buffer</b><br>Speak current buffer contents. With prefix ARG, speaks the rest of the buffer from point. Negative prefix arg speaks from start of buffer to point. If voice lock mode is on, the paragraphs in the buffer are voice annotated first, see command <b>emacspeak-speak-voice-annotate-paragraphs</b> . This provides the auditory equivalent of <i>dropped caps</i> from visual typography.  |
| <b><i>C-e n</i></b>     | <b>emacspeak-speak-rest-of-buffer</b><br>Speak remainder of the buffer starting at point  |
| <b><i>C-e /</i></b>     | <b>emacspeak-speak-this-buffer-other-window-display</b><br>Speak this buffer as displayed in a different frame. Emacs allows you to display the same buffer in multiple windows or frames. These different windows can display different portions of the buffer. This is equivalent to leaving a book   |

open at places at once. This command allows you to listen to the places where you have left the book open. The number used to invoke this command specifies which of the displays you wish to speak. Typically you will have two or at most three such displays open. The current display is 0, the next is 1, and so on. Optional argument ARG specifies the display to speak.

*C-e LEFT* `emacspeak-speak-this-buffer-previous-display`

Speak this buffer as displayed in a ‘previous’ window. See documentation for command `emacspeak-speak-this-buffer-other-window-display` for the meaning of ‘previous’.

*C-e RIGHT* `emacspeak-speak-this-buffer-next-display`

Speak this buffer as displayed in a ‘previous’ window. See documentation for command `emacspeak-speak-this-buffer-other-window-display` for the meaning of ‘previous’.

*C-e [* `emacspeak-speak-page`

Speak a page. With prefix ARG, speaks rest of current page. Negative prefix arg will read from start of current page to point. If option ‘voice-lock-mode’ is on, then it will use any defined personality.

*C-e DIGIT* `emacspeak-speak-predefined-window`

Speak one of the first 10 windows on the screen. In general, you’ll never have Emacs split the screen into more than two or three. Argument ARG determines the ‘other’ window to speak. Speaks entire window irrespective of point. Semantics of ‘other’ is the same as for the builtin Emacs command ‘other-window’.

*C-e C-n* `emacspeak-speak-next-window`

Speak the next window.

*C-e C-p* `emacspeak-speak-previous-window`

Speak the previous window.

`emacspeak-speak-other-window`

Speak contents of ‘other’ window. Speaks entire window irrespective of point. Semantics of ‘other’ is the same as for the builtin Emacs command ‘other-window’. Optional argument ARG specifies ‘other’ window to speak.

*ESCAPE UP* `emacspeak-owindow-previous-line`

Move to the next line in the other window and speak it. Numeric prefix arg COUNT specifies number of lines to move.

*ESCAPE DOWN*

`emacspeak-owindow-next-line`

Move to the next line in the other window and speak it. Numeric prefix arg COUNT can specify number of lines to move.

*ESCAPE next*

`emacspeak-owindow-scroll-up`

Scroll up the window that command ‘other-window’ would move to. Speak the window contents after scrolling.

**ESCAPE prior****emacspeak-owindow-scroll-down**

Scroll down the window that command ‘other-window’ would move to. Speak the window contents after scrolling.

**emacspeak-speak-sexp**

Speak current sexp. With prefix ARG, speaks the rest of the sexp from point. Negative prefix arg speaks from start of sexp to point.

**C-e meta C-@****emacspeak-speak-spaces-at-point** Speak the white space at point.

## 6.4 Speech System Commands

This section documents Emacspeak’s various user commands for controlling the text to speech (TTS) system.

### 6.4.1 Character, Word And Line Echo.

By default, Emacspeak speaks characters as they are typed — this is called character echo; Words are spoken as they are completed — this is called word echo. Emacspeak can also optionally speak each line as it is typed — this is called line echo.

Character, word and line echo can be toggled — either in the current buffer — or for all buffers (globally). To toggle the specific echo functionality for all buffers, precede the specific command with **C-u**. Note that in the documentation below, this use of **C-u** is indicated using the common Emacs terminology of *prefix arg* or *interactive prefix arg*.

**C-e d k** **emacspeak-toggle-character-echo**

Toggle state of Emacspeak character echo. Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

**C-e d w** **emacspeak-toggle-word-echo**

Toggle state of Emacspeak word echo. Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

**C-e d l** **emacspeak-toggle-line-echo**

Toggle state of Emacspeak line echo. Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 6.4.2 Setting TTS Characteristics.

Emacspeak user commands can set different characteristics of the speech output such as speech rate and punctuations mode.

Emacspeak provides a number of settings that affect how attributes of the text such as capitalization are conveyed. These include settings that produce a short tone for each upper case letter, as well as a smart mode for speaking mixed case words which is especially useful when programming. These settings can be made locally in a given buffer or be applied to all buffers by preceding these commands with **C-u**.

**C-e d r** **dtk-set-rate**

Set speaking RATE for the TTS. Interactive PREFIX arg means set the global default value, and then set the current local value to the result.

**C-e d f**     **dtk-set-character-scale**

Set scale FACTOR for speech rate. Speech rate is scaled by this factor when speaking characters. Interactive PREFIX arg means set the global default value, and then set the current local value to the result.

This function is advised.

Before-advice ‘emacspeak-auto’: Automatically defined advice to speak interactive prompts.

**C-e d DIGIT**

**dtk-set-predefined-speech-rate**

Set speech rate to one of nine predefined levels using digit keys 0 through 9. Interactive PREFIX arg says to set the rate globally.

**C-e d p**     **dtk-set-punctuations**

Set punctuation mode to MODE. Possible values are ‘some’, ‘all’, or ‘none’. Interactive PREFIX arg means set the global default value, and then set the current local value to the result.

**C-e d m**     **dtk-set-pronunciation-mode**

Set pronunciation MODE. This command is valid only for newer Dectalks, e.g. the Dectalk Express. Possible values are ‘math, name, europe, spell’, all of which can be turned on or off. Argument STATE specifies new state.

**C-e d s**     **dtk-toggle-split-caps**

Toggle split caps mode. Split caps mode is useful when reading Hungarian notation in program source code. Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result. **dtk-toggle-caps**

**C-e d c**

Toggle capitalization. when set, capitalization is indicated by a *cap* before the word, and upper-case words are indicated with a *acc* before the word. Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

In addition, Emacspeak can convey the indentation of lines as they are spoken — This is relevant when programming and is the default when working with program source.

**C-e d i**     **emacspeak-toggle-audio-indentation**

Toggle state of Emacspeak audio indentation. Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 6.4.3 Miscellaneous Speech Commands

Speech can be stopped using command **dtk-stop** — though in normal use, the action of moving the cursor will stop ongoing speech. The speech server can be stopped and restarted

for cases where the user wants to switch to a different server — or in the rare case to nuke a runaway speech server.

**C-e s**      **dtk-stop**

Stop speech now.

**C-e d q**    **dtk-toggle-quiet**

Toggle state of the speech device between being quiet and talkative. Useful if you want to continue using an Emacs session that has emacspeak loaded but wish to make the speech shut up. Optional argument **PREFIX** specifies whether speech is turned off in the current buffer or in all buffers.

**C-e C-s**    **dtk-emergency-restart**

Use this to nuke the currently running dtk server and restart it. Useful if you want to switch to another synthesizer while emacspeak is running. Also useful for emergency stopping of speech.

Finally, here are the remaining commands available via the TTS related keymap **C-e d**.

**C-e d a**    **dtk-add-cleanup-pattern**

Add this pattern to the list of repeating patterns that are cleaned up. Optional interactive prefix **arg** deletes this pattern if previously added. Cleaning up repeated patterns results in emacspeak speaking the pattern followed by a repeat count instead of speaking all the characters making up the pattern. Thus, by adding the repeating pattern **‘.**’ (this is already added by default) emacspeak will say “aw fifteen dot” when speaking the string “.....” instead of “period period period period”.

**C-e d d**    **dtk-select-server**

Select a speech server interactively. This will be the server that is used when you next call either **M-x dtk-initialize** or **C-e C-s**. Argument **PROGRAM** specifies the speech server program.

**C-e d SPACE**

**dtk-toggle-splitting-on-white-space**

Toggle splitting of speech on white space. This affects the internal state of emacspeak that decides if we split text purely by clause boundaries, or also include whitespace. By default, emacspeak sends a clause at a time to the speech device. This produces fluent speech for normal use. However in modes such as **‘shell-mode’** and some programming language modes, clause markers appear infrequently, and this can result in large amounts of text being sent to the speech device at once, making the system unresponsive when asked to stop talking. Splitting on white space makes emacspeak’s stop command responsive. However, when splitting on white space, the speech sounds choppy since the synthesizer is getting a word at a time.

**C-e d RETURN**

**dtk-set-chunk-separator-syntax**

Interactively set how text is split in chunks. See the Emacs documentation on syntax tables for details on how characters are classified into various syntactic classes. Argument **S** specifies the syntax class.

- C-e d t**     `emacspeak-dial-dtk`  
 Prompt for and dial a phone NUMBER with the Dectalk.
- C-e d cap V**  
       `tts-speak-version`  
 Use this to find out which version of the TTS firmware you are running.
- C-e d z**     `emacspeak-zap-dtk`  
 Send this command to the TTS engine directly.

## 6.5 Voice Lock Mode

The status of voice lock mode can be toggled on and off in the current buffer by issuing the command **C-e d v** (M-x voice-lock-toggle).

Voice-lock is turned on automatically in all buffers that support it when Emacspeak is started.

Emacspeak can be set to disable voice lock in all of the major modes that support it. To do so, insert the following statement into your Emacs initialization file:

```
(global-voice-lock-mode -1)
```

The characteristics of the different voice personalities used by voice lock mode vary according to the capabilities of the speech synthesizer. The definitions applicable to the Dectalk family of synthesizers are contained in `dectalk-voices.el`, which is supplied as part of the Emacspeak distribution. The Emacspeak distribution also contains voice definitions for many other synthesizers.

Using voice lock mode, Emacspeak also supports many of the aural style properties defined in level 2 of the World Wide Web Consortium's Cascading Style Sheet specification (see <http://www.w3.org/TR/REC-CSS2/>). Thus, when Emacspeak is running in conjunction with a cooperating user agent, such as William Perry's Emacspeak/W3 web browser, the rendering of HTML documents can be regulated by style sheets. Examples of style rules which employ the CSS audio properties can be found in the default style sheet which is supplied in the Emacs/W3 distribution.

## 6.6 Status Commands

The following commands provide miscellaneous information.

- C-e a**        `emacspeak-speak-message-again`  
 Speak the last message from Emacs once again.
- C-e m**        `emacspeak-speak-mode-line`  
 Speak the mode-line.
- C-e cap M**   `emacspeak-speak-minor-mode-line`  
 Speak the minor mode-information.
- C-e SPC**     `emacspeak-speak-header-line`  
 Speak the header-line.

|                  |   |
|------------------|---|
| <i>C-e C-w</i>   | <code>emacspeak-speak-window-information</code><br>Speaks information about current windows.  |
| <i>C-e t</i>     | <code>emacspeak-speak-time</code><br>Speak the time.  |
| <i>C-e cap V</i> | <code>emacspeak-speak-version</code><br>Announce version information for running Emacspeak.   |
| <i>C-e f</i>     | <code>emacspeak-speak-buffer-filename</code><br>Speak name of file being visited in current buffer. Speak default directory if invoked in a dired buffer, or when the buffer is not visiting any file.  |
| <i>C-e h</i>     | <code>emacspeak-speak-help</code><br>Speak help buffer if one present. With prefix arg, speaks the rest of the buffer from point. Negative prefix arg speaks from start of buffer to point.   |
| <i>C-e k</i>     | <code>emacspeak-speak-current-kill</code><br>Speak the current kill entry. This is the text that will be yanked in by the next <i>C-y</i> . Prefix numeric arg, COUNT, specifies that the text that will be yanked as a result of a <i>C-y</i> followed by count-1 <i>M-y</i> be spoken. The kill number that is spoken says what numeric prefix arg to give to command <b>yank</b> .   |
| <i>C-e v</i>     | <code>emacspeak-view-register</code><br>Display the contents of a register, and then speak it.  |
| <i>C-e C-@</i>   | <code>emacspeak-speak-current-mark</code><br>Speak the line containing the mark. With no argument, speaks the line containing the mark — this is where ‘exchange-point-and-mark’ <i>C-x C-x</i> would jump. Numeric prefix arg ‘COUNT’ speaks line containing mark ‘n’ where ‘n’ is one less than the number of times one has to jump using ‘set-mark-command’ to get to this marked position. The location of the mark is indicated by an aural highlight achieved by a change in voice personality. |
| <i>C-e C-l</i>   | <code>emacspeak-speak-line-number</code><br>Speak the line number of the current line.  |
| <i>C-e =</i>     | <code>emacspeak-speak-current-column</code><br>Speak the current column.  |
| <i>C-e %</i>     | <code>emacspeak-speak-current-percentage</code><br>Announce the percentage into the current buffer.   |



## 7 The Emacspeak Audio Desktop.

This chapter describes the Emacspeak audio desktop and gives tips and tricks for making use of many of Emacs' powerful features.

The desktop is the work area where you organize the tools of your trade and the information objects relevant to your current activities. In the conventional world of visual GUI (Graphical User Interface)-based computing, these tools and information objects manifest themselves as a collection of icons organized in a two-dimensional work-area — this organization is designed to place frequently used objects within easy reach.

Notice that organizing one's work area in terms of visual icons arranged in a two-dimensional area where such an organization is optimized for the available “conversational gestures” of pointing and clicking is an artifact of visual interaction.

In the spirit of a truly speech-enabled application, Emacspeak does not simply provide you spoken access to a particular presentation of your work environment that was initially designed with the “sign language” of visual interaction in mind. Instead, Emacspeak enables you to work with documents and other information objects in a manner that is optimized to aural, eyes-free interaction. A necessary consequence of this setup is that users accustomed to the purely visual manifestation of today's electronic desktop do not immediately perceive the Emacspeak environment as an electronic desktop. This section of the manual hopes to introduce you to a work-style that encourages a different perspective on how one interacts with the computer in performing day-to-day computing tasks.

The end result in my case has been a marked increase in personal productivity.

### 7.1 Objects Making Up The Emacspeak Desktop

A “buffer” is the basic building block of the Emacspeak desktop. Any information presented by Emacs is placed in a “buffer”. For example, when perusing this manual within Emacs, the “file” containing the documentation is presented in a “buffer”. All information objects such as WWW pages, email messages, output from user interaction with command-line shells etc., are presented by Emacs in individual “buffers”.

Buffers provide a base level of user interaction; Emacs derives its power by allowing applications to specialize buffers to enable specific types of user-interaction that is optimized for a specific class of information.

### 7.2 An Object-Oriented Desktop

The basic “buffer object” can be specialized by Emacs applications to provide optimal interaction. This kind of specialization makes the Emacs environment an object-oriented environment; thus, the basic conversational gesture of “move to the next statement” can be assigned behavior that is appropriate to the content that the user is currently navigating. As an example of such specialization, Emacs provides “specialized modes” for working with English text, programming languages, markup source e.g. HTML (Hypertext Markup Language) or L<sup>A</sup>T<sub>E</sub>X documents and so on.

## 7.3 Emacspeak Specializes Aural Interaction

The content-specific user interaction described above is a very powerful feature of Emacs, and this is where Emacspeak derives its power. Traditionally, the ability to create buffers specialized for working with specific content-types has been used by the Emacs community to develop versatile programming environments, messaging applications such as mail and news readers, and authoring environments. The clean design present in all of these Emacs extensions in terms of separating application functionality from the user-interface, combined with the availability of the entire source code making up these packages under the open-source model has laid the ground-work for developing Emacspeak as a versatile aural counterpart to the product of years of software engineering that has been invested by the Emacs community. In short, Emacspeak would not exist in its present shape or form without this prior effort.

### 7.3.1 Audio Formatted Output

Emacspeak takes advantage of the content-specific knowledge available within specialized buffers to produce “audio formatted” output designed to optimize user interaction. A basic consequence of the above is “voice locking” in specialized modes; a more interesting consequence is the implementation of Aural Cascading Style Sheets (ACSS) in conjunction with the Emacs EWW (Emacs Web Wowser) and W3 Web browsers.

### 7.3.2 Structured Navigation:

Emacspeak also exploits content-specific knowledge to provide structured navigation of different types of electronic content. In many cases, such structured navigation is an extension of what Emacs provides by default; in other cases, Emacspeak implements the necessary extensions to provide the level of structural navigation needed to work efficiently in an eyes-free environment.

Notable among such structured navigation is Emacs’ powerful outline feature.

An example of content-sensitive navigation is provided by the `imenu` package which dynamically creates a “table of contents” based on the content that is being displayed in a given buffer. Emacs *Selective Display* lets one easily hide and expose portions of a buffer based on indentation — this feature can be used to advantage when working with program source code.

### 7.3.3 Navigating The Desktop

In addition to navigating individual information objects, the Emacspeak environment provides speech-enabled navigation of the various buffers that are currently open on the Emacspeak desktop via Emacs’ built-in list-buffers feature. Emacs’ `dired` — directory editor — for browsing the file system, along with the new speedbar package that combines features from `dired` and `imenu` round off the suite of navigational tools.

### 7.3.4 Everything Is Searchable:

Emacs derives one final advantage from using buffers as the basic building block for the entire desktop. Every Emacs buffer is searchable via a uniform and powerful search interface. Emacs’ incremental search works efficiently and consistently to enable you locate “objects” of interest either within a given document or to locate a given object from among the various

objects that are currently open on the Emacspeak desktop. This is **very powerful** — where a GUI (Graphical User Interface) user is typically limited to quickly locating an object from a relatively small collection — the size of the collection being a direct function of available display real-estate — the Emacspeak user can typically work with a far larger collection of objects. This is well-suited to the eyes-free environment, where display real-estate has no meaning; so bringing up a list of currently open buffers and performing an incremental search to locate a specific buffer is just as efficient independent of whether you have a few dozen or a few hundred buffers open.

To illustrate the above, my typical working Emacs session lasts between two and three weeks — over that time I typically accumulate several hundred open buffers holding a large variety of content ranging from program source code to email messages and WWW pages.

Ubiquitous search in the eyes-free environment is critical — as a comparison, when using a conventional, purely visual WWW browser, users have no means of easily “searching” for say the “submit” button on a WWW page. This inability is a minor annoyance in visual interaction, and the typical mouse-enabled user **never** uses the find dialog to find a submit button — it is simply more efficient to point at the submit button given the eye’s ability to quickly scan the two-dimensional display. This luxury is absent in an eyes-free environment; as a consequence, blind users confronted by the combination of a visual interface and screen-reader are typically limited to either tabbing through all the controls on a WWW page, or using the sub-optimal find dialog.

## 8 Voice Lock

See <http://tvraman.github.io/emacspeak/blog/voice-lock-refreshed.html> for a high-level overview of how Emacspeak Voice-Lock has evolved over the years.

1. Emacspeak defines a number of voice overlays such as `voice-bolden`, and `voice-lighten` that can be applied to a given voice to change what it sounds like.
2. Voice overlays are defined in terms of Aural CSS (ACSS (<http://www.w3.org/tr/css2/aural.html>)) to keep them independent of a specific TTS engine.
3. For each such overlay there is a corresponding `<overlay-name>-settings` variable that can be customized via custom.
4. The numbers in `voice-bolden-settings` as an example:

| Setting       | Value |
|---------------|-------|
| family        | nil   |
| average-pitch | 1     |
| pitch-range   | 6     |
| stress        | 6     |
| richness      | nil   |
| punctuation   | nil   |

Unset values (`nil`) show up as “unspecified” in the customize interface.

1. Do not directly customize `voice-bolden` and friends, instead customize the corresponding `voice-bolden-settings`, since that ensures that all voices that are defined in terms of `voice-bolden` get correctly updated.
2. Discovering what to customize:

Command `emacspeak-show-personality-at-point` (bound by default to C-e M-v) will show you the value of properties `personality` and `face` at point. Describe-variable on these names should tell you what to customize; so as an example:

Put point on a comment line, and hit C-e M-v: you will hear

```
Personality emacspeak-voice-lock-comment-personality
Face font-lock-comment-delimiter-face
```

Describe-variable of `emacspeak-voice-lock-comment-personality` gives:

```
emacspeak-voice-lock-comment-personality's value is acss-p0-s0-all
```

```
Documentation: Personality used for font-lock-comment-face This
personality uses voice-monotone whose effect can be changed globally
by customizing voice-monotone-settings.
```

### 8.1 How It All Works

Here is a brief explanation of the connection between `voice-bolden` and its associated `voice-bolden-settings`.

1. Voice settings are initially in `voice-bolden-settings` which is a list of numbers.
2. That list of numbers needs to be translated to appropriate device-specific codes to send to the TTS engine.

3. You do not want to do this translation *each* time you speak something.
4. So when `voice-bolden` is defined, the definition happens in two steps:
  - The list of settings is stored away in `voice-bolden-settings`,
  - A corresponding voice-name is generated — ‘`acss-a<n>-p<n>-r<n>-s<n>`’ and the corresponding control codes to send to the device are stored away in a hash-table keyed by the above symbol.
  - Finally, `voice-bolden` is assigned the above symbol.

## 8.2 What this gives

1. The ability to customize the voice via custom by editing the list of numbers in `voice-bolden-settings`
2. When that list is edited, `voice-bolden` is arranged to be updated automatically.

The following additional commands from module See Section 12.209 [emacspeak-wizards], page 232, are useful when designing aural styles.

1. `emacspeak-wizards-generate-voice-sampler`  
Generate a buffer containing text that demonstrates the effect of various aural settings.
2. `emacspeak-wizards-voice-sampler`  
Applied specified aural style to text in current region.

## 9 Using Online Help With Emacspeak.

Emacs provides an extensive online help system for helping you learn about various aspects of using Emacs. Emacspeak provides online help for its various extensions using this same help system. This chapter explains how to use the online help facilities in order to empower you in discovering powerful and versatile working techniques that will make you more and more productive in your day to day computing.

The online help options are accessed via the **C-h** prefix key, which must be followed by an additional letter or control character to designate the kind of help desired. For example, **C-h t** `help-with-tutorial` visits the Emacs tutorial in a new buffer; **C-h i** `info` enters the Info documentation system, from which you can read Texinfo manuals that have been installed on your system, including the Emacs and Emacspeak documentation; and **C-h k** `describe-key` provides a description of the Emacs function which is bound to the next key that you type. For learning about the various options that are available via the **C-h** mechanism described above, view the online help for command `help-for-help` bound to **C-h C-h** — using what has been described so far, you would achieve this by pressing **C-h k** followed by **C-h C-h**.

Emacspeak users should note that online help is typically displayed in a separate Emacs window. Where it makes sense to do so, Emacspeak will automatically speak the displayed help. Once you've asked for help, you can hear the displayed documentation as many times as you wish using Emacspeak command `emacspeak-speak-help` bound to **C-e h**. If you want to move through the displayed help a line at a time, switch to the buffer where the help is displayed — the buffer is called `*Help*`.

Often, in adding an auditory interface to an Emacs extension, such as a web browser or mail reader, Emacspeak defines additional commands and key bindings which enhance the functionality of the spoken feedback provided by the application. This manual does not purport to document all such commands. It is important, therefore, when learning to use the various Emacs extensions which comprise the 'audio desktop' (see Chapter 7 [Audio Desktop], page 18) that you take advantage of online help to obtain details of any context-specific features provided by Emacspeak. The following two commands are of particular importance in this regard:

- **C-h m** `describe-mode` explains which major and minor modes are currently in effect, and lists the commands and key bindings associated with them.
- **C-h b** `describe-bindings` lists all of the key bindings which are currently defined.

The importance of these help functions can be illustrated by the Emacs/W3 web browser. When point is positioned inside a table, certain key bindings are established with which you can access Emacspeak commands that make it possible to read the rows and columns of the table and explore its structure efficiently. To get a description of these key bindings, you can use W3 to visit the sample HTML file supplied as part of the Emacspeak distribution, and, after having moved point onto the first row of the table, issue the command **C-h m** `describe-mode` to create a help buffer containing an explanation of the features offered by W3 mode.

Emacspeak supplements the online help facilities available within Emacs by defining several commands of its own, as follows:

- **C-h c-e** `describe-emacspeak` presents a list of standard Emacspeak commands.

- *C-e F* `emacspeak-view-emacspeak-faq` opens a new buffer containing the Emacspeak FAQ, a list of frequently asked questions about Emacspeak together with their answers.
- *C-e <F1>* `emacspeak-learn-mode` enters a mode in which the function of every key that you type is spoken; this mode can be terminated with the *C-g* `keyboard-quit` command.

## 10 Emacs Packages.

Emacs — The extensible, self-documenting editor, derives its functionality from its powerful extension mechanism. This extension mechanism is used to implement many user-level applications such as mail readers, web browsers, software development environments and so on. This chapter gives directions on how to locate the right Emacs package for addressing specific tasks. The chapter is organized into logical sections that each pertain to a specific class of tasks; in individual subsections within a section give a brief overview of particular Emacs packages that have been speech-enabled.

For a categorized list of speech-enabled applications on the Emacspeak desktop, see <http://emacspeak.sf.net/applications.html>. In Emacs 24 and later, you can use Emacs' builtin package manager to install and update packages.

### 10.1 Document Authoring

The Emacspeak environment provides a rich collection of structured document authoring tools. These are well-suited for working in an eyes-free environment — you clearly do not want to use a **What You See Is What You Get** (WYSIWYG) authoring tool if you cannot see what you're getting. Structure-based authoring tools allow you to focus on the act of content creation, leaving the minutiae of visual layout to the computer.

#### 10.1.1 Creating Well-formatted Documents

Before authoring a document, decide its primary audience. If the document contains relatively simple content, e.g., no mathematical equations etc. and is primarily targeted at the web, you are probably better off using HTML. You can create well-structured HTML documents with the help of package `nxml-mode` for editing XML documents. Another option is to use `org-mode` to create a Wiki-like text document that can be easily published to multiple output formats including HTML.

Packages `org-mode` and `nxml-mode` are speech-enabled by Emacspeak to provide auditory icons, structured navigation and outlines, as well as voice locking for audio formatted feedback as you work.

If the document being authored is more complex, you are usually better off creating it in  $\text{\LaTeX}$ . Note that  $\text{\LaTeX}$  documents can be converted to HTML either via package `tex4ht` — available on the WWW.

The  $\text{\TeX}$  family of typesetting languages is suitable for producing well-formatted documents in an eyes-free environment. Unlike WYSIWYG environments, the author of a  $\text{\TeX}$  or  $\text{\LaTeX}$  document works with the content of the document, leaving it to the formatting system ( $\text{\TeX}$ ) to format the document for good visual presentation.

The `AUCTeX` package is an Emacs extension that facilitates authoring and maintaining structured documents in  $\text{\TeX}$  and  $\text{\LaTeX}$ . Package `bibtex` facilitates maintenance and use of `bibtex` bibliography databases. The `Texinfo` package allows creation of software documentation that is suitable for both printing as well as online viewing as hypertext. Emacspeak speech-enables packages `AUCTeX`, `bibtex` and `texinfo` to provide convenient spoken feedback as you create documents. For details on using these packages, see their accompanying online info documentation.



As the document preparation system of choice, Emacspeak supports a fluent speech-enabled interface to editing and formatting L<sup>A</sup>T<sub>E</sub>X documents. This interface is provided by speech-enabling *AUCTeX* mode.

Mode *AUCTeX* provides efficient keyboard shortcuts for inserting and maintaining L<sup>A</sup>T<sub>E</sub>X markup as a document is being authored. All of these editing commands provide succinct auditory feedback when used with Emacspeak. The syntax coloring provided by this mode is extended to provide *voice locking* — consequently, Emacspeak uses different voices to speak the embedded markup to set it apart from the content.

Mode *AUCTeX* can be used to create empty document templates and to insert document content at the appropriate places in the template. The mode also enables structured navigation of the document as it is being edited. Emacspeak speech-enables these template creation and structured navigation commands to produce auditory icons and succinct spoken feedback. For example, while editing, the user can quickly browse through the sections of the document and have each section title spoken. Document elements such as paragraphs and bulleted lists can be manipulated as logical units. These features are especially relevant in an eyes-free environment where the user needs to select logical parts of the document without having to point at portions of a visual display.

### 10.1.2 Searching, Replacing, And Spell Checking

Incremental search, a process by which the system prompts the user for a search string and moves the selection to the next available match while allowing the user to add more characters to the search string, is the search technique of choice among most Emacs users. As the system successively finds each match, it provides the user the option of continuing the search. Incremental search is a more complex instance of traditional search interaction because in addition to either stopping or continuing the search, the user can modify the current search in a number of ways including specifying a longer (or shorter) search string.

All of the user commands available during incremental search are documented in the online Emacs info manual. These are speech-enabled by Emacspeak to provide spoken prompts as the dialog begins; auditory icons indicate a search hit or search miss as the search progresses. Along with auditory icons *search-hit* and *search-miss* the user also hears the current line spoken, and in the case of a search hit, the matching text is *aurally* highlighted by using the standard audio formatting technique of changing voice characteristic. This feedback proves extremely effective when the search pattern appears several times on a single line; the user is unambiguously cued to the current match.

Search and replace actions are an extension to the basic conversational gestures of a search dialog. In addition to specifying a search string, the user also specifies a replacement string. On the Emacspeak desktop, this functionality is provided by command *query-replace*. The speech-enabled version of this interaction prompts the user for the search and replacement texts. The auditory feedback during the interactive search and replacement process parallels that described in the case of incremental search. Audio formatting to indicate the occurrence that is about to be replaced proves an effective means of avoiding erroneous modifications to the text being edited. As an example, consider using command *query-replace* to locate and replace the second occurrence of **foo** with **bar** in the text

‘Do not change this fool, but change this food.’

When the search matches the first occurrence of **foo** in word *fool*, the aural highlighting helps the user in answering “no” in response to question “should this occurrence be

replaced”. In addition to allowing the user to supply a simple “yes or no” answer for each match, command *query-replace* also allows the user to specify a number of other valid answers as described in the online Emacs documentation.

## Spell Checking

A more complex instance of conversational gesture “search and replace” is exhibited by standard spell checking dialogues. Spell checking differs from the search and replace dialog described above in that the search and replacement text is guessed by the system based on an available dictionary. Words that are not found in the dictionary are flagged as potential spelling errors, and the system offers an interactive search and replace dialog for each of these possible errors. During this dialog, the system successively selects each occurrence of the possibly erroneous word and offers a set of possible replacements. Unlike in the case of simple search and replace, more than one possible replacement string is offered, since a potential spelling error can be corrected by more than one word appearing in the dictionary.

In the visual interface, such spell checking dialogues are realized by displaying the available choices in a pop-up window and allowing the user to pick a correction. Once a correction is selected, the user is offered the choice of interactively replacing the erroneous word with the correction.

The spell checking interface on the Emacspeak desktop is speech-enabled to provide fluent auditory feedback. The visual interface parallels that described above and is provided by package *ispell* which is part of the standard Emacs distribution. Emacspeak provides a spoken prompt that is composed of the line containing the possibly erroneous word (which is aurally highlighted to set it apart from the rest of the text on that line) and the available corrections. Each correction is prefixed with a number that the user can use to select it. Once a correction is selected, the interaction continues with the query and replace interaction described earlier. The speech interface to the spell checker is as fluent as the visual interface. Notice that Emacspeak users do not need to concern themselves with the details of the visual display such as “the corrections are displayed in a window at the top of the screen”.

In addition to the standard spell checker described above, newer versions of Emacs include an “on-the-fly” spell checker that flags erroneous words as they are typed. Emacspeak speech-enables package *flyspell* so that such erroneous words are aurally highlighted.

## 10.2 Structured Editing And Templates

Editing documents based on the inherent structure present in the electronic encoding can be very efficient when using spoken interaction. We described mode *AUCTeX* — a specialized interface to authoring  $\text{\LaTeX}$  documents as a special instance of such structured editing in see Section 10.1 [Document Authoring], page 25.

The Emacspeak desktop allows the user to efficiently author and maintain an electronic document based either on the structure present in the markup (as in the case of mode *AUCTeX*) or on special outlining constructs that allow the user to impose a desired logical structure on the document. This section describes the effect of speech-enabling such editing tools and points out the advantages in using these in a speech oriented interface.

Template-based authoring — a technique that allows the user to create a document by inserting contents into appropriate positions in a predefined template — goes hand in hand with such structured editing. Finally, structured editing can vastly simplify the creation and maintenance of structured data, for example, the data present in a UNIX password file. Such data files are in fact nothing more than a collection of database records, where each record (or line) consists of a set of fields delimited by a special character. Maintaining such files without exploiting the underlying structure often tends to be error prone. We describe editing modes that can exploit such record structure to provide a fluent editing interface. Finally, we outline a speech-enabled interface to a spreadsheet application as a complex instance of such structured data editing.

### 10.2.1 Outline Editing

All of the various outline editing interfaces on the Emacs desktop allow the user to *hide* or *show* the contents at the different levels of a possibly nested tree structure. Components of this tree structure can be manipulated as a unit, e.g., entire subtrees can be deleted or copied. Outline editing thus provides an efficient means of obtaining quick overviews of a document.

The visual interface displays such hidden content as a series of ellipses following the visible outline heading. Emacspeak produces auditory icon *ellipses* when speaking such outline headings.

The basic *outline mode* allows the user to specify the syntax and level of outline header lines as a regular expression. This simple technique can be used to advantage in the structured navigation of large electronic texts such as those available on the Internet from online book projects such as project Gutenberg and the Internet Wiretap. For example, when this feature is activated while reading the electronic text of a Shakespearean play, the different acts can be recognized as separate nodes in the logical structure of the document. The user can then hide the document body with a single keystroke, navigate the outline headings to find a particular act, and have that portion rendered either visually or aurally. Hiding an outline level produces auditory icon *close-object*; exposing a hidden level produces auditory icon *open-object*. For details on using mode `outline`, see the relevant section of the online Emacs info manual.

The basic outline facility described above is applicable to all content being edited or browsed on the Emacspeak desktop. In addition, Emacspeak has other specialized outline editing modes such as *folding mode* that provide extended outlining facilities. In mode *folding*, the user can create (possibly nested) *folds* — logical containers of content that are delimited by a special *fold mark*. The fold mark is typically a text string that is chosen based on the type of content that is being manipulated. Thus, when *folding* a C~program source file, fold marks are created from C~comments. The user can *open* or *close* any or all folds in a document, and these actions are accompanied by auditory icons *open-object* and *close-object*. By entering a fold, all editing actions are restricted to the contents of that fold; this proves a simple yet convenient way of constraining editing actions such as search and replace to specific portions of large documents. Folds can be manipulated as a unit and can be deleted, copied or moved.

Mode *folding* proves especially effective in maintaining large software modules. The technique can be used to advantage by creating folds for different sections in a module and by further placing each function appearing in a particular section in a fold of its own.

Complex functions can themselves be folded into sections where each section reflects a different stage in the algorithm implemented by that function. Thus, the technique of folding can be used as an effective aid in *literate* programming. I typically write software modules by first creating an outline structure using folds that reflect the various components of that module. Next, I populate each fold with the function signatures and documentation for the functions in each section. When I am satisfied with the overall architecture of the module, I fill in the function skeletons with actual program code. This technique is used extensively in maintaining the Emacspeak code base.

### 10.2.2 Template-based Authoring

Emacspeak supports two powerful template-based authoring subsystems that enable the user to quickly create and fill in templates. *Dmacro* (short for “dynamic macros”) allows the user to define and invoke template-based macros that are specialized for creating different types of content. For example, when programming in C, the user can invoke dynamic macros that insert skeletons of standard C constructs with a few keystrokes. This form of editing has numerous advantages in creating consistently structured code when developing large software modules. Emacspeak speech-enables mode *dmacro* to provide succinct spoken feedback as templates are created and filled. The user invokes *dmacro* via command *insert dmacro*, which is typically bound to a single key. This results in a dialog where the user is prompted to pick one of the dynamic macros available in the current context. If the user's choice can be uniquely completed, that completion is spoken; otherwise, the list of possible completions based on the available partial input is spoken, accompanied by auditory icon *help*.

An alternative template-editing facility is provided by mode *tempo*. This mode is designed to be used in creating template-based editing tools for specific markup languages; a good example is mode *html-helper*, a mode for creating and updating HTML documents for publishing on the WWW (see Section 10.1 [Document Authoring], page 25).

### 10.2.3 Maintaining Structured Data

Consider the following entry from file `/etc/passwd` on my laptop.

```
'aster:KoUxwQ2:501:100:Aster Labrador:/home/aster:/bin/bash'
```

File `/etc/passwd` is a simple instance of a text file that stores structured data records as a series of fields delimited by a special character. Each item in the file acquires *meaning* from the *position* in which it occurs for example, the fifth field contains the **user name**, Aster Labrador. More generally, structured data where each field in a record has *meaning* is found throughout the desktop in applications ranging from entries in a rolodex to rows in a spreadsheet.

Typically, users do not directly edit the stored representation of the data. Instead, application front-ends provide a more human-centric (and hopefully less error prone) user interface for modifying and maintaining the data. Thus, spreadsheet applications present the data as a two dimensional table that is automatically updated to reflect changes in the underlying data. The two dimensional table is perhaps the most commonly found visual front-end to structured data tables with row and column headers prove a succinct way of

implicitly displaying the *meaning* along with the *value* of the fields making up each data record.

## 10.3 Browsing Structure

This section describes packages that allow you to browse structured information — these are distinct from the tools described in Section 10.2 [Structured Editing], page 27, in that they are typically used for working with content that is read-only e.g., online documentation.

## 10.4 Web Browsing

Note that there is newer material at <http://emacspeak.blogspot.com/2014/05/emacspeak-eww-updates-for-complete.html> and in See Section 12.74 [emacspeak-eww], page 99. For Emacs 24.4 and later, note that the built-in Web browser EWW is also the browser of choice for emacspeak.

— T. V. Raman, October 2014.

This document, “The State of Web Browsing in Emacspeak” describes the primary web browsers in use under emacspeak and ways they might be used more efficiently.

Version 1.0 — February, 2007.

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### 10.4.1 Intro

Web browsing in emacspeak can be made as simple or as complicated as you wish to make it. On the one hand, all that need be done is to open a web browser and fetch a particular url. This works fine in many cases with exceptions being things like html tables. On the other hand, if you spend a little time learning a particular browser and its functionality, web browsing can be made more efficient and the web more navigable.

This document is intended to be an introduction to the 2 primary browsers that run under emacs: emacs/w3 and EWW. I also intend to introduce a couple of add-on packages intended to make life easier and to address specific shortcomings.

The primary reason for this documentation is the fact that a lot of the documentation of the various functions tells exactly what it does, but not why or in what circumstance one might use it. Hopefully I can remedy that here.

## Who this document is intended for

While this document is geared toward emacspeak users, it might be helpful for other users as well. I have tried to note where functions are specific to emacspeak.

## Assumptions

This document assumes emacs is installed. If reading the section on a particular browser and trying out the associated functions, it, of course, assumes that the browser is installed and working. For features specific to emacspeak, a working install of emacspeak is necessary. It is far beyond the scope of this document to help with the installation of these programs.

For help with installing any of the above bits of software, the following mailing lists and / or newsgroups are available:

- emacs - `gnu.emacs.help`
- emacs/w3 - the mailing list for w3 is pretty dead. Sorry. The documentation is, however, not terrible.
- emacspeak - see <http://emacspeak.sf.net>

It is highly suggested that the mailing list archives, google, and the relevant documentation be consulted before posting messages to any mailing list. Nothing is more irritating than answering the same questions over and over. Those of you with kids know what I am talking about.

It is also assumed that the reader is comfortable with using emacs itself. Understanding the convention for communicating keystrokes to run commands, navigating documents, and the like are not covered.

### 10.4.2 emacs-w3

emacs/w3 is a web browser written completely in emacs lisp. It has some really nice features applicable to the emacspeak community such as the ability to navigate tables and support for the w3c's aural cascading stylesheets.

#### emacs/w3 advantages

As mentioned above, the ability to navigate tables is a super help. emacs/w3 also has support for cascading stylesheets. This allows incredible control of voices used for what would normally be visual attributes of the text such as bold, italics, preformatted text and the like.

Another advantage of emacs/w3 is that it is written completely in emacs lisp. With some effort, emacs/w3 is very customizable and quite extendable.

#### emacs/w3 disadvantages

Rendering can be slow. Sometimes it can be painfully, excruciatingly slow. That might be a slight exaggeration, but slow it is. This is because it is written in lisp... something I mentioned just above as a strength. It is a trade-off, but one that some see as worth it. There are, however, some things that can be done to speed up the browsing process. See `[emacspeak-w3-xsl-transform]`, page 34, for more information.

Another disadvantage is that emacs/w3 chokes on some pages. Sometimes it gives error messages and doesn't display anything. Sometimes it does this to some people and doesn't do it to others as we saw on the emacspeak mailing list a short time ago. Sometimes it gives error messages and renders the page anyway.

One other major annoyance of emacs/w3 is that sometimes it simply stops doing anything while rendering a page. There is a way I have found to get around this. I hit `C-g`. I usually wait five to ten seconds and then simply quit, using `C-g`. Not always, but usually, the page has already completed downloading and is being rendered and it therefore is not a problem.

emacs/w3 also has no bookmark functionality. This can be remedied in several ways. One simple way, mentioned below, is to use the emacs package `bmk-mgr`. Another way is

to use org mode with remember which is the method used by Dr. Raman, the author of emacspk. See See [bmkngr], page 36, later in this manual, for more information.

History back and next in the browser also seem to be broken but this is not generally a problem for me as I never look back.

## emacs/w3 native functions

Many functions for efficient navigation of the internet are native to emacs/w3. Some of the most useful functions are listed below

Unlike emacs-w3m, the information presented by `describe-mode` is very complete, but a little terse. All the function names are listed and asking for help on particular functions works well. That being said, use this list to augment, not replace, the built-in help that is available in emacs.

`C-f` will open a new buffer containing the cell point is in. In most instances, this works very well. Imagine you are looking at a page that is divided into 4 distinct areas: a cell at the top of the page that contains a banner and some navigation, and a “body” area that is divided into three sections consisting of more navigation, an article, and advertisement. If point is in the main article cell, using `C-f` will open another buffer that contains only the text of that cell, the article you are interested in.

One caveat is that this does not always work as advertised. Sometimes the leftmost character of each line is missing. At least it makes for interesting reading. Usually when I have this problem I simply exit that buffer and linearize the tables in the original page.

The `m` key executes a very useful command. It will complete a link on the page. Imagine that you are reading through a document and you hear a link that you need to visit. You could tab through all the links until you hear the one you want or you could hit the `m` key and enter the link text at the prompt. Completion is available and it is not case-sensitive. Efficient, no?

The period in a cell will speak the contents of that particular cell. This command is, in my opinion, most useful when navigating tables with cells that have only one paragraph or less. I tend to not read whole articles in this manner because, inevitably, someone will interrupt me and I will lose my place.

The equals key, while in a table cell will give you the cell information. It tells you the row and column position, the size of the table, and at what nesting level the table is.

The pipe key, is used to read the table column. As this command seems to read the rectangle the column is in, this command is most useful when used in a table where there is no column spanning, i.e. all rows and columns are uniform.

Here is a list of table navigation commands:

- `C-e +` moves to the beginning of the next table row.
- `C-e -` moves to the beginning of the previous table row.
- `C-e <` moves to the beginning of the table.
- `C-e >` moves to the end of the table.
- `C-e =` moves to the top of the table column.
- `C-e <DOWN>` moves to the next cell down in the same column.
- `C-e <UP>` moves to the previous cell in the same column.

- **C-e** <LEFT> moves to the previous cell in the same row.
- **C-e** <RIGHT> moves to the next cell in the same row.

As you can see, table navigation in w3 can be easy and fun.

## emacspeak specific functions for emacs/w3

An incredible amount of work has been done by the emacspeak community to make emacs/w3 accessible to those with visual impairments. Here is an explanation of some of those functions.

The command **C-t** will toggle the visibility of table borders. This command might be useful where you want to hear all punctuation symbols on a page but the table characters get in the way.

The quote key will execute a command that allows you to skim the contents of the buffer. it will read the page, paragraph-by-paragraph, pausing between paragraphs to prompt you to move on by pressing **SPACE**. If you hit **SPACE** in the middle of a paragraph, it skips to the next paragraph.

Another skimming command is bound to the **z** key. This will allow you to zip through web pages by logical blocks such as div, paragraph, and table tags.

Using the imenu facilities is another way of skimming the document and getting to the information you desire. imenu works especially well for well-structured documents. The first thing that need be done is to copy the **w3-imenu.el** file from the **contrib** directory of the **w3** directory to somewhere in your load path. I am using the cvs version of w3 and my w3 directory is under **/home/rdc/sourceforge**. The easiest thing to do is probably to do an **M-x locate** and search for **w3-imenu.el** to see where it is. After locating the file, move it into your load path. In my case I have it under **/home/rdc/share/emacs/site-lisp/**.

There are two ways to use the imenu facilities: automatically and manually. Since I do not use imenu on every site, I prefer to invoke it manually to save the time required to build the index.

Once things are in place, invoke imenu with the **j** key. This will ask you for an index position. Hitting **TAB** will give you a list of the possible index positions. Another way of navigating the document would now be to use the keys **M-n** and **M-p** to go to the next and previous index positions. Note that you have to build an index for a page before you can use these commands.

**Cap A** and **cap R** serve the same function. **Cap A** browses the Atom feed at point and **cap R** browses the rss feed at point. This is useful to sample the feed, so to speak, before going through the trouble of configuring your feed reader to fetch the feed. It might also be useful to grab the headlines from a page and present them in a more concise, readable format. If using the sort-tables xsl transform, there will be a link at the top of the page if there is an rss feed available. See See [emacspeak atom and emacspeak rss], page 36, for more information.

Google provides many useful tools for web surfers. The following commands are useful to access much google goodness.

**Cap C** extracts the current page from the google cache. With a prefix argument it will extract the link under point. This is useful for those times when a particular site is down...



maybe it is in the cache... maybe it is not. It can also be used for when particular pages are removed from a site like in the case of a government conspiracy. Are we at war with Eurasia or East Asia?

The slash key will search google for pages similar to the current page.

The command `g` will do a google search restricted to the site of the document.

The `l` command googles for who links to this page.

The command `t` runs the url under point through the google transcoder. This is useful for sites that are heavy on the use of tables and the xsl transforms are not helpful. It also works on some sites that use javascript to go to the next page in the story, such as Reuters. Using a prefix argument with this command will untranscode the url under point for pages that are currently transcoded.

`Cap T` will jump to the first occurrence of the title in the document. Multiple consecutive executions of this command will jump to further occurrences. This command is probably one of the most useful timesavers while web browsing.

`M-s` jumps to the “submit” button for the form you are editing.

`M-r` plays the media stream at point with the default media player.

The `y` command will rewrite the url of the url under point. This is useful for those sites you frequent. Often, sites that have printer friendly content have a specific way in which the url is written. For The first time you run this command in a particular buffer you are prompted for a pattern to use. The pattern is in the form of

```
‘("from string" "to string")’
```

The opening paren is supplied. Remember to quote the strings or you will get an error. From this point on, until you kill the buffer in which you wrote the rule, hitting `y` on a link will use this rewrite rule to visit the page. If you mistyped the rule, providing a numeric argument will allow you to rewrite the rewrite rule. I love alliteration.

Saving the best for last, `e` is the xsl map prefix. As I mentioned in the section on `emacs-w3m`, xsl transforms are some powerful magic that takes a web page and transforms it in some way. Linearizing tables is a good example, and the one I use most often.

The keystroke `e a` prompts for an xsl transform to apply to the current page. If you know the name of the particular transform you want you can use tab completion to select it. Otherwise, you can hit `TAB` to get a buffer that contains the list of choices.

If you know that you want a particular transform done automatically you can use the command `e s` to select a transform and then `e o` to turn xslt on (the same command will turn xslt off). Then, every page opened from that point on will have the transform applied.

There is the variable `emacspeak-w3-xsl-transform` that can be set via the usual methods. This variable specifies a transform to use before displaying a web page. There is an advantage to turning on xsl transforms all the time. If you use the `identity.xsl`, the `linearize-tables.xsl` or the `sort-tables.xsl` it can actually speed up rendering of the page. This is because the transforms provide clean and balanced html to the renderer. Additionally, using `sort-tables.xsl` or `linearize-tables.xsl` will provide a little more boost as rendering nested tables is particularly difficult for a web browser.

Sometimes it is just easier to read the printer friendly version of a story instead of having to linearize the tables and search for the content. Also, some sites, like the New York Times,

I believe, make you navigate several pages to read the whole story, but if you select a “Print this story” link you can read the entire story on one page formatted without a lot of the cruft on the normal page. This is where the `e Cap P` command comes in. It will extract all the print streams from the current document.

Closely associated commands are `e r` and `e Cap R` which extract the media streams from the current page and from the link under point, respectively.

The command `e y` is another command that is useful for frequented sites. It does the same as the `y` command above in that it rewrites the url at point and follows it. In addition, it filters the output by a particular CSS class.

The command `e e` does more magic to the url at point. It processes the url using a specific function. For example, it can be used in retrieving radio content from the BBC. If you execute `C-e u` and type in *BBC Channel On Demand* or use tab completion to get the same, and then type in *radio4* you will be presented with a page containing a plethora of links to other pages containing information about particular shows. On these pages there is, somewhere, a link that will play the program. If you hit enter on one of the links on the first page, you will be taken to one of these description pages. By using the `e e` command on a link you cut out this middle step and proceed directly to playing the program you are interested in.

If there is no executor defined for a current buffer, hitting TAB after `e e` will give you a list of possibilities to choose from. One nice feature of this function is that it can be used for any function. If you cannot remember the keystroke that will play the url under point in `emacspeak-m-player`, but you know what it is called, you can hit `e e` and then enter the name of the function. Nice.

The `e f` command will run the current page through an XPath filter and return the results. For more information on XPath, see <http://en.wikipedia.org/wiki/XPath>. If you wanted to see only the links on a page, when prompted enter `//a` and you will be returned every link on the page. If you wanted to see only the contents of “p” tags, you would enter `//p`. This can be useful for many things, form elements included. Giving this command a prefix argument will reverse the filter, giving you everything but the content of the specified tag.

A related command can be invoked with the `e p` keystroke. This command does the same as the filter above but works on the url under point.

## emacs/w3 tips and tricks

As I mentioned above, using `C-g` when it seems the browser is not responding will often display the page with no ill effects. Your mileage may vary. Taxes, tags and title are extra.

Also mentioned above is the use of sort-tables or identity as an xsl transform to speed up the rendering of pages. Every little bit helps.

Another useful tip is the use of the `k` key. This key will place the current url in the kill-ring for later yanking. If a page will not render correctly, using `k` will get the url and allow me to pass it to `emacs-w3m`. The counterpart to this command, `cap K` puts the url under point in the kill-ring.

### 10.4.3 Add-ons

Some of these are `emacspeak` specific, some are not. You can usually tell by the name.

## emacspeak url template

I love this package. Since changing my primary browser to emacs/w3 I have really been giving the `url-template` package a workout. The `url-template` package contains templates that prompt you for information to supply to various sites to retrieve information without all the fuss of having to go to the site and navigate it. One really nice thing about url-templates is the fact that they need not be web pages. Media streams can also be made into url-templates.

The way to get to the templates is with the command `C-e u`. A TAB at the prompt will give you a list of the available templates. You should go now and have a look at the info manual section on See Section 12.233 [URL Templates], page 280, and read it. I'll wait here.

By the way, the ones I find most useful are the “Google Hits”, “emacswiki search” “NPR On Demand” and “Weather forecast from Weather Underground”.

## emacspeak atom and emacspeak rss

These are fairly simple rss and atom browsers for the emacspeak desktop. Using the Customize interface you add feeds in the form of titles and urls. Then you call the readers with `C-e C-u` for rss feeds and use `M-x emacspeak-atom-browse` for atom feeds. There is also emacspeak support for newsticker, an rss / atom reader that is a part of emacs 22, but I have never used it.

I personally use See Info file `gnus`, node ‘Top’, for rss feeds but setting gnus up for only that purpose is like hunting rabbits with a bazooka.

## emacspeak websearch

`emacspeak-websearch` provides more search options than you can shake a stick at; `emacspeak-websearch` provides search for dictionaries, news sites, software sites, google tools, weather, currency converter and much more. It can be accessed with the keystroke `C-e ?`. At the prompt, you can enter another question mark to get a list of the available search options. You will then be prompted for the necessary information. One of the nice things about this package is that it attempts to jump to and read the most relevant information on the result page. Module `emacspeak-websearch` is complemented by module `emacspeak-url-template`; that module provides URL templates that prompt for and retrieve the relevant information from complex Web pages.

See Section 12.204 [`emacspeak-websearch`], page 227, and See Section 12.195 [`emacspeak-url-template`], page 215, for more information.

## bmk-mgr

This is a newcomer to the emacspeak world. In the interest of full disclosure, I am the one that wrote the emacspeak module that makes this package accessible. It is a bookmarks manager that works with both emacs/w3 and emacs-w3m. As of the writing of this document there are still some issues, especially when using it on emacs version 22, but those are being worked on. I think this is a good solution to the problem of emacs/w3 not having bookmarks functionality and providing one central bookmark location for those who reg-

ularly use both browsers. See <http://www.emacswiki.org/cgi-bin/wiki/EmacsBmkMgr>, for more information.

#### 10.4.4 Conclusion

emacspeak makes the internet not only accessible to those with visual impairments, but it makes browsing and information retrieval quick and efficient. If a user will spend a little time up front to learn the tools available to access the web, the increase in efficiency and ability will more than make up for the time spent. The nice thing about these tools is that you can integrate them in your day-to-day as you have the time. While it is not necessary to use everything mentioned in the above document, if you add some of these tools to your repertoire you will not be sorry.

In the end, no one makes you use a hammer to drive nails but it sure beats using a banana.

### 10.5 Messaging

Working with messaging applications involves both authoring and browsing content. Emacspeak provides a rich set of speech-enabled messaging tools. Further, all of the tools described in the previous sections integrate smoothly with the messaging applications described here; this means that you do not need to re-learn a new set of work habits when dealing with content in your messaging application.

### 10.6 Editing Code

Files containing program source code form a very specific class of **structured** documents. Unlike documents meant for human consumption that are often only loosely structured, program source (as a concession to the computer's intolerance of lack of structure) are per force well-structured and adhere to a fairly stringent syntax.

The Emacs environment provides editing modes that are specific to creating and maintaining software written in most popular programming languages. Many of these editing modes are speech-enabled by Emacspeak. Speech-enabling these modes includes providing a rich set of navigational commands that allow you to move through the source efficiently. In addition, Emacspeak's core **voice-lock** facilities are used to produce audio formatted output — this helps you spot errors quickly.

### 10.7 Development Environment

In addition to providing specialized editing modes for creating and maintaining program source, Emacs provides a rich set of software development tools that can be combined to create powerful Integrated Development Environments (IDE). These IDEs are speech-enabled by Emacspeak to provide a versatile and powerful environment for eyes-free software development.

### 10.8 Desktop Management

Emacs provides an integrated environment for performing all of ones day-to-day computing tasks ranging from electronic messaging to software development. The environment derives its power from the fact that this integration allows for content to be handled across different

tasks in a seamless manner. In order to work effectively with large Emacs sessions with many documents and applications open at the same time, the Emacspeak desktop provides a powerful collection of desktop management tools designed to help the user easily locate objects that pertain to a given task.

## 10.9 Personal Information Management

This section describes speech-enabled tools designed to aid in personal information management such as maintaining a daily calendar.

## 10.10 Desktop Applications

### 10.10.1 Spread Sheets

Spreadsheet applications present a two dimensional view of structured data where the field values are (possibly) mutually dependent. On the Emacspeak desktop, a speech-enabled spreadsheet application can be used to manipulate such data-driven documents ranging from simple cheque books and expense reports to complex investment portfolios. Where the traditional visual interface to spreadsheets is typically independent of the semantics of the data stored in the spreadsheet, the speech-enabled interface is derived from the *meaning* of the various fields making up the data. When presenting such information on a visual display, implicit visual layout can be used to cue the user to the meaning of different data fields.

On the other hand, in the case of an actively scrolling auditory display, the spoken output needs to explicitly convey both the value and interpretation of the different data items. In addition, the interface needs to enable an active dialog between user and application where the user is able to query the system about the possible meaning of a particular item of data.

Finally, the aural interface needs to enable *multiple* views of the display. In the visual interface, such *multiple* views are automatically enabled by the two dimensional layout combined with the eye's ability to move rapidly around the layout structure. Thus, while viewing any particular row of a portfolio, one can immediately see the current total value as well as the net gain or loss. The Emacs spread-sheet package `dismal` can be retrieved from <ftp://cs.nyu.edu/pub/local/fox/dismal>.

### 10.10.2 Forms Mode

*Forms* mode an Emacs mode designed to edit structured data records like the line shown from file `/etc/passwd` presents a user-friendly visual interface that displays the field name along with the field value. The user can edit the field value and save the file, at which point the data is written out using the underlying `:` delimited representation. Mode *forms* provides a flexible interface to associating meaning to the fields of such structured data files. For details on its use, see the forms-mode section of the online Emacs info documentation.

### 10.10.3 OCR — Reading Print Documents

Module `emacspeak-ocr` implements an OCR (Optical Character Recognition) front-end for the Emacspeak desktop.

Page image is acquired using tools from package `SANE` (Scanner Access Now Easy). The acquired image is run through the OCR engine if one is available, and the results

placed in a buffer that is suitable for browsing the results. This buffer is placed in mode `emacspeak-ocr-mode` a specialized mode for reading and scanning documents.

### 10.10.3.1 Emacspeak OCR Mode

Emacspeak OCR mode is a special major mode for document scanning and OCR.

Pre-requisites:

- A working scanner back-end like SANE on Linux.
- An OCR engine.

Make sure your scanner back-end works, and that you have the utilities to scan a document and acquire an image as a tiff file. Then set variable `emacspeak-ocr-scan-image-program` to point at this utility. By default, this is set to ‘`scanimage`’ which is the image scanning utility provided by SANE.

By default, this front-end attempts to compress the acquired tiff image; make sure you have a utility like `tiffcp`. Variable `emacspeak-ocr-compress-image` is set to ‘`tiffcp`’ by default; if you use something else, you should customize this variable.

Next, make sure you have an OCR engine installed and working. By default this front-end assumes that OCR is available as `/usr/bin/ocr`.

Once you have ensured that acquiring an image and applying OCR to it work independently of Emacs, you can use this Emacspeak front-end to enable easy OCR access from within Emacspeak.

The Emacspeak OCR front-end is launched by command `emacspeak-ocr` bound to `C-e C-o`.

This command switches to a special buffer that has OCR commands bounds to single keystrokes — see the key-binding list at the end of this description. Use Emacs online help facility to look up help on these commands.

Mode `emacspeak-ocr-mode` provides the necessary functionality to scan, OCR, read and save documents. By default, scanned images and the resulting text are saved under directory `~/ocr`; see variable `emacspeak-ocr-working-directory`. Invoking command `emacspeak-ocr-open-working-directory` bound to `d` will open this directory.

By default, the document being scanned is named ‘untitled’. You can name the document by using command `emacspeak-ocr-name-document` bound to `n`. The document name is used in constructing the name of the image and text files.

Here is a list of all emacspeak OCR commands along with their key-bindings and a brief description:

|                    |   |
|--------------------|---|
| <code>digit</code> | <code>emacspeak-ocr-page</code> Jumps to specified page in the OCR output.  |
| <code>c</code>     | <code>emacspeak-ocr-set-compress-image-options</code> Interactively update image compression options. Prompts with current setting in the minibuffer. Setting persists for current Emacs session. |
| <code>i</code>     | <code>emacspeak-ocr-set-scan-image-options</code> Interactively update scan image options. Prompts with current setting in the minibuffer. Setting persists for current Emacs session.            |
| <code>spc</code>   | <code>emacspeak-ocr-read-current-page</code> Speaks current page.   |

|            |   |
|------------|---|
| <i>s</i>   | <i>emacspeak-ocr-save-current-page</i> Saves current page as a text file.                 |
| <i>p</i>   | <i>emacspeak-ocr-page</i> Prompts for a page number and moves to the specified page.      |
| <i>]</i>   | <i>emacspeak-ocr-forward-page</i> Move forward to the next page.                          |
| <i>[</i>   | <i>emacspeak-ocr-backward-page</i> Move back to the previous page.                        |
| <i>d</i>   | <i>emacspeak-ocr-open-working-directory</i> Open directory containing the results of OCR. |
| <i>n</i>   | <i>emacspeak-ocr-name-document</i> Name current document.                                 |
| <i>o</i>   | <i>emacspeak-ocr-recognize-image</i> Launch OCR engine on a scanned image.                |
| <i>i</i>   | <i>emacspeak-ocr-scan-image</i> Acquire an image using <b>scanimage</b> .                 |
| <i>RET</i> | <i>emacspeak-ocr-scan-and-recognize</i> Scan and recognize a page.                        |
| <i>w</i>   | <i>emacspeak-ocr-write-document</i> Write all pages of current document to a text file.   |
| <i>q</i>   | <i>bury-buffer</i> Bury the OCR buffer.   |
| <i>c</i>   | <i>emacspeak-ocr-customize</i> Customize Emacspeak OCR settings.                          |
| <i>?</i>   | <i>describe-mode</i> Describe OCR mode.   |

## 11 Running Terminal Based Applications.

You can use the terminal emulator mode to run arbitrary terminal-based programs from within Emacs. You open a terminal emulator buffer using *M-x term*, with an extra carriage return to accept the default shell (such as **bash**). (Incidentally, don't confuse this command with *M-x terminal-emulator*, which starts an older terminal emulator mode not supported by Emacspeak.)

Three kinds of commands are used within the terminal emulator. Normal term commands use a prefix of *C-c*. The emacspeak commands for *eterm* mode use a prefix of *C-t*. Anything else is a normal shell command.

There are two sub-modes of term mode: char sub-mode and line sub-mode. In char sub-mode, emacspeak will only speak the final chunk of output — typically the last line displayed. Each character typed (except 'term-escape-char') is sent immediately. Use char sub-mode for screen oriented programs like **vi** or **pine**.

In line sub-mode, program output is spoken if user option *eterm-autospeak* is turned on. When you type a return at the end of the buffer, that line is sent as input, while return not at end copies the rest of the line to the end and sends it. When using terminal line mode with option *eterm-autospeak* turned on, speech feedback is similar to that obtained in regular *shell-mode* buffers.

The default is char sub-mode. You can switch to line sub-mode with *C-c C-j* (recall that control J is a linefeed), and back to char sub-mode with *C-c C-k* (think of character spelled with a K).

Note: Use char-mode with the terminal emulator for running screen-oriented programs like **Lynx** or **Pine**. For regular shell interaction just use *M-x shell* instead of using the terminal emulator.

### 11.1 Char Sub-mode of Term Mode

In char sub-mode of term, each character you type is sent directly to the inferior process without intervention from emacs, except for the escape character (usually *C-c*).

Here are some of the useful commands for the char sub-mode. Note that the usual commands for killing a buffer or switching buffers do not work in this mode, so new key bindings are supplied. The first five commands are different ways of leaving this mode.

*C-c C-j*

*M-x term-line-mode*

Switch to line sub-mode of term mode.

*C-c o*

*M-x other-window*

Select the next window on this frame. All windows on current frame are arranged in a cyclic order. This command selects the next window in that order. If there are no other windows, this command does nothing.

*C-c C-f*

*M-x find-file*

Switch to a buffer visiting a file, creating one if none already exists.



*C-c 0*

*M-x delete-window*

Remove current window from the display.

*C-c k*

*M-x kill-buffer*

Kill the current buffer.

*C-c C-x C-c*

*M-x save-buffers-kill-emacs*

Offer to save each buffer, then kill this Emacs process.

*C-c C-d*

*M-x list-directory*

Display a list of files in or matching DIRNAME, a la 'ls'. DIRNAME is globbed by the shell if necessary. Prefix arg (*C-u*) means supply -l switch to **ls**. The list appears in a second window.

*C-c 1*

*M-x delete-other-windows*

Delete all other windows in the frame, making the current window fill its frame.

*C-c C-c*

*M-x term-send-raw*

Send the last character typed through the terminal-emulator without any interpretation.

*C-c (*

*M-x start-kbd-macro*

Record subsequent keyboard input, defining a keyboard macro. The commands are recorded even as they are executed. Use *C-c )* to finish recording and make the macro available. Use *M-x name-last-kbd-macro* to give it a permanent name. Prefix arg (*C-u*) means append to last macro defined; This begins by re-executing that macro as if you had typed it again.

*C-c )*

*M-x end-kbd-macro*

Finish defining a keyboard macro. The definition was started by *C-c (*. The macro is now available for use via *C-c e*, or it can be given a name with *M-x name-last-kbd-macro* and then invoked under that name.

*C-c e*

*M-x call-last-kbd-macro*

Call the last keyboard macro that you defined with *C-c (*. A prefix argument serves as a repeat count. Zero means repeat until error.

You can get a list of all the key sequences with a *C-c* prefix by typing *C-c C-h* while in this sub-mode. Some of those commands are only available in the char sub-mode, while others are generally available.

## 11.2 Line Sub-mode of Term Mode

In line sub-mode of term mode, emacs editing commands work normally, until you type **RETURN** which sends the current line to the inferior process.

Here are some of the useful commands for the line sub-mode of the term mode. In addition, the usual commands for handling a buffer work in this mode (**C-x o** to switch windows, **C-x k** to kill a buffer, **C-x f** to find a file, and so forth).

**C-c C-k**

**M-x term-char-mode**

Switch to char sub-mode of term mode.

**C-c C-z**

**M-x term-stop-subjob**

Stop the current subjob. Resume the subjob in the foreground with the ordinary command **fg**, or run it in the background with **bg**. WARNING: if there is no current subjob, you can end up suspending the top-level process running in the buffer. If you accidentally do this, use **M-x term-continue-subjob** to resume the process. (This is not a problem with most shells, including **bash**, since they ignore this signal.)

**C-c C-\**

**M-x term-quit-subjob**

Send quit signal to the current subjob.

**C-c C-c**

**M-x term-interrupt-subjob**

Interrupt the current subjob.

**C-c C-w**

**M-x backward-kill-word**

Kill characters backward until encountering the end of a word.

**C-c C-u**

**M-x term-kill-input**

Kill all text from last stuff output by interpreter to point.

**C-c C-a**

**M-x term-bol**

Goes to the beginning of line, then skips past the prompt, if any. If a prefix argument is given (**C-u**), then no prompt skip — go straight to column 0.

**C-c C-d**

**M-x term-send-eof**

Send an end of file character (EOF) to the current buffer's process.

You can get a list of all the key sequences with a **C-c** prefix by typing **C-c C-h** while in this sub-mode. Some of those commands are only available in the line sub-mode, while others are generally available.

### 11.3 Eterm Mode Commands

The eterm mode maintains a pointer, which is not necessarily the same as the terminal's cursor. It is intended to be used in eterm's char submode. In char submode, `C-t ,` (that's control-t followed by comma) will tell you where the eterm pointer is. `C-t C-i` will tell you where the terminal's cursor is. The top left corner of the window is "row 0 column 0".

The eterm pointer can be moved with `C-t <` (to the top of the screen), `C-t >` (to the bottom of the screen), `C-t n` (to the next line), `C-t p` (to the previous line), and `C-t .` (to the cursor). Each of these also speaks the line the pointer moves to. You can also search forward with `C-t s`.

These commands speak without moving the pointer: `C-t l` (current line), `C-t w` (current word), `C-t c` (current character), and `C-t SPACE` (from eterm pointer to cursor).

You may enter review mode with `C-t q`. In review mode, you can search the buffer and speak its contents, without disturbing the terminal. Commands for moving the pointer are similar to normal editing commands, but without a control key: `n` and `p` for next and previous line, `f` and `b` for forward and back by characters, `<` and `>` for the beginning or end of the buffer. `c`, `w`, and `l` speak the current character, word, and line. `s` searches forward (not incrementally). A comma speaks the pointer location. A period moves the pointer to the terminal cursor. Return to normal term mode by typing `q`.

## 12 Emacspeak Commands And Options

### Overview

This chapter documents the various Emacspeak modules and is auto-generated from the Emacspeak source code. It is meant to be a complete reference to the emacspeak implementation while also providing high-level usage summaries of some of the larger Emacspeak modules.

Each section provides a high-level overview of that module, followed by detailed description of the commands and options defined in that module.

Emacspeak modules can be classified as follows:

1. Modules that interface with various TTS engines, e.g. `espeak-voices` and `dectalk-voices`.
2. Modules that implement core Emacspeak functionality, e.g., `emacspeak-speak`, `emacspeak-keymap`, `voice-lock` and `emacspeak-advice`.
3. Emacspeak extensions that speech-enable various emacs packages, these are all named using the convention `emacspeak-<packagename>`.

The first two of the above are mostly of interest when extending Emacspeak, or to learn how things are implemented. The third category is useful in understanding how emacspeak works with a given package; thus, when learning to use the Emacs Web Browser (EWW), read the EWW documentation, then read See Section 12.74 [emacspeak-eww], page 99.

This chapter documents a total of 1142 commands and 145 options.

### 12.1 amixer

Provide an emacs front-end to amixer, the sound mixer in ALSA that is used to configure the audio device.

The main entry point is command `emacspeak-audio-setup` bound to `C-e`). When called for the first time, this command builds up a database of available controls on the default audio device. These control names are then available for completion in the minibuffer. Pick a desired control, e.g., "master playback volume", and this displays a prompt with the current value. Enter the new value and press `<RETURN>`. To reset all controls to their default values, Press `C-j`.

#### 12.1.1 Amixer Commands

##### 12.1.1.1 amixer

`amixer` (**&optional** *refresh*) [Command]

ALSA settings.

Interactive prefix arg refreshes cache.

(fn &optional REFRESH)

### 12.1.1.2 amixer-store

**amixer-store** [Command]  
Persist amixer.

### 12.1.2 amixer Options

**User Option** *amixer-device* [Variable]  
ALSA Control Device.

## 12.2 cd-tool

Provide an emacs front-end to cdtool. cdtool can be obtained as an rpm check using rpmfind or from its home site at [sunsite.unc.edu /pub/Linux/apps/sound/cdrom/cli](http://sunsite.unc.edu/pub/Linux/apps/sound/cdrom/cli) This module also provides the ability to play or save clips from a CD if you have cdda2wav installed. cdda2wav is a cd to wav converter.

### 12.2.1 Cd-Tool Commands

#### 12.2.1.1 cd-tool

**cd-tool** [Command]  
Front-end to CDTool.

| Key   | Action            |
|-------|-------------------|
| +     | Next Track        |
| -     | Previous Track    |
| SPC   | Pause or Resume   |
| e     | Eject             |
| =     | Shuffle           |
| i     | CD Info           |
| p     | Play              |
| s     | Stop              |
| t     | track             |
| c     | clip              |
| cap C | Save clip to disk |

### 12.2.2 cd-tool Options

**User Option** *cd-tool-start-command* [Variable]  
Name of cdstart command; most likely either "cdstart" or "cdplay".

## 12.3 dectalk-voices

This module defines the various voices used in voice-lock mode. This module is Dectalk specific.

### 12.3.1 Dectalk-Voices Commands

### 12.3.1.1 dectalk

dectalk [Command]

*C-e d C-d*

*<fn> d C-d*

Dectalk TTS.

### 12.3.2 dectalk-voices Options

User Option *dectalk-default-speech-rate* [Variable]

Default speech rate .

## 12.4 dom-addons

Useful additional functions for dom.el

## 12.5 dtk-speak

Defines the TTS interface. Here, prefix dtk is synonymous with tts.

### 12.5.1 Dtk-Speak Commands

#### 12.5.1.1 dtk-add-cleanup-pattern

dtk-add-cleanup-pattern (*&optional delete*) [Command]

*C-e d a*

*<fn> d a*

Add this pattern to the list of repeating patterns.

Optional interactive prefix arg deletes  
this pattern if previously added.

(fn &optional DELETE)

#### 12.5.1.2 dtk-cloud

dtk-cloud [Command]

*C-e d C-c*

*<fn> d C-c*

Select Cloud TTS server.

#### 12.5.1.3 dtk-list-languages

dtk-list-languages [Command]

List available languages.

### 12.5.1.4 dtk-local-server

**dtk-local-server** (*program* &**optional** *prompt-port*) [Command]

*C-e d L*

*<fn> d L*

Select and start an local speech server interactively. Local server lets Emacspeak on a remote host connect back via SSH port forwarding for instance. Argument PROGRAM specifies the speech server program. Port defaults to dtk-local-server-port

(fn PROGRAM &optional PROMPT-PORT)

### 12.5.1.5 dtk-notify-initialize

**dtk-notify-initialize** [Command]

*C-e d C-n*

*<fn> d C-n*

Initialize notification TTS stream.

### 12.5.1.6 dtk-notify-stop

**dtk-notify-stop** [Command]

*C-e d .*

*<fn> d .*

Stop speech on notification stream.

### 12.5.1.7 dtk-reset-state

**dtk-reset-state** [Command]

*C-e d R*

*<fn> d R*

Reset TTS engine.

### 12.5.1.8 dtk-select-server

**dtk-select-server** (*program* &**optional** *device*) [Command]

*C-e d d*

*<fn> d d*

Select speech server ‘program’.

Optional arg device sets env-var ALSA\_DEFAULT.

(fn PROGRAM &optional DEVICE)

### 12.5.1.9 dtk-set-character-scale

**dtk-set-character-scale** (*factor* &**optional** *prefix*) [Command]

*C-e d f*

*<fn> d f*

Set character scale FACTOR for speech rate.

Speech rate is scaled by this factor when speaking characters.

Interactive PREFIX arg means set the global default value, and then set the current local value to the result.

(fn FACTOR &optional PREFIX)

### 12.5.1.10 dtk-set-chunk-separator-syntax

**dtk-set-chunk-separator-syntax** (*s*) [Command]

*C-e d RET*

*<fn> d RET*

Interactively set how text is split in chunks.

Argument S specifies the syntax class.

(fn S)

### 12.5.1.11 dtk-set-language

**dtk-set-language** (*lang*) [Command]

*C-e d S*

*<fn> d S*

Set language.

(fn LANG)

### 12.5.1.12 dtk-set-next-language

**dtk-set-next-language** [Command]

*C-e d N*

*<fn> d N*

Switch to next language

### 12.5.1.13 dtk-set-predefined-speech-rate

**dtk-set-predefined-speech-rate** (&**optional** *prefix*) [Command]

*C-e d 9*

*C-e d 8*

*C-e d 7*



*C-e d 6*

*C-e d 5*

*C-e d 4*

*C-e d 3*

*C-e d 2*

*C-e d 1*

*C-e d 0*

*<fn> d 9*

*<fn> d 8*

*<fn> d 7*

*<fn> d 6*

*<fn> d 5*

*<fn> d 4*

*<fn> d 3*

*<fn> d 2*

*<fn> d 1*

*<fn> d 0*

Set speech rate to one of nine predefined levels.

Interactive PREFIX arg says to set the rate globally.

Formula used is:

rate = dtk-speech-rate-base + dtk-speech-rate-step \* level.

(fn &optional PREFIX)

#### 12.5.1.14 dtk-set-preferred-language

**dtk-set-preferred-language** (*alias lang*)

[Command]

Set language by alias.

(fn ALIAS LANG)

#### 12.5.1.15 dtk-set-previous-language

**dtk-set-previous-language**

[Command]

*C-e d P*

*<fn> d P*

Switch to previous language

**12.5.1.16 dtk-set-punctuations****dtk-set-punctuations** (*mode* **&optional** *prefix*) [Command]*C-e d p**<fn> d p*

Set punctuation mode to MODE.

Possible values are ‘some’, ‘all’, or ‘none’.

Interactive PREFIX arg means set the global default value, and then set the current local value to the result.

(fn MODE &amp;optional PREFIX)

**12.5.1.17 dtk-set-punctuations-to-all****dtk-set-punctuations-to-all** (**&optional** *prefix*) [Command]

Set punctuation mode to all.

Interactive PREFIX arg sets punctuation mode globally.

(fn &amp;optional PREFIX)

**12.5.1.18 dtk-set-punctuations-to-some****dtk-set-punctuations-to-some** (**&optional** *prefix*) [Command]

Set punctuation mode to some.

Interactive PREFIX arg sets punctuation mode globally.

(fn &amp;optional PREFIX)

**12.5.1.19 dtk-set-rate****dtk-set-rate** (*rate* **&optional** *prefix*) [Command]*C-e d r**<fn> d r*

Set speaking RATE.

Interactive PREFIX arg means set the global default value, and then set the current local value to the result.

(fn RATE &amp;optional PREFIX)

**12.5.1.20 dtk-stop****dtk-stop** (**&optional** *all*) [Command]*C-e s**<fn> s*

Stop speech.

Optional arg ‘all’ or interactive call silences notification stream as well.

(fn &amp;optional ALL)

**12.5.1.21 dtk-toggle-caps****dtk-toggle-caps** (&optional *prefix*) [Command]*C-e d c*<*fn*> *d c*

Toggle caps.

when set, capitalized words are preceded by a short ‘cap’, and upper-case words are preceded by a ‘ac’ spoken in a lower voice.

Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

**12.5.1.22 dtk-toggle-punctuation-mode****dtk-toggle-punctuation-mode** (&optional *prefix*) [Command]*C-e d ,*<*fn*> *d ,*

Toggle punctuation mode between "some" and "all".

Interactive PREFIX arg makes the new setting global.

(fn &amp;optional PREFIX)

**12.5.1.23 dtk-toggle-quiet****dtk-toggle-quiet** (&optional *prefix*) [Command]

Toggles state of dtk-quiet.

Turning on this switch silences speech. Optional interactive prefix arg causes this setting to become global.

**12.5.1.24 dtk-toggle-speak-nonprinting-chars****dtk-toggle-speak-nonprinting-chars** (&optional *prefix*) [Command]*C-e d n*<*fn*> *d n*

Toggle speak-nonprinting-chars.

Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

**12.5.1.25 dtk-toggle-split-caps****dtk-toggle-split-caps** (&optional *prefix*) [Command]*C-e d s*<*fn*> *d s*

Toggle split caps mode.

Split caps mode is useful when reading Hungarian notation in program source code. Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

**12.5.1.26 dtk-toggle-splitting-on-white-space****dtk-toggle-splitting-on-white-space** [Command]*C-e d SPC**<fn> d SPC*

Toggle splitting of speech on white space.

**12.5.1.27 dtk-toggle-strip-octals****dtk-toggle-strip-octals (&optional prefix)** [Command]*C-e d o**<fn> d o*

Toggle stripping of octals.

Interactive prefix arg means

toggle the global default value, and then set the current local value to the result.

**12.5.1.28 dtk-unicode-customize-char****dtk-unicode-customize-char (char replacement)** [Command]

Add a custom replacement string for CHAR.

When called interactively, CHAR defaults to the character after point.

(fn CHAR REPLACEMENT)

**12.5.1.29 dtk-unicode-uncustomize-char****dtk-unicode-uncustomize-char (char)** [Command]

Delete custom replacement for CHAR.

When called interactively, CHAR defaults to the character after point.

(fn CHAR)

**12.5.1.30 tts-restart****tts-restart** [Command]*C-e C-s**<fn> C-s*

Restart TTS server.

**12.5.1.31 tts-speak-version****tts-speak-version** [Command]*C-e d V**<fn> d V*

Speak version.

### 12.5.2 dtk-speak Options

**User Option** *dtk-allcaps-prefix* [Variable]  
Prefix used to indicate AllCaps

**User Option** *dtk-caps-prefix* [Variable]  
Prefix used to indicate capitalization

**User Option** *dtk-cleanup-repeats* [Variable]  
List of repeating patterns to clean up. Use ‘dtk-add-cleanup-pattern’ bound to C-e d  
a to add patterns.  
More than 3 consecutive occurrences of a pattern is replaced with a repeat count.

**User Option** *dtk-cloud-server* [Variable]  
Set this to your preferred cloud TTS server.

**User Option** *dtk-local-engine* [Variable]  
Engine we use for our local TTS server.

**User Option** *dtk-speech-rate-base* [Variable]  
Value of lowest speech rate.

**User Option** *dtk-speech-rate-step* [Variable]  
Speech rate step used by ‘dtk-set-predefined-speech-rate’.

**User Option** *dtk-unicode-character-replacement-alist* [Variable]  
Replacements for characters.

**User Option** *dtk-unicode-name-transformation-rules-alist* [Variable]  
Alist of character name transformation rules.

**User Option** *dtk-unicode-untouched-charsets* [Variable]  
Characters of these charsets are ignored by dtk-unicode-replace-chars.

**User Option** *dtk-use-tones* [Variable]  
Toggle tones.

**User Option** *tts-notification-device* [Variable]  
Virtual ALSA device to use for notifications stream.

## 12.6 emacspeak

Emacspeak extends Emacs to be a fully functional audio desktop. This is the main emacspeak module.

### 12.6.1 Emacspeak Commands

### 12.6.1.1 emacspeak-toggle-comint-output-monitor

`emacspeak-toggle-comint-output-monitor` (&optional *prefix*) [Command]

*C-e o*

*<fn> o*

Toggle Emacspeak comint monitor.

Interactive PREFIX arg means toggle the global default value.

### 12.6.2 emacspeak Options

User Option *emacspeak-play-emacspeak-startup-icon* [Variable]

If set to T, emacspeak plays its icon as it launches.

## 12.7 emacspeak-2048

Speech-enable 2048 Game

### 12.7.1 Emacspeak-2048 Commands

#### 12.7.1.1 emacspeak-2048-add-column

`emacspeak-2048-add-column` [Command]

Add a column to the current board.

#### 12.7.1.2 emacspeak-2048-add-row

`emacspeak-2048-add-row` [Command]

Add a row to the current board.

#### 12.7.1.3 emacspeak-2048-drop-column

`emacspeak-2048-drop-column` [Command]

Drop last row from the current board.

#### 12.7.1.4 emacspeak-2048-drop-row

`emacspeak-2048-drop-row` [Command]

Drop last row from the current board.

#### 12.7.1.5 emacspeak-2048-export

`emacspeak-2048-export` (&optional *prompt*) [Command]

Exports game stack to a file.

Optional interactive prefix arg prompts for a file.

Note that the file is overwritten silently.

(fn &optional PROMPT)

### 12.7.1.6 emacspeak-2048-import

**emacspeak-2048-import** (*&optional prompt*) [Command]

Import game.

Optional interactive prefix arg prompts for a filename.

(fn &optional PROMPT)

### 12.7.1.7 emacspeak-2048-pop-state

**emacspeak-2048-pop-state** [Command]

Reset state from stack.

### 12.7.1.8 emacspeak-2048-prune-stack

**emacspeak-2048-prune-stack** (*drop*) [Command]

Prune game stack to specified length.

(fn DROP)

### 12.7.1.9 emacspeak-2048-push-state

**emacspeak-2048-push-state** [Command]

Push current game state on stack.

### 12.7.1.10 emacspeak-2048-randomize-game

**emacspeak-2048-randomize-game** (*&optional count*) [Command]

Puts game in a randomized new state.

(fn &optional COUNT)

### 12.7.1.11 emacspeak-2048-score

**emacspeak-2048-score** [Command]

Show total on board.

### 12.7.1.12 emacspeak-2048-speak-board

**emacspeak-2048-speak-board** [Command]

Speak board.

### 12.7.1.13 emacspeak-2048-speak-transposed-board

**emacspeak-2048-speak-transposed-board** [Command]

Speak board column-wise.

## 12.8 emacspeak-abc-mode

ABC-MODE == Specialized mode for editing ABC Music notation. See [http://www.lesession.co.uk/abc/abc\\_notation.htm](http://www.lesession.co.uk/abc/abc_notation.htm) for details. This package speech-enables abc-mode.

## 12.9 emacspeak-actions

Define mode-specific actions. Actions are defined by adding them to hook `emacspeak-<mode-name>-actions-hook`

## 12.10 emacspeak-add-log

Speech-enable Changelog mode

## 12.11 emacspeak-advice

This module defines the advice forms for making the core of Emacs speak Advice forms that are specific to Emacs subsystems do not belong here! I violate this at present by advising completion. Note that we needed to advice a lot more for Emacs 19 and Emacs 20 than we do for Emacs 21 and Emacs 22. As of August 2007, this file is being purged of advice forms not needed in Emacs 22.

### 12.11.1 Emacspeak-Advice Commands

#### 12.11.1.1 emacspeak-eldoc-speak-doc

`emacspeak-eldoc-speak-doc` [Command]

`C-, ,`

`C-x @ a ,`

Speak Eldoc documentation if available.

### 12.11.2 emacspeak-advice Options

User Option `emacspeak-speak-messages-filter` [Variable]

List of strings used to filter spoken messages.

User Option `emacspeak-speak-tooltips` [Variable]

Enable to get tooltips spoken.

## 12.12 emacspeak-amar

Structure `emacspeak-amar` holds a bookmark into an mp3 file path: fully qualified path-name to file being marked name: Bookmark tag Position: time offset from start

This library will be used from `emacspeak-m-player`, `emacspeak-mplayer` and friends to set and jump to bookmarks.

### 12.12.1 Emacspeak-Amark Commands

#### 12.12.1.1 emacspeak-amar-add

`emacspeak-amar-add` (*path name position*) [Command]

Add an AMark to the buffer local list of AMarks. AMarks are bookmarks in audio content. If there is an existing amark of the given name, it is updated with path and position.

(fn PATH NAME POSITION)



### 12.12.1.2 emacspeak-amar-k-find

`emacspeak-amar-k-find` (*name*) [Command]

Return matching AMark if found in buffer-local AMark list.

(fn NAME)

### 12.12.1.3 emacspeak-amar-k-save

`emacspeak-amar-k-save` [Command]

Save buffer-local AMarks in currently playing directory.

## 12.13 emacspeak-analog

Speech-enables package analog –convenient log analyzer

### 12.13.1 Emacspeak-Analog Commands

#### 12.13.1.1 emacspeak-analog-backward-field-or-char

`emacspeak-analog-backward-field-or-char` [Command]

Move back to next field if field specification is available.

Otherwise move to previous char.

Speak field or char moved to.

#### 12.13.1.2 emacspeak-analog-forward-field-or-char

`emacspeak-analog-forward-field-or-char` [Command]

Move forward to next field if field specification is available.

Otherwise move to next char.

Speak field or char moved to.

#### 12.13.1.3 emacspeak-analog-next-line

`emacspeak-analog-next-line` [Command]

Move down and speak current field.

#### 12.13.1.4 emacspeak-analog-previous-line

`emacspeak-analog-previous-line` [Command]

Move up and speak current field.

#### 12.13.1.5 emacspeak-analog-speak-this-field

`emacspeak-analog-speak-this-field` [Command]

Speak current field.

## 12.14 emacspeak-apt-sources

This module speech-enables apt-sources.el that is included in the debian-el package and provides a major mode for editing APT's sources.list file.

## 12.15 emacspeak-arc

Auditory interface to archive mode This lets Emacs manipulate package files such as .zip and .jar files.

### 12.15.1 Emacspeak-Arc Commands

#### 12.15.1.1 emacspeak-arc-speak-file-modification-time

`emacspeak-arc-speak-file-modification-time` [Command]  
Speak modification time of the file on current line

#### 12.15.1.2 emacspeak-arc-speak-file-name

`emacspeak-arc-speak-file-name` [Command]  
Speak the name of the file on current line

#### 12.15.1.3 emacspeak-arc-speak-file-permissions

`emacspeak-arc-speak-file-permissions` [Command]  
Speak permissions of file current entry

#### 12.15.1.4 emacspeak-arc-speak-file-size

`emacspeak-arc-speak-file-size` [Command]  
Speak the size of the file on current line

## 12.16 emacspeak-auctex

Speech-enables the AucTeX package. AucTeX, now available from ELPA, has been my authoring environment of choice for writing LaTeX since 1991.

### 12.16.1 Emacspeak-Auctex Commands

#### 12.16.1.1 emacspeak-auctex-comma-at-end-of-word

`emacspeak-auctex-comma-at-end-of-word` [Command]  
Move to the end of current word and add a comma.

#### 12.16.1.2 emacspeak-auctex-end-of-word

`emacspeak-auctex-end-of-word` (*arg*) [Command]  
move to end of word

(fn ARG)

#### 12.16.1.3 emacspeak-auctex-lacheck-buffer-file

`emacspeak-auctex-lacheck-buffer-file` [Command]  
Run Lacheck on current buffer.

#### 12.16.1.4 emacspeak-auctex-tex-tie-current-word

**emacspeak-auctex-tex-tie-current-word** (*n*) [Command]

Tie the next *n* words.

(fn *N*)

### 12.17 emacspeak-bbc

BBC developer API (backstage) is now history. that implementation is in `obsolete/emacspeak-bbc-backstage.el` This module contains a light-weight client.

#### 12.17.1 Emacspeak-Bbc Commands

##### 12.17.1.1 emacspeak-bbc-get-iplayer-stream-pid

**emacspeak-bbc-get-iplayer-stream-pid** (*pid*) [Command]

Stream using `get-iplayer`.

(fn *PID*)

##### 12.17.1.2 emacspeak-bbc-get-iplayer-stream-url

**emacspeak-bbc-get-iplayer-stream-url** (*url*) [Command]

Stream using `get-iplayer`.

(fn *URL*)

##### 12.17.1.3 emacspeak-bbc-schedule

**emacspeak-bbc-schedule** [Command]

Browse BBC Schedule from `get-iplayer` radio cache

### 12.18 emacspeak-bbdb

Speech-enables BBDB. I have used BBDB to manage email address and contact information since 1991.

### 12.19 emacspeak-bibtex

Speech extensions for bibtex mode.

### 12.20 emacspeak-bookmark

Speech enable bookmarks

### 12.21 emacspeak-bookshare

BOOKSHARE == <http://www.bookshare.org> provides book access to print-disabled users. It provides a simple Web API <http://developer.bookshare.org> This module implements an Emacspeak Bookshare client.

### 12.21.1 requirements

- You need to get your own API key
- You need Emacs built with libxml2 support

### 12.21.2 Usage

The main entry point is command `emacspeak-bookshare` bound to `C-e C-b`. This creates a special *Bookshare Interaction* buffer that is placed in *emacspeak-bookshare-mode*. See the help for that mode on detailed usage instructions and key-bindings.

### 12.21.3 Sample Interaction

### 12.21.4 Emacspeak-Bookshare Commands

#### 12.21.4.1 emacspeak-bookshare

`emacspeak-bookshare` [Command]  
`C-e C-b`  
`<fn> C-b`  
 Bookshare Interaction.

#### 12.21.4.2 emacspeak-bookshare-action

`emacspeak-bookshare-action` [Command]  
 Call action specified by `invoking` key.

#### 12.21.4.3 emacspeak-bookshare-author-search

`emacspeak-bookshare-author-search` (*query* &*optional category*) [Command]  
 Perform a Bookshare author search.  
 Interactive prefix arg filters search by category.  
 (fn QUERY &optional CATEGORY)

#### 12.21.4.4 emacspeak-bookshare-browse

`emacspeak-bookshare-browse` [Command]  
 Browse Bookshare.

#### 12.21.4.5 emacspeak-bookshare-browse-latest

`emacspeak-bookshare-browse-latest` [Command]  
 Return latest books.

#### 12.21.4.6 emacspeak-bookshare-browse-popular

`emacspeak-bookshare-browse-popular` (&*optional category*) [Command]  
 Browse popular books.  
 Optional interactive prefix arg prompts for a category to use as a filter.  
 (fn &optional CATEGORY)

#### 12.21.4.7 emacspeak-bookshare-debugInfo-handler

**emacspeak-bookshare-debugInfo-handler** (*&rest arguments*) [Command]

Do nothing and return nil.

This function accepts any number of ARGUMENTS, but ignores them.

Also see ‘always’.

(fn &rest ARGUMENTS)

#### 12.21.4.8 emacspeak-bookshare-download-audio

**emacspeak-bookshare-download-audio** (*id target*) [Command]

Download audio format of specified book to target location.

(fn ID TARGET)

#### 12.21.4.9 emacspeak-bookshare-download-audio-at-point

**emacspeak-bookshare-download-audio-at-point** [Command]

Download audio version of book under point.

Target location is generated from author and title.

#### 12.21.4.10 emacspeak-bookshare-download-brf

**emacspeak-bookshare-download-brf** (*id target*) [Command]

Download Daisy format of specified book to target location.

(fn ID TARGET)

#### 12.21.4.11 emacspeak-bookshare-download-brf-at-point

**emacspeak-bookshare-download-brf-at-point** [Command]

Download Braille version of book under point.

Target location is generated from author and title.

#### 12.21.4.12 emacspeak-bookshare-download-daisy

**emacspeak-bookshare-download-daisy** (*id target*) [Command]

Download Daisy format of specified book to target location.

(fn ID TARGET)

#### 12.21.4.13 emacspeak-bookshare-download-daisy-at-point

**emacspeak-bookshare-download-daisy-at-point** [Command]

Download Daisy version of book under point.

Target location is generated from author and title.

**12.21.4.14 emacspeak-bookshare-download-epub-3****emacspeak-bookshare-download-epub-3** (*id target*) [Command]

Download epub-3 format of specified book to target location.

(fn ID TARGET)

**12.21.4.15 emacspeak-bookshare-download-epub-3-at-point****emacspeak-bookshare-download-epub-3-at-point** [Command]

Download epub-3 version of book under point.

Target location is generated from author and title.

**12.21.4.16 emacspeak-bookshare-download-internal****emacspeak-bookshare-download-internal** (*url target*) [Command]

Download content to target location.

(fn URL TARGET)

**12.21.4.17 emacspeak-bookshare-eww****emacspeak-bookshare-eww** (*directory*) [Command]

Render book using EWW

(fn DIRECTORY)

**12.21.4.18 emacspeak-bookshare-expand-at-point****emacspeak-bookshare-expand-at-point** [Command]

Expand entry at point by retrieving metadata.

Once retrieved, memoize to avoid multiple retrievals.

**12.21.4.19 emacspeak-bookshare-extract-and-view****emacspeak-bookshare-extract-and-view** (*url*) [Command]

Extract content referred to by link under point, and render via the browser.

(fn URL)

**12.21.4.20 emacspeak-bookshare-extract-xml****emacspeak-bookshare-extract-xml** (*url*) [Command]

Extract content referred to by link under point, and return an XML buffer.

(fn URL)

#### 12.21.4.21 emacspeak-bookshare-flush-lines

`emacspeak-bookshare-flush-lines` (*regexp*) [Command]  
Flush lines matching *regexp* in Bookshare buffer.

(fn REGEXP)

#### 12.21.4.22 emacspeak-bookshare-fulltext

`emacspeak-bookshare-fulltext` (*directory*) [Command]  
Display fulltext contents of *book* in specified *directory*.  
Useful for fulltext search in a book.

(fn DIRECTORY)

#### 12.21.4.23 emacspeak-bookshare-fulltext-search

`emacspeak-bookshare-fulltext-search` (*query*) [Command]  
Perform a Bookshare fulltext search.

(fn QUERY)

#### 12.21.4.24 emacspeak-bookshare-get-more-results

`emacspeak-bookshare-get-more-results` [Command]  
Get next page of results for last query.

#### 12.21.4.25 emacspeak-bookshare-id-search

`emacspeak-bookshare-id-search` (*query*) [Command]  
Perform a Bookshare id search.

(fn QUERY)

#### 12.21.4.26 emacspeak-bookshare-isbn-search

`emacspeak-bookshare-isbn-search` (*query*) [Command]  
Perform a Bookshare isbn search.

(fn QUERY)

#### 12.21.4.27 emacspeak-bookshare-list-preferences

`emacspeak-bookshare-list-preferences` [Command]  
Return preference list.

#### 12.21.4.28 emacspeak-bookshare-mode

`emacspeak-bookshare-mode` [Command]  
A Bookshare front-end for the Emacspeak desktop.

The Emacspeak Bookshare front-end is launched by command `emacspeak-bookshare` bound to C-e C-b

This command switches to a special buffer that has Bookshare commands bounds to single keystrokes– see the key-binding list at the end of this description. Use Emacs online help facility to look up help on these commands.

`emacspeak-bookshare-mode` provides the necessary functionality to Search and download Bookshare material, Manage a local library of downloaded Bookshare content, And commands to easily read newer Daisy books from Bookshare.

Here is a list of all emacspeak Bookshare commands with their key-bindings:

a Author Search  
A Author/Title Search  
t Title Search  
s Full Text Search  
d Date Search  
b Browse

| key | binding   |
|-----|---|
| ESC | Prefix Command  |
| SPC | <code>emacspeak-bookshare-expand-at-point</code>          |
| +   | <code>emacspeak-bookshare-action</code>                   |
| /   | <code>emacspeak-bookshare-action</code>                   |
| 3   | <code>emacspeak-bookshare-download-epub-3-at-point</code> |
| A   | <code>emacspeak-bookshare-download-audio-at-point</code>  |
| B   | <code>emacspeak-bookshare-download-brf-at-point</code>    |
| C   | <code>emacspeak-bookshare-fulltext</code>                 |
| D   | <code>emacspeak-bookshare-download-daisy-at-point</code>  |
| E   | <code>emacspeak-bookshare-eww</code>                      |
| I   | <code>emacspeak-bookshare-action</code>                   |
| P   | <code>emacspeak-bookshare-action</code>                   |
| S   | <code>emacspeak-bookshare-action</code>                   |
| U   | <code>emacspeak-bookshare-unpack-at-point</code>          |
| V   | <code>emacspeak-bookshare-view-at-point</code>            |
| [   | <code>backward-page</code>                                |
| ]   | <code>forward-page</code>                                 |
| a   | <code>emacspeak-bookshare-action</code>                   |
| b   | <code>emacspeak-bookshare-browse</code>                   |
| c   | <code>emacspeak-bookshare-toc-at-point</code>             |
| d   | <code>emacspeak-bookshare-action</code>                   |
| e   | <code>emacspeak-bookshare-eww</code>                      |



f emacspeak-bookshare-flush-lines  
 i emacspeak-bookshare-action  
 j next-line  
 k previous-line  
 l .. m emacspeak-bookshare-action  
 n emacspeak-bookshare-next-result  
 p emacspeak-bookshare-previous-result  
 q bury-buffer  
 s .. t emacspeak-bookshare-action  
 v emacspeak-bookshare-view

M-n emacspeak-bookshare-next-result  
 M-p emacspeak-bookshare-previous-result

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘emacspeak-bookshare-mode-hook’, as the final or penultimate step during initialization.

#### 12.21.4.29 emacspeak-bookshare-next-result

**emacspeak-bookshare-next-result** [Command]  
Move to next result.

#### 12.21.4.30 emacspeak-bookshare-periodical-list

**emacspeak-bookshare-periodical-list** [Command]  
Return list of periodicals.

#### 12.21.4.31 emacspeak-bookshare-previous-result

**emacspeak-bookshare-previous-result** [Command]  
Move to previous result.

#### 12.21.4.32 emacspeak-bookshare-set-preference

**emacspeak-bookshare-set-preference** (*preference-id value*) [Command]  
Set preference preference-id to value.

(fn PREFERENCE-ID VALUE)

#### 12.21.4.33 emacspeak-bookshare-since-search

**emacspeak-bookshare-since-search** (*query &optional category*) [Command]  
Perform a Bookshare date search.  
Optional interactive prefix arg filters by category.

(fn QUERY &optional CATEGORY)

#### 12.21.4.34 emacspeak-bookshare-title-search

**emacspeak-bookshare-title-search** (*query* &**optional** *category*) [Command]

Perform a Bookshare title search.

Interactive prefix arg filters search by category.

(fn QUERY &optional CATEGORY)

#### 12.21.4.35 emacspeak-bookshare-toc

**emacspeak-bookshare-toc** (*directory*) [Command]

View TOC for book in specified directory.

(fn DIRECTORY)

#### 12.21.4.36 emacspeak-bookshare-toc-at-point

**emacspeak-bookshare-toc-at-point** [Command]

View TOC for book at point.

Make sure it's downloaded and unpacked first.

#### 12.21.4.37 emacspeak-bookshare-unpack-at-point

**emacspeak-bookshare-unpack-at-point** [Command]

Unpack downloaded content if necessary.

#### 12.21.4.38 emacspeak-bookshare-url-executor

**emacspeak-bookshare-url-executor** (*url*) [Command]

Custom URL executor for use in Bookshare TOC.

(fn URL)

#### 12.21.4.39 emacspeak-bookshare-version-handler

**emacspeak-bookshare-version-handler** (&**rest** *arguments*) [Command]

Do nothing and return nil.

This function accepts any number of ARGUMENTS, but ignores them.

Also see 'always'.

(fn &rest ARGUMENTS)

#### 12.21.4.40 emacspeak-bookshare-view

**emacspeak-bookshare-view** (*directory*) [Command]

View book in specified directory.

(fn DIRECTORY)

**12.21.4.41 emacspeak-bookshare-view-at-point****emacspeak-bookshare-view-at-point** [Command]

View book at point.

Make sure it's downloaded and unpacked first.

**12.21.4.42 emacspeak-bookshare-view-page-range****emacspeak-bookshare-view-page-range** (*url*) [Command]

Play pages in specified page range from URL.

(fn URL)

**12.21.5 emacspeak-bookshare Options****User Option** *emacspeak-bookshare-api-key* [Variable]Web API key for this application. See <http://developer.bookshare.org/docs> for details on how to get an API key.**User Option** *emacspeak-bookshare-directory* [Variable]

Customize this to the root of where books are organized.

**12.22 emacspeak-browse-kill-ring**Browse the kill ring using `browse-kill-ring.el` - interactively insert items from kill-ring (by Colin Walters)**12.23 emacspeak-bs**speech-enable `bs.el` – an alternative to Emacs' default list-buffers**12.23.1 Emacspeak-Bs Commands****12.23.1.1 emacspeak-bs-speak-buffer-line****emacspeak-bs-speak-buffer-line** [Command]

Speak information about this buffer

**12.24 emacspeak-buff-menu**

Speech-enable buffer-menus.

**12.24.1 Emacspeak-Buff-Menu Commands****12.24.1.1 emacspeak-list-buffers-next-line****emacspeak-list-buffers-next-line** (*count*) [Command]

Speech enabled buffer menu navigation

(fn COUNT)

**12.24.1.2 emacspeak-list-buffers-previous-line**

**emacspeak-list-buffers-previous-line** (*count*) [Command]  
 Speech enabled buffer menu navigation

(fn COUNT)

**12.24.1.3 emacspeak-list-buffers-speak-buffer-line**

**emacspeak-list-buffers-speak-buffer-line** [Command]  
 Speak information about this buffer

**12.24.1.4 emacspeak-list-buffers-speak-buffer-name**

**emacspeak-list-buffers-speak-buffer-name** [Command]  
 Speak the name of the buffer on this line

**12.25 emacspeak-c**

Make C and C++ mode more emacspeak friendly Works with both boring c-mode and the excellent cc-mode

**12.25.1 Emacspeak-C Commands****12.25.1.1 emacspeak-c-speak-semantic**

**emacspeak-c-speak-semantic** [Command]  
 Speak the C semantics of this line.

**12.26 emacspeak-calc**

This module extends the Emacs Calculator. Extensions are minimal. We force a calc-load-everything, And use an after advice on this function To fix all of calc's interactive functions

**12.27 emacspeak-calculator**

Speech enable desktop calculator

**12.28 emacspeak-calendar**

This module speech enables the Emacs Calendar.

**12.28.1 Emacspeak-Calendar Commands****12.28.1.1 emacspeak-appt-repeat-announcement**

**emacspeak-appt-repeat-announcement** [Command]  
*C-e A*  
*<fn> A*  
 Speaks the most recently displayed appointment message if any.

### 12.28.1.2 emacspeak-calendar-setup-sunrise-sunset

**emacspeak-calendar-setup-sunrise-sunset** [Command]

Set up geo-coordinates using Google Maps reverse geocoding.

To use, configure variable `gmaps-my-address` via M-x `customize-variable`.

### 12.28.1.3 emacspeak-calendar-speak-date

**emacspeak-calendar-speak-date** [Command]

Speak the date under point when called in Calendar Mode.

### 12.28.1.4 emacspeak-calendar-sunrise-sunset

**emacspeak-calendar-sunrise-sunset** (*address* &**optional** *arg*) [Command]

Display sunrise/sunset for specified address.

(fn ADDRESS &optional ARG)

## 12.29 emacspeak-calibredb

CALIBREDB == Browse And Search Local Calibre Library

### 12.29.1 Emacspeak-Calibredb Commands

#### 12.29.1.1 emacspeak-calibredb-epub-eww

**emacspeak-calibredb-epub-eww** (&**optional** *broken-ncx*) [Command]

Open EPub at point in EWW.

Optional prefix arg uses alternative renderer that handles epub's with broken NCX files.

(fn &optional BROKEN-NCX)

## 12.30 emacspeak-chess

The Emacs Chess package provides a rich environment for playing and exploring Chess Games. That package comes with a light-weight module that announces moves.

### 12.30.1 Emacspeak-Chess Commands

#### 12.30.1.1 emacspeak-chess-east

**emacspeak-chess-east** [Command]

Move east one step.

#### 12.30.1.2 emacspeak-chess-goto-target

**emacspeak-chess-goto-target** [Command]

Jump to the most recent target square.

### 12.30.1.3 emacspeak-chess-jump

`emacspeak-chess-jump` (*coord*) [Command]  
Jump to square specified as coord.

(fn COORD)

### 12.30.1.4 emacspeak-chess-look-east

`emacspeak-chess-look-east` [Command]  
Look east

### 12.30.1.5 emacspeak-chess-look-king

`emacspeak-chess-look-king` [Command]  
Look along non-empty squares reachable by the king from current position.

### 12.30.1.6 emacspeak-chess-look-knight

`emacspeak-chess-look-knight` [Command]  
Look along non-empty squares reachable by a knight from current position.

### 12.30.1.7 emacspeak-chess-look-north

`emacspeak-chess-look-north` [Command]  
Look north

### 12.30.1.8 emacspeak-chess-look-northeast

`emacspeak-chess-look-northeast` [Command]  
Look northeast

### 12.30.1.9 emacspeak-chess-look-northwest

`emacspeak-chess-look-northwest` [Command]  
Look northwest

### 12.30.1.10 emacspeak-chess-look-south

`emacspeak-chess-look-south` [Command]  
Look south

### 12.30.1.11 emacspeak-chess-look-southeast

`emacspeak-chess-look-southeast` [Command]  
Look southeast

### 12.30.1.12 emacspeak-chess-look-southwest

`emacspeak-chess-look-southwest` [Command]  
Look southwest

**12.30.1.13 emacspeak-chess-look-west**

`emacspeak-chess-look-west` [Command]  
Look west

**12.30.1.14 emacspeak-chess-north**

`emacspeak-chess-north` [Command]  
Move north one step.

**12.30.1.15 emacspeak-chess-northeast**

`emacspeak-chess-northeast` [Command]  
Move northeast one step.

**12.30.1.16 emacspeak-chess-northwest**

`emacspeak-chess-northwest` [Command]  
Move northwest one step.

**12.30.1.17 emacspeak-chess-south**

`emacspeak-chess-south` [Command]  
Move south one step.

**12.30.1.18 emacspeak-chess-southeast**

`emacspeak-chess-southeast` [Command]  
Move southeast one step.

**12.30.1.19 emacspeak-chess-southwest**

`emacspeak-chess-southwest` [Command]  
Move southwest one step.

**12.30.1.20 emacspeak-chess-speak-board**

`emacspeak-chess-speak-board` [Command]  
Speak complete board. Only useful in end-states.

**12.30.1.21 emacspeak-chess-speak-piece-squares**

`emacspeak-chess-speak-piece-squares` (*piece*) [Command]  
Prompt for a piece (single char) and speak its locations on the board. Piece is specified as a char using SAN notation. Use ‘w’ for all whites pieces, ‘l’ for all black pieces, and ‘a’ for entire board..

(fn PIECE)

**12.30.1.22 emacspeak-chess-speak-that-square**

`emacspeak-chess-speak-that-square` (*coord*) [Command]  
 Speak square at specified coord.

(fn COORD)

**12.30.1.23 emacspeak-chess-speak-this-move**

`emacspeak-chess-speak-this-move` [Command]  
 Speak move at current display index.

**12.30.1.24 emacspeak-chess-speak-this-square**

`emacspeak-chess-speak-this-square` [Command]  
 Speak square under point.

**12.30.1.25 emacspeak-chess-speak-who-targets**

`emacspeak-chess-speak-who-targets` (*piece*) [Command]  
 Speak description of squares that can target current square.  
 Argument 'piece' specifies `piece-or-color` as in command  
`emacspeak-chess-speak-piece-squares`

(fn PIECE)

**12.30.1.26 emacspeak-chess-view-rank-or-file**

`emacspeak-chess-view-rank-or-file` [Command]  
 View a complete rank or file from white's perspective.

**12.30.1.27 emacspeak-chess-west**

`emacspeak-chess-west` [Command]  
 Move west one step.

**12.31 emacspeak-cider**

Speech-Enable CIDER — Clojure IDE

**12.32 emacspeak-ciel**

Package `ciel` provides vim's "copy inside" and "clear inside" commands. Emacspeak binds these commands to <Super i> and <Super o>. This module speech-enables `ciel`.

**12.33 emacspeak-clojure**

CLOJURE-mode: Specialized mode for Clojure programming.

**12.34 emacspeak-cmuscheme**

speech-enable scheme support



## 12.35 emacspeak-comint

comint == command interaction. Advice comint and friends to speak.

### 12.35.1 Emacspeak-Comint Commands

#### 12.35.1.1 emacspeak-completion-pick-completion

`emacspeak-completion-pick-completion` [Command]  
Pick completion.

#### 12.35.1.2 emacspeak-toggle-comint-autospeak

`emacspeak-toggle-comint-autospeak (&optional prefix)` [Command]  
Toggle comint autospeak.  
Interactive PREFIX arg means toggle global default value.

(fn &optional PREFIX)

#### 12.35.1.3 emacspeak-toggle-inaudible-or-comint-autospeak

`emacspeak-toggle-inaudible-or-comint-autospeak` [Command]  
*C-e C-q*  
*<fn> C-q*  
Toggle comint-autospeak when in a comint or vterm buffer.  
Otherwise call voice-setup-toggle-silence-personality which  
toggles personality under point.

### 12.35.2 emacspeak-comint Options

User Option `emacspeak-comint-autospeak` [Variable]  
Speak comint output. Use M-x `emacspeak-toggle-comint-autospeak` to toggle this setting.

## 12.36 emacspeak-company

COMPANY -mode: Complete Anything Support for emacs.

This module provides an Emacspeak Company Front-end, And advises the needed interactive commands in Company. It adds an emacspeak-specific front-end `emacspeak-company-frontend` to the value of `company-frontends`. Note that *company-frontends* is a user-customizable option and ends up getting saved by emacs along with other custom settings. Function `emacspeak-company-frontend` handles providing spoken feedback, and leaves it to other frontends on *company-frontends* to generate their own feedback.

## 12.37 emacspeak-compile

This module makes compiling code from inside Emacs speech friendly. It is an example of how a little amount of code can make Emacspeak even better.

### 12.37.1 Emacspeak-Compile Commands

#### 12.37.1.1 emacspeak-compilation-speak-error

`emacspeak-compilation-speak-error` [Command]  
Speech feedback about the compilation error.

### 12.38 emacspeak-cperl

Provide additional advice to CPerl mode

### 12.39 emacspeak-crossword

CROSSWORD == Solve crosswords in Emacs Use fork at <https://github.com/ieure/emacs-crossword> Rather than the one on melpa.

### 12.40 emacspeak-custom

Advise custom to speak. most of the work is actually done by `emacspeak-widget.el` which speech-enables the widget libraries.

#### 12.40.1 Emacspeak-Custom Commands

##### 12.40.1.1 emacspeak-custom-goto-group

`emacspeak-custom-goto-group` [Command]  
Jump to custom group when in a customization buffer.

##### 12.40.1.2 emacspeak-custom-goto-toolbar

`emacspeak-custom-goto-toolbar` [Command]  
Jump to custom toolbar when in a customization buffer.

### 12.41 emacspeak-dbus

Loading this module sets up Emacspeak to respond to DBus notifications. This module needs to be loaded explicitly from the user's init file after emacspeak has been started.

#### 12.41.1 Overview

#### 12.41.2 Emacspeak-DBus Commands

##### 12.41.2.1 emacspeak-dbus-lock-screen

`emacspeak-dbus-lock-screen` [Command]  
Lock screen using DBus.

##### 12.41.2.2 emacspeak-dbus-sleep-disable

`emacspeak-dbus-sleep-disable` [Command]  
Disable integration with login1 daemon. Does nothing if already disabled.

**12.41.2.3 emacspeak-dbus-sleep-enable**

**emacspeak-dbus-sleep-enable** [Command]  
 Enable integration with Login1. Does nothing if already enabled.

**12.41.2.4 emacspeak-dbus-udisks-disable**

**emacspeak-dbus-udisks-disable** [Command]  
 Disable integration with UDisks2 daemon. Does nothing if already disabled.

**12.41.2.5 emacspeak-dbus-udisks-enable**

**emacspeak-dbus-udisks-enable** [Command]  
 Enable integration with UDisks2. Does nothing if already enabled.

**12.41.2.6 emacspeak-dbus-upower-disable**

**emacspeak-dbus-upower-disable** [Command]  
 Disable integration with UPower daemon. Does nothing if already disabled.

**12.41.2.7 emacspeak-dbus-upower-enable**

**emacspeak-dbus-upower-enable** [Command]  
 Enable integration with UPower. Does nothing if already enabled.

**12.41.2.8 emacspeak-screen-saver-mode**

**emacspeak-screen-saver-mode** [Command]  
 A light-weight mode for the ‘\*Emacspeak Screen Saver \*’ buffer. This is a hidden buffer that is made current so we automatically switch to a screen-saver soundscape.

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘emacspeak-screen-saver-mode-hook’, as the final or penultimate step during initialization.

|     |         |
|-----|---------|
| key | binding |
| —   | —       |

**12.42 emacspeak-deadgrep**

DEADGREP == Front-end to ripgrep.

**12.43 emacspeak-debugger**

DEBUGGER == Emacs Interactive Debugger. Speech-enable the debugger by speech-enabling interactive commands.

## 12.44 emacspeak-desktop

advice desktop package

## 12.45 emacspeak-dictionary

Speech-enables emacs client for accessing dictionary server at dict.org:2628

## 12.46 emacspeak-diff-mode

DIFF-MODE support.

## 12.47 emacspeak-dired

This module speech enables dired.

### 12.47.1 Emacspeak-Dired Commands

#### 12.47.1.1 emacspeak-dired-csv-open

|                                       |           |
|---------------------------------------|-----------|
| <code>emacspeak-dired-csv-open</code> | [Command] |
| Open CSV file on current dired line.  |           |

#### 12.47.1.2 emacspeak-dired-downloads

|  |           |
|--|-----------|
| <code>emacspeak-dired-downloads</code> | [Command] |
| <code>C-. d</code>                     |           |
| <code>C-' d</code>                     |           |
| <code>C-x @ s d</code>                 |           |
| Open Downloads directory.              |           |

#### 12.47.1.3 emacspeak-dired-epub-eww

|                                       |           |
|---------------------------------------|-----------|
| <code>emacspeak-dired-epub-eww</code> | [Command] |
| Open epub on current line in EWW      |           |

#### 12.47.1.4 emacspeak-dired-eww-open

|                                       |           |
|---------------------------------------|-----------|
| <code>emacspeak-dired-eww-open</code> | [Command] |
| Open HTML file on current dired line. |           |

#### 12.47.1.5 emacspeak-dired-label-fields

|   |           |
|---|-----------|
| <code>emacspeak-dired-label-fields</code>             | [Command] |
| Labels the fields of the listing in the dired buffer. |           |
| Currently is a no-op unless                           |           |
| unless 'dired-listing-switches' contains -l           |           |

**12.47.1.6 emacspeak-dired-md-open**

**emacspeak-dired-md-open** [Command]  
 Preview markdown file on current dired line.

**12.47.1.7 emacspeak-dired-midi-play**

**emacspeak-dired-midi-play** [Command]  
 Play midi file on current dired line.

**12.47.1.8 emacspeak-dired-open-this-directory**

**emacspeak-dired-open-this-directory** [Command]  
 Open directory corresponding to file on current line.

**12.47.1.9 emacspeak-dired-open-this-file**

**emacspeak-dired-open-this-file** [Command]  
 Smart dired opener. Invokes appropriate Emacspeak handler on current file in DirEd.

**12.47.1.10 emacspeak-dired-pdf-open**

**emacspeak-dired-pdf-open** [Command]  
 Open PDF file on current dired line.

**12.47.1.11 emacspeak-dired-play-duration**

**emacspeak-dired-play-duration** [Command]  
 Speak duration of MP3 files.  
 If on a file, speak its duration.  
 If on a directory, speak the total duration of all mp3 files under that directory.

**12.47.1.12 emacspeak-dired-rpm-query-in-dired**

**emacspeak-dired-rpm-query-in-dired** [Command]  
 Run rpm -qi on current dired entry.

**12.47.1.13 emacspeak-dired-show-file-type**

**emacspeak-dired-show-file-type (&optional file deref-symlinks)** [Command]  
 Displays type of current file by running command file.  
 Like Emacs' built-in dired-show-file-type but allows user to customize options passed to command 'file'.

(fn &optional FILE DEREFSYMLINKS)

**12.47.1.14 emacspeak-dired-speak-file-access-time**

**emacspeak-dired-speak-file-access-time** [Command]  
 Speak access time of the current file.

**12.47.1.15 emacspeak-dired-speak-file-modification-time**

**emacspeak-dired-speak-file-modification-time** [Command]  
 Speak modification time of the current file.

**12.47.1.16 emacspeak-dired-speak-file-permissions**

**emacspeak-dired-speak-file-permissions** [Command]  
 Speak the permissions of the current file.

**12.47.1.17 emacspeak-dired-speak-file-size**

**emacspeak-dired-speak-file-size** [Command]  
 Speak the size of the current file.  
 On a directory line, run `du -s` on the directory to speak its size.

**12.47.1.18 emacspeak-dired-speak-header-line**

**emacspeak-dired-speak-header-line** [Command]  
 Speak the header line of the dired buffer.

**12.47.1.19 emacspeak-dired-speak-symlink-target**

**emacspeak-dired-speak-symlink-target** [Command]  
 Speaks the target of the symlink on the current line.

**12.47.1.20 emacspeak-locate-play-results-as-playlist**

**emacspeak-locate-play-results-as-playlist** (**&optional** [Command]  
*shuffle*)  
 Treat locate results as a play-list.  
 Optional interactive prefix arg shuffles playlist.  
 (fn &optional SHUFFLE)

**12.48 emacspeak-dismal**

### emacspeak-dismal: No Commentary

**12.48.1 Emacspeak-Dismal Commands****12.48.1.1 emacspeak-dismal-backward-col-and-summarize**

**emacspeak-dismal-backward-col-and-summarize** (*cols*) [Command]  
 Move backward by arg columns  
 (the previous column by default) and summarize it.  
 (fn COLS)

**12.48.1.2 emacspeak-dismal-backward-row-and-summarize****emacspeak-dismal-backward-row-and-summarize** (*rows*) [Command]

Move backward by arg rows  
(the previous row by default)and summarize it.

(fn ROWS)

**12.48.1.3 emacspeak-dismal-col-summarize****emacspeak-dismal-col-summarize** [Command]

Summarizes a col using the specification in list  
emacspeak-dismal-col-summarizer-list

**12.48.1.4 emacspeak-dismal-display-cell-expression****emacspeak-dismal-display-cell-expression** [Command]

Display the expression in the message area

**12.48.1.5 emacspeak-dismal-display-cell-value****emacspeak-dismal-display-cell-value** [Command]

Display the cell value in the message area

**12.48.1.6 emacspeak-dismal-display-cell-with-col-header****emacspeak-dismal-display-cell-with-col-header** [Command]

Display current cell along with its column header.  
The ‘column header’ is the entry in row 0.

**12.48.1.7 emacspeak-dismal-display-cell-with-row-header****emacspeak-dismal-display-cell-with-row-header** [Command]

Displays current cell along with its row header.  
The ‘row header’ is the entry in column 0.

**12.48.1.8 emacspeak-dismal-forward-col-and-summarize****emacspeak-dismal-forward-col-and-summarize** (*cols*) [Command]

Move forward by arg columns  
(the next column by default)and summarize it.

(fn COLS)

**12.48.1.9 emacspeak-dismal-forward-row-and-summarize****emacspeak-dismal-forward-row-and-summarize** (*rows*) [Command]

Move forward by arg rows  
(the next row by default)and summarize it.

(fn ROWS)

**12.48.1.10 emacspeak-dismal-row-summarize**

**emacspeak-dismal-row-summarize** [Command]

Summarizes a row using the specification in list  
 emacspeak-dismal-row-summarizer-list

**12.48.1.11 emacspeak-dismal-set-col-summarizer-list**

**emacspeak-dismal-set-col-summarizer-list** [Command]

Specify or reset col summarizer list.

**12.48.1.12 emacspeak-dismal-set-row-summarizer-list**

**emacspeak-dismal-set-row-summarizer-list** [Command]

Specify or reset row summarizer list.

**12.48.1.13 emacspeak-dismal-set-sheet-summarizer-list**

**emacspeak-dismal-set-sheet-summarizer-list** [Command]

Specify or reset sheet summarizer list.

**12.48.1.14 emacspeak-dismal-sheet-summarize**

**emacspeak-dismal-sheet-summarize** [Command]

Summarizes a sheet using the specification in list  
 emacspeak-dismal-sheet-summarizer-list

**12.49 emacspeak-dumb-jump**

DUMB-JUMP == Jump to imputed cross-references in source code. This module speech-enables dumb-jump

**12.50 emacspeak-eaf**

EAF == Emacs Application Framework <https://github.com/manateelazycat/emacs-application-framework.git> This module speech-enables the elisp side of EAF.

**12.51 emacspeak-ecb**

The ECB is an Emacs Class Browser. This module speech-enables ECB

**12.51.1 Emacspeak-Ecb Commands****12.51.1.1 emacspeak-ecb-speak-window-directories**

**emacspeak-ecb-speak-window-directories** [Command]

Speak contents of directories window.

**12.51.1.2 emacspeak-ecb-speak-window-history**

**emacspeak-ecb-speak-window-history** [Command]

Speak contents of history window.



### 12.51.1.3 emacspeak-ecb-speak-window-methods

**emacspeak-ecb-speak-window-methods** [Command]  
Speak contents of methods window.

### 12.51.1.4 emacspeak-ecb-speak-window-sources

**emacspeak-ecb-speak-window-sources** [Command]  
Speak contents of sources window.

### 12.51.1.5 emacspeak-ecb-tree-backspace

**emacspeak-ecb-tree-backspace** [Command]  
Back up during incremental search in tree buffers.

### 12.51.1.6 emacspeak-ecb-tree-clear

**emacspeak-ecb-tree-clear** [Command]  
Clear search pattern during incremental search in tree buffers.

## 12.52 emacspeak-eclim

ECLIM == Eclipse/Vim integration. <http://www.eclim.org> turns Eclipse into a headless server that can be called from other programs. Package Emacs-Eclim connects Emacs to Eclim. Package emacspeak-eclim speech-enables emacs-eclim.

## 12.53 emacspeak-ediff

Ediff provides a nice visual interface to diff. ;;;Comparing and patching files is easy with ediff when you can see the screen. This module provides Emacspeak extensions to work fluently with ediff. Try it out, it's an excellent example of why Emacspeak is better than a traditional screenreader. This module was originally written to interface to the old ediff.el bundled with GNU Emacs 19.28 and earlier. It has been updated to work with the newer and much larger ediff system found in Emacs 19.29 and later.

When using under modern versions of Emacs, I recommend setting (setq ediff-window-setup-function 'ediff-setup-windows-plain) so that Emacs always displays Ediff windows in a single frame.

### 12.53.1 Emacspeak-Ediff Commands

#### 12.53.1.1 emacspeak-ediff-speak-current-difference

**emacspeak-ediff-speak-current-difference** [Command]  
Speak the current difference

## 12.54 emacspeak-eglot

EGLLOT == LSP Support for emacs

## 12.55 emacspeak-ein

EIN == Emacs IPython Notebook You can install package EIN via mELPA This module speech-enables EIN

### 12.55.1 Emacspeak-Ein Commands

#### 12.55.1.1 emacspeak-ein-speak-current-cell

`emacspeak-ein-speak-current-cell` [Command]  
Speak current cell.

## 12.56 emacspeak-elfeed

ELFEED == Feed Reader for Emacs. Install from elpa M-x package-install elfeed

### 12.56.1 Emacspeak-Elfeed Commands

#### 12.56.1.1 emacspeak-elfeed-eww-entry-at-point

`emacspeak-elfeed-eww-entry-at-point` [Command]  
Display current article in EWW.

#### 12.56.1.2 emacspeak-elfeed-filter-entry-at-point

`emacspeak-elfeed-filter-entry-at-point` [Command]  
Display current article after filtering.

#### 12.56.1.3 emacspeak-elfeed-next-entry

`emacspeak-elfeed-next-entry` [Command]  
Move to next entry and speak it.

#### 12.56.1.4 emacspeak-elfeed-previous-entry

`emacspeak-elfeed-previous-entry` [Command]  
Move to previous entry and speak it.

#### 12.56.1.5 emacspeak-elfeed-speak-entry-at-point

`emacspeak-elfeed-speak-entry-at-point` [Command]  
Speak entry at point.

## 12.57 emacspeak-elisp-refs

Speech-enable package elisp-refs. ELISP-REFS ==

## 12.58 emacspeak-elpher

ELPHER == gopher/gemini client Let's see if we can rescue the Content-Oriented Web

## 12.59 emacspeak-elpy

ELPY == Emacs Lisp Python IDE Speech-enables all aspects of elpy.

## 12.60 emacspeak-elscreen

ELSCREEN == Emacs Window Session Manager Speech-enable interactive commands.

## 12.61 emacspeak-emms

Speech-enables EMMS — the Emacs equivalent of XMMS available from the Emacs package archive. <http://savannah.gnu.org/project/emms> EMMS is under active development, to get the current CVS version, use Emacspeak command M-x emacspeak-cvs-gnu-get-project-snapshot RET emms RET

### 12.61.1 Emacspeak-Emms Commands

#### 12.61.1.1 emacspeak-emms-speak-current-track

`emacspeak-emms-speak-current-track` [Command]  
Speak current track.

## 12.62 emacspeak-enriched

emacspeak extensions to voiceify rich text.

### 12.62.1 Emacspeak-Enriched Commands

#### 12.62.1.1 emacspeak-enriched-voiceify-faces

`emacspeak-enriched-voiceify-faces` (*start end*) [Command]  
Map base fonts to voices.  
Useful in voiceifying rich text.  
  
(fn START END)

## 12.63 emacspeak-entertain

Auditory interface to misc games

### 12.63.1 Emacspeak-Entertain Commands

#### 12.63.1.1 emacspeak-hangman-speak-guess

`emacspeak-hangman-speak-guess` [Command]  
Speak current guessed string.

#### 12.63.1.2 emacspeak-hangman-speak-statistics

`emacspeak-hangman-speak-statistics` [Command]  
Speak statistics.

## 12.64 emacspeak-epa

EPA == EasyPG Assistant Integrate GPG functionality into Emacs. Speech-enable all interactive commands.

## 12.65 emacspeak-eperiodic

eperiodic produces an interactive periodic table of elements and can be found at <http://vegemite.chem.nottingham.ac.uk/~matt/emacs/eperiodic.el>

### 12.65.1 Emacspeak-Eperiodic Commands

#### 12.65.1.1 emacspeak-eperiodic-goto-property-section

`emacspeak-eperiodic-goto-property-section` [Command]  
Mark position and jump to properties section.

#### 12.65.1.2 emacspeak-eperiodic-next-line

`emacspeak-eperiodic-next-line` [Command]  
Move to next row and speak element.

#### 12.65.1.3 emacspeak-eperiodic-play-description

`emacspeak-eperiodic-play-description` [Command]  
Play audio description from WebElements.

#### 12.65.1.4 emacspeak-eperiodic-previous-line

`emacspeak-eperiodic-previous-line` [Command]  
Move to next row and speak element.

#### 12.65.1.5 emacspeak-eperiodic-speak-current-element

`emacspeak-eperiodic-speak-current-element` [Command]  
Speak element at point.

## 12.66 emacspeak-epub

### 12.66.1 Introduction

This module implements the Emacspeak EPub Bookshelf — a unified interface for organizing, locating and reading EPub EBooks on the emacspeak Audio Desktop. The epub reader is built using the Emacs Web Browser (EWW), and all of emacspeak's EWW conveniences are available when reading EBooks — see See Section 12.74 [emacspeak-eww], page 99, for useful tools including bookmarking and structured navigation. For now it supports epub2 — it will support epub3 some time in the future.

The main entry point is command `emacspeak-epub` bound to *C-e g*. This command opens a new bookshelf buffer unless the user has previously opened a specific bookshelf. A *bookshelf* is a buffer that lists books placed on a given bookshelf — these are listed by *title*

and *author*. The bookshelf buffer is in a special mode that provides single-key commands for adding, removing and finding books, as well as for opening the selected book using Emacs' built-in Web browser (**eww**).

The next few sections give a high-level overview of the emacspeak Bookshelf and EPub interaction, followed by detailed documentation on the various commands and user options.

## 12.66.2 Organizing EBooks On The Emacspeak Desktop

In the simplest case, EBooks can be placed under a specific directory (with sub-directories as needed). Customize user option `emacspeak-epub-library-directory` to point to this location. Here is a quick summary of commands for

## 12.66.3 Emacspeak-Epub Commands

### 12.66.3.1 emacspeak-calibre-mode

`emacspeak-calibre-mode` [Command]  
 A Calibre Front-end.  
 Letters do not insert themselves; instead, they are commands.

| key | binding |
|-----|---------|
| —   | —       |

RET emacspeak-epub-calibre-dired-at-point

In addition to any hooks its parent mode 'special-mode' might have run, this mode runs the hook 'emacspeak-calibre-mode-hook', as the final or penultimate step during initialization.

### 12.66.3.2 emacspeak-epub

`emacspeak-epub` [Command]  
*C-e g*

*<fn> g*

EPub Interaction.

When opened, displays a bookshelf consisting of epubs found at the root directory, see M-x emacspeak-epub-mode

### 12.66.3.3 emacspeak-epub-bookshelf-add-directory

`emacspeak-epub-bookshelf-add-directory` (*directory* &**optional** *recursive*) [Command]

Add EPubs found in specified directory to the bookshelf.

Interactive prefix arg searches recursively in directory.

(fn DIRECTORY &optional RECURSIVE)

#### 12.66.3.4 emacspeak-epub-bookshelf-add-epub

`emacspeak-epub-bookshelf-add-epub` (*epub-file*) [Command]  
Add epub file to current bookshelf.

(fn EPUB-FILE)

#### 12.66.3.5 emacspeak-epub-bookshelf-calibre-author

`emacspeak-epub-bookshelf-calibre-author` (*pattern*) [Command]  
Add results of an author search to current bookshelf.

(fn PATTERN)

#### 12.66.3.6 emacspeak-epub-bookshelf-calibre-search

`emacspeak-epub-bookshelf-calibre-search` (*pattern*) [Command]  
Add results of an title/author search to current bookshelf.

(fn PATTERN)

#### 12.66.3.7 emacspeak-epub-bookshelf-calibre-title

`emacspeak-epub-bookshelf-calibre-title` (*pattern*) [Command]  
Add results of an title search to current bookshelf.

(fn PATTERN)

#### 12.66.3.8 emacspeak-epub-bookshelf-clear

`emacspeak-epub-bookshelf-clear` [Command]  
Clear all books from bookshelf.

#### 12.66.3.9 emacspeak-epub-bookshelf-load

`emacspeak-epub-bookshelf-load` [Command]  
Load bookshelf metadata from disk.

#### 12.66.3.10 emacspeak-epub-bookshelf-open

`emacspeak-epub-bookshelf-open` (*bookshelf*) [Command]  
Load bookshelf metadata from specified bookshelf.

(fn BOOKSHELF)

#### 12.66.3.11 emacspeak-epub-bookshelf-open-epub

`emacspeak-epub-bookshelf-open-epub` (*epub-file*) [Command]  
Open epub file and add it to current bookshelf.

(fn EPUB-FILE)

**12.66.3.12 emacspeak-epub-bookshelf-redraw****emacspeak-epub-bookshelf-redraw** (**&optional** *author-first*) [Command]

Redraw Bookshelf.

Optional interactive prefix arg *author-first* prints author at the left.

(fn &amp;optional AUTHOR-FIRST)

**12.66.3.13 emacspeak-epub-bookshelf-refresh****emacspeak-epub-bookshelf-refresh** [Command]

Refresh and redraw bookshelf.

**12.66.3.14 emacspeak-epub-bookshelf-remove-directory****emacspeak-epub-bookshelf-remove-directory** (*directory* **&optional** *recursive*) [Command]

Remove EPubs found in specified directory from the bookshelf.

Interactive prefix arg searches recursively in directory.

(fn DIRECTORY &amp;optional RECURSIVE)

**12.66.3.15 emacspeak-epub-bookshelf-remove-this-book****emacspeak-epub-bookshelf-remove-this-book** [Command]

Remove the book on current line from this bookshelf.

No book files are deleted.

**12.66.3.16 emacspeak-epub-bookshelf-rename****emacspeak-epub-bookshelf-rename** (*name* **&optional** *overwrite*) [Command]

Saves current bookshelf to specified name.

Interactive prefix arg ‘overwrite’ will overwrite existing file.

(fn NAME &amp;optional OVERWRITE)

**12.66.3.17 emacspeak-epub-bookshelf-save****emacspeak-epub-bookshelf-save** [Command]

Save bookshelf metadata.

**12.66.3.18 emacspeak-epub-browse-files****emacspeak-epub-browse-files** (*epub*) [Command]

Browse list of HTML files in EPub.

Useful if table of contents in toc.ncx is empty.

(fn EPUB)

**12.66.3.19 emacspeak-epub-calibre-dired-at-point**

**emacspeak-epub-calibre-dired-at-point** [Command]  
 Open directory containing current result.

**12.66.3.20 emacspeak-epub-calibre-results**

**emacspeak-epub-calibre-results** [Command]  
 Show most recent Calibre search results.

**12.66.3.21 emacspeak-epub-delete**

**emacspeak-epub-delete** [Command]  
 Delete EPub under point.

**12.66.3.22 emacspeak-epub-eww**

**emacspeak-epub-eww** (*epub-file* **&optional** *use-ncx*) [Command]  
 Display entire book using EWW from EPub.  
 Use content listed in toc.ncx if prefix-arg use-ncx is true.  
 Default is to use the sorted list of html files  
 in the epub file.

(fn EPUB-FILE &optional USE-NCX)

**12.66.3.23 emacspeak-epub-google**

**emacspeak-epub-google** (*query*) [Command]  
 Search for Epubs from Google Books.

(fn QUERY)

**12.66.3.24 emacspeak-epub-gutenberg-catalog**

**emacspeak-epub-gutenberg-catalog** (**&optional** *refresh*) [Command]  
 Open Gutenberg catalog.  
 Fetch if needed, or if refresh is T.

(fn &optional REFRESH)

**12.66.3.25 emacspeak-epub-gutenberg-download**

**emacspeak-epub-gutenberg-download** (*book-id* **&optional** *download*) [Command]  
 Open web page for specified book.

Place download url for epub in kill ring.  
 With interactive prefix arg ‘download’, download the epub.

(fn BOOK-ID &optional DOWNLOAD)



**12.66.3.26 emacspeak-epub-locate-epubs**

**emacspeak-epub-locate-epubs** (*pattern*) [Command]  
 Locate epub files using locate.

(fn PATTERN)

**12.66.3.27 emacspeak-epub-mode**

**emacspeak-epub-mode** [Command]

An EPub Front-end.

Letters do not insert themselves; instead, they are commands.

|     |         |
|-----|---------|
| key | binding |
| —   | —       |

|         |   |
|---------|---|
| C-a     | emacspeak-epub-bookshelf-add-directory    |
| C-d     | emacspeak-epub-bookshelf-remove-directory |
| C-l     | emacspeak-epub-bookshelf-redraw           |
| RET     | emacspeak-epub-eww                        |
| C-o     | emacspeak-epub-bookshelf-open-epub        |
| C-x     | Prefix Command                            |
| ESC     | Prefix Command                            |
| /       | emacspeak-epub-calibre-results            |
| A       | emacspeak-epub-bookshelf-calibre-author   |
| C       | emacspeak-epub-gutenberg-catalog          |
| G       | emacspeak-epub-google                     |
| O       | emacspeak-epub-open-with-nov              |
| S       | emacspeak-epub-bookshelf-calibre-search   |
| T       | emacspeak-epub-bookshelf-calibre-title    |
| a       | emacspeak-epub-bookshelf-add-epub         |
| b       | emacspeak-epub-bookshelf-open             |
| c       | emacspeak-epub-bookshelf-clear            |
| d       | emacspeak-epub-bookshelf-remove-this-book |
| e       | emacspeak-epub-eww                        |
| f       | emacspeak-epub-browse-files               |
| g       | emacspeak-epub-gutenberg-download         |
| l       | emacspeak-epub-locate-epubs               |
| n       | next-line                                 |
| o       | emacspeak-epub-open                       |
| p       | previous-line                             |
| r       | emacspeak-epub-bookshelf-rename           |
| M-s     | emacspeak-epub-bookshelf-save             |
| C-x C-q | emacspeak-epub-bookshelf-refresh          |
| C-x C-s | emacspeak-epub-bookshelf-save             |

In addition to any hooks its parent mode ‘special-mode’ might have

run, this mode runs the hook ‘`emacspeak-epub-mode-hook`’, as the final or penultimate step during initialization.

### 12.66.3.28 `emacspeak-epub-next`

`emacspeak-epub-next` [Command]  
Move to next book.

### 12.66.3.29 `emacspeak-epub-open`

`emacspeak-epub-open` (*epub-file*) [Command]  
Open specified Epub.  
Filename may need to be shell-quoted when called from Lisp.  
  
(fn EPUB-FILE)

### 12.66.3.30 `emacspeak-epub-open-with-nov`

`emacspeak-epub-open-with-nov` [Command]  
Open ebook at point in nov-mode.

### 12.66.3.31 `emacspeak-epub-previous`

`emacspeak-epub-previous` [Command]  
Move to previous book.

### 12.66.3.32 `emacspeak-epub-url-executor`

`emacspeak-epub-url-executor` (*url*) [Command]  
Custom URL executor for use in EPub Mode.  
  
(fn URL)

## 12.66.4 `emacspeak-epub` Options

User Option `emacspeak-epub-bookshelf-directory` [Variable]  
Directory where we keep .bsf files defining various bookshelves.

User Option `emacspeak-epub-calibre-root-dir` [Variable]  
Root of Calibre library.

User Option `emacspeak-epub-gutenberg-mirror` [Variable]  
Base URL for Gutenberg mirror.

User Option `emacspeak-epub-gutenberg-suffix` [Variable]  
Suffix of book type we retrieve.

User Option `emacspeak-epub-library-directory` [Variable]  
Directory under which we store Epubs.

## 12.67 emacspeak-erc

erc.el is a modern Emacs client for IRC including color and font locking support. erc.el - an Emacs IRC client (by Alexander L. Belikoff) <http://www.cs.cmu.edu/~berez/irc/erc.el>

### 12.67.1 Emacspeak-Erc Commands

#### 12.67.1.1 emacspeak-erc-add-name-to-monitor

**emacspeak-erc-add-name-to-monitor** (*name* &**optional** *quiten-pronunciation*) [Command]

Add people to monitor in this room.

Optional interactive prefix *arg* defines a pronunciation that silences speaking of this perso's name.

(fn NAME &optional QUITEN-PRONUNCIATION)

#### 12.67.1.2 emacspeak-erc-delete-name-from-monitor

**emacspeak-erc-delete-name-from-monitor** (*name*) [Command]

Remove name to monitor in this room.

(fn NAME)

#### 12.67.1.3 emacspeak-erc-setup-cricket-rules

**emacspeak-erc-setup-cricket-rules** [Command]

Set up #cricket channels.

#### 12.67.1.4 emacspeak-erc-toggle-my-monitor

**emacspeak-erc-toggle-my-monitor** (&**optional** *prefix*) [Command]

Toggle state of ERC monitor of my messages.

Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

#### 12.67.1.5 emacspeak-erc-toggle-room-monitor

**emacspeak-erc-toggle-room-monitor** (&**optional** *prefix*) [Command]

Toggle state of ERC room monitor.

Interactive

PREFIX arg means toggle the global default value, and then set the current local value to the result.

#### 12.67.1.6 emacspeak-erc-toggle-speak-all-participants

**emacspeak-erc-toggle-speak-all-participants** (&**optional** *prefix*) [Command]

Toggle state of ERC speak all participants..

Interactive

PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 12.67.2 emacspeak-erc Options

User Option *emacspeak-erc-ignore-notices* [Variable]  
Set to T if you dont want to see notification messages from the server.

User Option *emacspeak-erc-my-nick* [Variable]  
My IRC nick.

User Option *emacspeak-erc-speak-all-participants* [Variable]  
Speak all things said if t.

### 12.68 emacspeak-eshell

EShell is a shell implemented entirely in Emacs Lisp. It is part of emacs 21 –and can also be used under Emacs 20. This module speech-enables EShell

### 12.69 emacspeak-ess

ESS == Emacs Speaks Statistics This module makes ESS speak.

### 12.70 emacspeak-etable

table.el provides rich table editing for emacs. this module speech-enables table.el

#### 12.70.1 Emacspeak-Etable Commands

##### 12.70.1.1 emacspeak-etable-speak-cell

*emacspeak-etable-speak-cell* [Command]  
Speak current cell.

### 12.71 emacspeak-eterm

This module makes eterm talk. Eterm is the new terminal emulator for Emacs. Use of emacspeak with eterm really needs an info page. At present, the only documentation is the source level documentation. This module uses Control-t as an additional prefix key to allow the user To move around the terminal and have different parts spoken.

#### 12.71.1 Emacspeak-Eterm Commands

##### 12.71.1.1 emacspeak-eterm-copy-region-to-register

*emacspeak-eterm-copy-region-to-register* (*register*) [Command]  
Copy text from terminal to an Emacs REGISTER.  
This copies region delimited by the emacspeak eterm marker set by command M-x emacspeak-eterm-set-marker and the emacspeak eterm pointer to a register.

(fn REGISTER)

**12.71.1.2 emacspeak-eterm-define-window****emacspeak-eterm-define-window** (*id*) [Command]

Prompt for a window ID.

The window is then define to be the rectangle delimited by point and eterm mark. This is to be used when emacspeak is set to review mode inside an eterm.

(fn ID)

**12.71.1.3 emacspeak-eterm-describe-window****emacspeak-eterm-describe-window** (*id*) [Command]

Describe an eterm window.

Description indicates eterm window coordinates and whether it is stretchable

(fn ID)

**12.71.1.4 emacspeak-eterm-goto-line****emacspeak-eterm-goto-line** (*line*) [Command]

Move emacspeak eterm pointer to a specified LINE.

(fn LINE)

**12.71.1.5 emacspeak-eterm-kill-ring-save-region****emacspeak-eterm-kill-ring-save-region** [Command]

Copy text from terminal to kill ring.

This copies region delimited by the emacspeak eterm marker set by command M-x emacspeak-eterm-set-marker and the emacspeak eterm pointer.

**12.71.1.6 emacspeak-eterm-maybe-send-raw****emacspeak-eterm-maybe-send-raw** [Command]

Send a raw character through if in the terminal buffer.

Execute end of line if

in a non eterm buffer if executed via C-e C-e

**12.71.1.7 emacspeak-eterm-paste-register****emacspeak-eterm-paste-register** (*register*) [Command]

Paste contents of REGISTER at current location.

If the specified register contains text, then that text is sent to the terminal as if it were typed by the user.

(fn REGISTER)

### 12.71.1.8 emacspeak-eterm-pointer-backward-word

**emacspeak-eterm-pointer-backward-word** (*count*) [Command]

Move the pointer backward by words.

Interactive numeric prefix arg specifies number of words to move.

Argument COUNT specifies number of words by which to move.

(fn COUNT)

### 12.71.1.9 emacspeak-eterm-pointer-down

**emacspeak-eterm-pointer-down** (*count*) [Command]

Move the pointer down a line.

Argument COUNT specifies number of lines by which to move.

(fn COUNT)

### 12.71.1.10 emacspeak-eterm-pointer-forward-word

**emacspeak-eterm-pointer-forward-word** (*count*) [Command]

Move the pointer forward by words.

Interactive numeric prefix arg specifies number of words to move.

Argument COUNT specifies number of words by which to move.

(fn COUNT)

### 12.71.1.11 emacspeak-eterm-pointer-left

**emacspeak-eterm-pointer-left** (*count*) [Command]

Move the pointer left.

Argument COUNT specifies number of columns by which to move.

(fn COUNT)

### 12.71.1.12 emacspeak-eterm-pointer-right

**emacspeak-eterm-pointer-right** (*count*) [Command]

Move the pointer right.

Argument COUNT specifies number of columns by which to move.

(fn COUNT)

### 12.71.1.13 emacspeak-eterm-pointer-to-bottom

**emacspeak-eterm-pointer-to-bottom** [Command]

Move the pointer to the bottom of the screen.

### 12.71.1.14 emacspeak-eterm-pointer-to-cursor

**emacspeak-eterm-pointer-to-cursor** [Command]

Move the pointer to the cursor.

**12.71.1.15 emacspeak-eterm-pointer-to-left-edge****emacspeak-eterm-pointer-to-left-edge** [Command]

Move the pointer to the right edge.

**12.71.1.16 emacspeak-eterm-pointer-to-next-color-change****emacspeak-eterm-pointer-to-next-color-change (&optional  
count)** [Command]

Move the eterm pointer to the next color change.

This allows you to move between highlighted regions of the screen.

Optional argument COUNT specifies how many changes to skip.

(fn &amp;optional COUNT)

**12.71.1.17 emacspeak-eterm-pointer-to-previous-color-change****emacspeak-eterm-pointer-to-previous-color-change  
(&optional count)** [Command]

Move the eterm pointer to the next color change.

This allows you to move between highlighted regions of the screen.

Optional argument COUNT specifies how many changes to skip.

(fn &amp;optional COUNT)

**12.71.1.18 emacspeak-eterm-pointer-to-right-edge****emacspeak-eterm-pointer-to-right-edge** [Command]

Move the pointer to the right edge.

**12.71.1.19 emacspeak-eterm-pointer-to-top****emacspeak-eterm-pointer-to-top** [Command]

Move the pointer to the top of the screen.

**12.71.1.20 emacspeak-eterm-pointer-up****emacspeak-eterm-pointer-up (count)** [Command]

Move the pointer up a line.

Argument COUNT .specifies number of lines by which to move.

(fn COUNT)

**12.71.1.21 emacspeak-eterm-search-backward****emacspeak-eterm-search-backward** [Command]

Search backward on the terminal.

**12.71.1.22 emacspeak-eterm-search-forward****emacspeak-eterm-search-forward** [Command]

Search forward on the terminal.

**12.71.1.23 emacspeak-eterm-set-filter-window****emacspeak-eterm-set-filter-window** (*flag*) [Command]

Prompt for the id of a predefined window,  
and set the ‘filter’ window to it.

Non-nil interactive prefix arg ‘unsets’ the filter window;  
this is equivalent to having the entire terminal as the filter window (this is  
what eterm starts up with).

Setting the filter window results in emacspeak only monitoring screen  
activity within the filter window.

(fn FLAG)

**12.71.1.24 emacspeak-eterm-set-focus-window****emacspeak-eterm-set-focus-window** (*flag*) [Command]

Prompt for the id of a predefined window,  
and set the ‘focus’ window to it.

Non-nil interactive prefix arg ‘unsets’ the focus window;  
this is equivalent to having the entire terminal as the focus window (this is  
what eterm starts up with).

Setting the focus window results in emacspeak monitoring screen  
and speaking that window upon seeing screen activity.

(fn FLAG)

**12.71.1.25 emacspeak-eterm-set-marker****emacspeak-eterm-set-marker** [Command]

Set Emacspeak eterm marker.

This sets the emacspeak eterm marker to the position pointed  
to by the emacspeak eterm pointer.

**12.71.1.26 emacspeak-eterm-speak-cursor****emacspeak-eterm-speak-cursor** [Command]

Speak cursor position.

**12.71.1.27 emacspeak-eterm-speak-pointer****emacspeak-eterm-speak-pointer** [Command]

Speak current pointer position.

**12.71.1.28 emacspeak-eterm-speak-pointer-char****emacspeak-eterm-speak-pointer-char** (&optional *prefix*) [Command]

Speak char under eterm pointer.

Pronounces character phonetically unless called with a PREFIX arg.

(fn &optional PREFIX)



**12.71.1.29 emacspeak-eterm-speak-pointer-line**

`emacspeak-eterm-speak-pointer-line` [Command]  
 Speak the line the pointer is on.

**12.71.1.30 emacspeak-eterm-speak-pointer-word**

`emacspeak-eterm-speak-pointer-word` [Command]  
 Speak the word the pointer is on.

**12.71.1.31 emacspeak-eterm-speak-predefined-window**

`emacspeak-eterm-speak-predefined-window` [Command]  
 Speak a predefined eterm window between 1 and 10.

**12.71.1.32 emacspeak-eterm-speak-screen**

`emacspeak-eterm-speak-screen` (&optional *flag*) [Command]  
 Speak the screen. Default is to speak from the emacspeak pointer to point.  
 Optional prefix arg FLAG causes region above  
 the Emacspeak pointer to be spoken.

(fn &optional FLAG)

**12.71.1.33 emacspeak-eterm-speak-window**

`emacspeak-eterm-speak-window` (*id*) [Command]  
 Speak an eterm window.  
 Argument ID specifies the window.

(fn ID)

**12.71.1.34 emacspeak-eterm-toggle-filter-window**

`emacspeak-eterm-toggle-filter-window` [Command]  
 Toggle active state of filter window.

**12.71.1.35 emacspeak-eterm-toggle-focus-window**

`emacspeak-eterm-toggle-focus-window` [Command]  
 Toggle active state of focus window.

**12.71.1.36 emacspeak-eterm-toggle-pointer-mode**

`emacspeak-eterm-toggle-pointer-mode` (&optional *prefix*) [Command]  
 Toggle emacspeak eterm pointer mode.  
 With optional interactive prefix arg, turn it on.  
 When emacspeak eterm is in pointer mode, the eterm read pointer  
 stays where it is rather than automatically moving to the terminal cursor when  
 there is terminal activity.

**12.71.1.37 emacspeak-eterm-toggle-review****emacspeak-eterm-toggle-review** [Command]

Toggle state of eterm review.

In review mode, you can move around the terminal and listen to the contents without sending input to the terminal itself.

**12.71.1.38 emacspeak-eterm-yank-window****emacspeak-eterm-yank-window** (*id*) [Command]

Yank contents of an eterm window at point.

(fn ID)

**12.71.1.39 emacspeak-toggle-eterm-autospeak****emacspeak-toggle-eterm-autospeak** (&*optional prefix*) [Command]

Toggle state of eterm autospeak.

When eterm autospeak is turned on and the terminal is in line mode, all output to the terminal is automatically spoken.

Interactive prefix arg means toggle the global default value, and then set the current local value to the result.

**12.72 emacspeak-eudc**

EUDC –Emacs Universal Directory Client provides a unified interface to directory servers e.g. ldap servers this module speech enables eudc

**12.72.1 Emacspeak-Eudc Commands****12.72.1.1 emacspeak-eudc-send-mail****emacspeak-eudc-send-mail** [Command]

Send email to the address given by the current record.

**12.73 emacspeak-evil**

EVIL == VIM In Emacs This is work-in-progress and is not complete.

**12.73.1 Emacspeak-Evil Commands****12.73.1.1 emacspeak-evil-toggle-evil****emacspeak-evil-toggle-evil** [Command]

Interactively toggle evil-mode.

**12.74 emacspeak-eww**

EWW == Emacs Web Browser

EWB is a light-weight Web browser built into Emacs starting with Emacs-24.4 . This module speech-enables EWB.

It implements additional interactive commands for navigating the DOM. It also provides a set of filters for interactively filtering the DOM by various attributes such as id, class and role. Finally, this module updates EWB's built-in key-bindings with Emacspeak conveniences.

### 12.74.1 Structured Navigation

These commands move through section headers as defined in HTML.

|            |   |
|------------|---|
| <i>1</i>   | <code>emacspeak-eww-next-h1</code> Move to next H1 heading.               |
| <i>2</i>   | <code>emacspeak-eww-next-h2</code> Move to next H2 heading.               |
| <i>3</i>   | <code>emacspeak-eww-next-h3</code> Move to next H3 heading.               |
| <i>4</i>   | <code>emacspeak-eww-next-h4</code> Move to next H4 heading.               |
| <i>.</i>   | <code>emacspeak-eww-next-h</code> Move to next heading. (H1...H4).        |
| <i>M-1</i> | <code>emacspeak-eww-previous-h1</code> Move to previous H1 heading.       |
| <i>M-2</i> | <code>emacspeak-eww-previous-h2</code> Move to previous H2 heading.       |
| <i>M-3</i> | <code>emacspeak-eww-previous-h3</code> Move to previous H3 heading.       |
| <i>M-4</i> | <code>emacspeak-eww-previous-h4</code> Move to previous H4 heading.       |
| <i>,</i>   | <code>emacspeak-eww-previous-h</code> Move to previous heading (H1...H4). |

This next set of DOM commands enable navigating by HTML elements.

|              |   |
|--------------|---|
| <i>M-SPC</i> | <code>emacspeak-eww-speak-this-element</code> Speak contents of current element.  |
| <i>J</i>     | <code>emacspeak-eww-next-element-like-this</code> Jump to next element that is the same as the one under point. If there are multiple HTML elements under point, prompts for element-name using completion.         |
| <i>K</i>     | <code>emacspeak-eww-previous-element-like-this</code> Jump to previous element that is the same as the one under point. If there are multiple HTML elements under point, prompts for element-name using completion. |
| <i>N</i>     | <code>emacspeak-eww-next-element-from-history</code> Jump to next element based on previous J/K command history.  |
| <i>P</i>     | <code>emacspeak-eww-previous-element-from-history</code> Jump to previous element based on previous J/K history.  |
| <i>O</i>     | <code>emacspeak-eww-previous-li</code> Jump to previous list item.  |
| <i>o</i>     | <code>emacspeak-eww-next-li</code> Jump to next list item.  |
| <i>T</i>     | <code>emacspeak-eww-previous-table</code> Jump to previous table in page.   |
| <i>t</i>     | <code>emacspeak-eww-next-table</code> Jump to next table.   |
| <i>[</i>     | <code>emacspeak-eww-previous-p</code> Jump to previous paragraph.   |
| <i>]</i>     | <code>emacspeak-eww-next-p</code> Jump to next paragraph.   |

|          |   |
|----------|---|
| <i>b</i> | <code>shr-previous-link</code> Jump to previous link.                                 |
| <i>f</i> | <code>shr-next-link</code> Jump to next link.   |
| <i>n</i> | <code>emacspeak-eww-next-element</code> Jump to next element.                         |
| <i>p</i> | <code>emacspeak-eww-previous-element</code> Jump to previous element.                 |
| <i>s</i> | <code>eww-readable</code> Use EWW's built-in readable tool.                           |
| <i>:</i> | <code>emacspeak-eww-tags-at-point</code> Display currently active HTML tags at point. |

### 12.74.2 Filtering Content Using The DOM

These commands use EWW's HTML DOM to display different filtered views of the Web page. With an interactive prefix argument, these commands prompt for a list of filters. Command `emacspeak-eww-restore` bound to *DEL* can be used to restore the previous view.

|            |  |
|------------|--|
| <i>A</i>   | <code>eww-view-dom-having-attribute</code> Display DOM nodes having specified attribute. Valid attributes are available via completion.              |
| <i>C</i>   | <code>eww-view-dom-having-class</code> Display DOM nodes having specified class. Valid classes are available via completion.                         |
| <i>E</i>   | <code>eww-view-dom-having-elements</code> Display specified elements from the Dom. Valid element names are available via completion.                 |
| <i>I</i>   | <code>eww-view-dom-having-id</code> Display DOM nodes having specified ID. Valid id values are available via completion.                             |
| <i>R</i>   | <code>eww-view-dom-having-role</code> Display DOM nodes having specified role. Valid roles are available via completion.                             |
| <i>M-a</i> | <code>eww-view-dom-not-having-attribute</code> Filter out DOM nodes having specified attribute. Valid attribute values are available via completion. |
| <i>M-c</i> | <code>eww-view-dom-not-having-class</code> Filter out DOM nodes having specified class. Valid class values are available via completion.             |
| <i>M-e</i> | <code>eww-view-dom-not-having-elements</code> Filter out specified element DOM nodes. Valid element names are available via completion.              |
| <i>M-i</i> | <code>eww-view-dom-not-having-id</code> Filter out Display DOM nodes having specified ID. Valid id values are available via completion.              |
| <i>M-r</i> | <code>eww-view-dom-not-having-role</code> Filter out DOM nodes having specified role. Valid role values are available via completion.                |

### 12.74.3 Diving Into (Focusing) On Specific Content

Contrast this with filtering described in the previous section. There, we discussed commands that *filter* the DOM to render specific types of elements. For HTML as spoken on the Web, there is a separate use-case that is helpful as a dual to filtering, namely, displaying a specific portion of a page, typically the contents of a `div` element. These elements often appear many times on a page, and can be deeply nested, making it difficult to focus on the relevant content on the page, e.g. news sites. Commands `emacspeak-eww-dive-into-div` help in

such cases, *C-d* renders the div containing point in a separate buffer. As with the filtering commands, *l* returns to the buffer where these commands were executed. Long-term users of Emacspeak who still remember Emacs-W3 will recognize this as the *focus* command implemented by Emacspeak for W3.

#### 12.74.4 Updated Commands For Following Links

These key-bindings are available when point is on a link. They enable context-specific actions for following links, e.g., to play media streams, or to open various feed-types such as ATOM, RSS, or OPML.

|            |   |
|------------|---|
| <i>k</i>   | <code>shr-copy-url</code> Copy URL under point to the kill-ring.  |
| <i>;</i>   | <code>emacspeak-eww-play-media-at-point</code> Play media URL under point using <code>emacs-m-player</code> .   |
| <i>U</i>   | <code>emacspeak-eww-curl-play-media-at-point</code> Play media url under point by first downloading the URL using CURL. This is useful for sites that do multiple redirects before returning the actual media stream URL. |
| <i>C-o</i> | <code>emacspeak-feeds-opml-display</code> Display link under point as an OPML feed .  |
| <i>C-r</i> | <code>emacspeak-feeds-rss-display</code> Display link under point as an RSS feed.   |
| <i>C-a</i> | <code>emacspeak-feeds-atom-display</code> Display link under point as an ATOM feed.   |
| <i>y</i>   | <code>emacspeak-m-player-youtube-player</code> Play link under point as a Youtube stream.   |

#### 12.74.5 Table Browsing

#### 12.74.6 Emacspeak-Eww Commands

##### 12.74.6.1 emacspeak-eww-add-mark

`emacspeak-eww-add-mark` (*name*) [Command]  
 Interactively add a mark with name title+'name' at current position.  
 (fn NAME)

##### 12.74.6.2 emacspeak-eww-curl-play-media-at-point

`emacspeak-eww-curl-play-media-at-point` [Command]  
 Use Curl to pull a URL, then pass  
 the first line to MPlayer as a playlist.  
 Useful in handling double-redirect from TuneIn.

##### 12.74.6.3 emacspeak-eww-delete-mark

`emacspeak-eww-delete-mark` (*name*) [Command]  
 Interactively delete a mark with name 'name' at current position.  
 (fn NAME)

#### 12.74.6.4 emacspeak-eww-dive-into-div

**emacspeak-eww-dive-into-div** [Command]  
Focus on current div by rendering it in a new buffer.

#### 12.74.6.5 emacspeak-eww-fillin-form-field

**emacspeak-eww-fillin-form-field** [Command]  
Fill in user or passwd field using auth-source backend.

#### 12.74.6.6 emacspeak-eww-links-rel

**emacspeak-eww-links-rel** [Command]  
Display Link tags of type rel. Web pages for which alternate links are available are cued by an auditory icon on the header line.

#### 12.74.6.7 emacspeak-eww-marks-load

**emacspeak-eww-marks-load** [Command]  
Load saved marks.

#### 12.74.6.8 emacspeak-eww-marks-save

**emacspeak-eww-marks-save** [Command]  
Save Emacspeak EWW marks.

#### 12.74.6.9 emacspeak-eww-masquerade

**emacspeak-eww-masquerade** [Command]  
Toggle masquerade.

#### 12.74.6.10 emacspeak-eww-next-dd

**emacspeak-eww-next-dd** (&optional *speak*) [Command]  
Move forward to the next dd.  
Optional interactive prefix arg speaks the dd. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The dd is automatically spoken if there is no user activity.

#### 12.74.6.11 emacspeak-eww-next-dl

**emacspeak-eww-next-dl** (&optional *speak*) [Command]  
Move forward to the next dl.  
Optional interactive prefix arg speaks the dl. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The dl is automatically spoken if there is no user activity.

**12.74.6.12 emacspeak-eww-next-dt****emacspeak-eww-next-dt** (&*optional speak*) [Command]

Move forward to the next dt.  
 Optional interactive prefix arg speaks the dt. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The dt is automatically spoken if there is no user activity.

**12.74.6.13 emacspeak-eww-next-element****emacspeak-eww-next-element** (*el*) [Command]

Move forward to the next specified element.

(fn EL)

**12.74.6.14 emacspeak-eww-next-element-from-history****emacspeak-eww-next-element-from-history** [Command]

Uses element navigation history to decide where we jump.

**12.74.6.15 emacspeak-eww-next-element-like-this****emacspeak-eww-next-element-like-this** (*element*) [Command]

Moves to next element like current.  
 Prompts if content at point is enclosed by multiple elements.

(fn ELEMENT)

**12.74.6.16 emacspeak-eww-next-h****emacspeak-eww-next-h** (&*optional speak*) [Command]

Move forward to the next h.  
 Optional interactive prefix arg speaks the h. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The h is automatically spoken if there is no user activity.

**12.74.6.17 emacspeak-eww-next-h1****emacspeak-eww-next-h1** (&*optional speak*) [Command]

Move forward to the next h1.  
 Optional interactive prefix arg speaks the h1. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The h1 is automatically spoken if there is no user activity.

### 12.74.6.18 emacspeak-eww-next-h2

**emacspeak-eww-next-h2** (*&optional speak*) [Command]

Move forward to the next h2.

Optional interactive prefix arg speaks the h2. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The h2 is automatically spoken if there is no user activity.

### 12.74.6.19 emacspeak-eww-next-h3

**emacspeak-eww-next-h3** (*&optional speak*) [Command]

Move forward to the next h3.

Optional interactive prefix arg speaks the h3. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The h3 is automatically spoken if there is no user activity.

### 12.74.6.20 emacspeak-eww-next-h4

**emacspeak-eww-next-h4** (*&optional speak*) [Command]

Move forward to the next h4.

Optional interactive prefix arg speaks the h4. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The h4 is automatically spoken if there is no user activity.

### 12.74.6.21 emacspeak-eww-next-h5

**emacspeak-eww-next-h5** (*&optional speak*) [Command]

Move forward to the next h5.

Optional interactive prefix arg speaks the h5. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The h5 is automatically spoken if there is no user activity.

### 12.74.6.22 emacspeak-eww-next-h6

**emacspeak-eww-next-h6** (*&optional speak*) [Command]

Move forward to the next h6.

Optional interactive prefix arg speaks the h6. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The h6 is automatically spoken if there is no user activity.



### 12.74.6.23 emacspeak-eww-next-li

**emacspeak-eww-next-li** (*&optional speak*) [Command]

Move forward to the next li.

Optional interactive prefix arg speaks the li. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The li is automatically spoken if there is no user activity.

### 12.74.6.24 emacspeak-eww-next-ol

**emacspeak-eww-next-ol** (*&optional speak*) [Command]

Move forward to the next ol.

Optional interactive prefix arg speaks the ol. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The ol is automatically spoken if there is no user activity.

### 12.74.6.25 emacspeak-eww-next-p

**emacspeak-eww-next-p** (*&optional speak*) [Command]

Move forward to the next p.

Optional interactive prefix arg speaks the p. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The p is automatically spoken if there is no user activity.

### 12.74.6.26 emacspeak-eww-next-table

**emacspeak-eww-next-table** (*&optional speak*) [Command]

Move forward to the next table.

Optional interactive prefix arg speaks the table. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The table is automatically spoken if there is no user activity.

### 12.74.6.27 emacspeak-eww-next-ul

**emacspeak-eww-next-ul** (*&optional speak*) [Command]

Move forward to the next ul.

Optional interactive prefix arg speaks the ul. Second interactive prefix toggles this flag. See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior. Second interactive prefix arg toggles default value of this flag. The ul is automatically spoken if there is no user activity.

**12.74.6.28 emacspeak-eww-open-mark****emacspeak-eww-open-mark** (*name* &**optional** *delete*) [Command]*C-x r e*

Open EWW marked location. With optional interactive prefix arg ‘delete’, delete that mark instead.

(fn NAME &amp;optional DELETE)

**12.74.6.29 emacspeak-eww-play-media-at-point****emacspeak-eww-play-media-at-point** (&**optional** *playlist-p*) [Command]*C-e M-;*<*fn*> *M-;*

Play media url under point.

Optional interactive prefix arg ‘playlist-p’ treats link as a playlist. A second interactive prefix arg adds mplayer option -allow-dangerous-playlist-parsing

(fn &amp;optional PLAYLIST-P)

**12.74.6.30 emacspeak-eww-previous-dd****emacspeak-eww-previous-dd** (&**optional** *speak*) [Command]

Move backward to the next dd.

Optional interactive prefix arg speaks the dd.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The dd is automatically spoken if there is no user activity.

**12.74.6.31 emacspeak-eww-previous-dl****emacspeak-eww-previous-dl** (&**optional** *speak*) [Command]

Move backward to the next dl.

Optional interactive prefix arg speaks the dl.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The dl is automatically spoken if there is no user activity.

**12.74.6.32 emacspeak-eww-previous-dt****emacspeak-eww-previous-dt** (&**optional** *speak*) [Command]

Move backward to the next dt.

Optional interactive prefix arg speaks the dt.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The dt is automatically spoken if there is no user activity.

**12.74.6.33 emacspeak-eww-previous-element****emacspeak-eww-previous-element** (*el*) [Command]

Move backward to the previous specified element.

(fn EL)

**12.74.6.34 emacspeak-eww-previous-element-from-history****emacspeak-eww-previous-element-from-history** [Command]

Uses element navigation history to decide where we jump.

**12.74.6.35 emacspeak-eww-previous-element-like-this****emacspeak-eww-previous-element-like-this** (*element*) [Command]

Moves to next element like current.

Prompts if content at point is enclosed by multiple elements.

(fn ELEMENT)

**12.74.6.36 emacspeak-eww-previous-h****emacspeak-eww-previous-h** (&optional *speak*) [Command]

Move backward to the next h.

Optional interactive prefix arg speaks the h.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The h is automatically spoken if there is no user activity.

**12.74.6.37 emacspeak-eww-previous-h1****emacspeak-eww-previous-h1** (&optional *speak*) [Command]

Move backward to the next h1.

Optional interactive prefix arg speaks the h1.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The h1 is automatically spoken if there is no user activity.

**12.74.6.38 emacspeak-eww-previous-h2****emacspeak-eww-previous-h2** (&optional *speak*) [Command]

Move backward to the next h2.

Optional interactive prefix arg speaks the h2.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The h2 is automatically spoken if there is no user activity.

**12.74.6.39 emacspeak-eww-previous-h3****emacspeak-eww-previous-h3** (&optional *speak*) [Command]

Move backward to the next h3.

Optional interactive prefix arg speaks the h3.  
 Second interactive prefix toggles this flag.  
 See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.  
 The h3 is automatically spoken if there is no user activity.

#### 12.74.6.40 emacspeak-eww-previous-h4

**emacspeak-eww-previous-h4** (*&optional speak*) [Command]

Move backward to the next h4.  
 Optional interactive prefix arg speaks the h4.  
 Second interactive prefix toggles this flag.  
 See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.  
 The h4 is automatically spoken if there is no user activity.

#### 12.74.6.41 emacspeak-eww-previous-h5

**emacspeak-eww-previous-h5** (*&optional speak*) [Command]

Move backward to the next h5.  
 Optional interactive prefix arg speaks the h5.  
 Second interactive prefix toggles this flag.  
 See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.  
 The h5 is automatically spoken if there is no user activity.

#### 12.74.6.42 emacspeak-eww-previous-h6

**emacspeak-eww-previous-h6** (*&optional speak*) [Command]

Move backward to the next h6.  
 Optional interactive prefix arg speaks the h6.  
 Second interactive prefix toggles this flag.  
 See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.  
 The h6 is automatically spoken if there is no user activity.

#### 12.74.6.43 emacspeak-eww-previous-li

**emacspeak-eww-previous-li** (*&optional speak*) [Command]

Move backward to the next li.  
 Optional interactive prefix arg speaks the li.  
 Second interactive prefix toggles this flag.  
 See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.  
 The li is automatically spoken if there is no user activity.

#### 12.74.6.44 emacspeak-eww-previous-ol

**emacspeak-eww-previous-ol** (*&optional speak*) [Command]

Move backward to the next ol.  
 Optional interactive prefix arg speaks the ol.  
 Second interactive prefix toggles this flag.  
 See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.  
 The ol is automatically spoken if there is no user activity.

**12.74.6.45 emacspeak-eww-previous-p****emacspeak-eww-previous-p** (*&optional speak*) [Command]

Move backward to the next p.

Optional interactive prefix arg speaks the p.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The p is automatically spoken if there is no user activity.

**12.74.6.46 emacspeak-eww-previous-table****emacspeak-eww-previous-table** (*&optional speak*) [Command]

Move backward to the next table.

Optional interactive prefix arg speaks the table.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The table is automatically spoken if there is no user activity.

**12.74.6.47 emacspeak-eww-previous-ul****emacspeak-eww-previous-ul** (*&optional speak*) [Command]

Move backward to the next ul.

Optional interactive prefix arg speaks the ul.

Second interactive prefix toggles this flag.

See user option ‘emacspeak-eww-autospeak’ on how to reverse this behavior.

The ul is automatically spoken if there is no user activity.

**12.74.6.48 emacspeak-eww-reading-settings****emacspeak-eww-reading-settings** [Command]

Setup speech-rate, punctuation and split-caps for reading prose.

**12.74.6.49 emacspeak-eww-restore****emacspeak-eww-restore** [Command]

Restore buffer to pre-filtered canonical state.

**12.74.6.50 emacspeak-eww-shell-command-on-url-at-point****emacspeak-eww-shell-command-on-url-at-point** (*&optional prefix*) [Command]

Run specified shell command on URL at point.

Warning: Running shell script cbox through this fails mysteriously.

(fn *&optional* PREFIX)**12.74.6.51 emacspeak-eww-smart-tabs****emacspeak-eww-smart-tabs** (*char &optional define*) [Command]

C-, SPC

*C-x @ a SPC*

Open URL in EWW keyed by ‘char’.

To associate a URL with a char, use this command with an interactive prefix arg.

(fn CHAR &optional DEFINE)

### 12.74.6.52 emacspeak-eww-smart-tabs-add

`emacspeak-eww-smart-tabs-add` (*char url*) [Command]

Add a URL to the specified location in smart tabs.

(fn CHAR URL)

### 12.74.6.53 emacspeak-eww-smart-tabs-load

`emacspeak-eww-smart-tabs-load` [Command]

Load our smart tabs from a file.

### 12.74.6.54 emacspeak-eww-smart-tabs-save

`emacspeak-eww-smart-tabs-save` [Command]

Save our smart tabs to a file for reloading.

### 12.74.6.55 emacspeak-eww-speak-this-element

`emacspeak-eww-speak-this-element` (*element*) [Command]

Speaks to next element like current.

(fn ELEMENT)

### 12.74.6.56 emacspeak-eww-table-data

`emacspeak-eww-table-data` [Command]

View table at point as a data table using Emacspeak Table UI.

### 12.74.6.57 emacspeak-eww-table-next-cell

`emacspeak-eww-table-next-cell` (&optional *prefix*) [Command]

Speak next cell after making it current.

Interactive prefix arg moves to the last cell in the table.

(fn &optional PREFIX)

### 12.74.6.58 emacspeak-eww-table-next-row

`emacspeak-eww-table-next-row` (&optional *prefix*) [Command]

Speak cell after moving to next row.

Optional interactive prefix arg moves to end of table.

(fn &optional PREFIX)

**12.74.6.59 emacspeak-eww-table-previous-cell**

**emacspeak-eww-table-previous-cell** (*&optional prefix*) [Command]

Speak previous cell after making it current.

With interactive prefix arg, move to the start of the table.

(fn &optional PREFIX)

**12.74.6.60 emacspeak-eww-table-previous-row**

**emacspeak-eww-table-previous-row** (*&optional prefix*) [Command]

Speak cell after moving to previous row.

Optional interactive prefix arg moves to start of table.

(fn &optional PREFIX)

**12.74.6.61 emacspeak-eww-table-speak-cell**

**emacspeak-eww-table-speak-cell** [Command]

Speak current cell.

**12.74.6.62 emacspeak-eww-table-speak-dimensions**

**emacspeak-eww-table-speak-dimensions** [Command]

Speak number of rows and cells.

**12.74.6.63 emacspeak-eww-tags-at-point**

**emacspeak-eww-tags-at-point** [Command]

Display tags at point.

**12.74.7 emacspeak-eww Options**

User Option *emacspeak-eww-autospeak* [Variable]

Turn this on to make section navigation autospeak. This also reverses the meaning of the prefix-arg to section nav commands.

User Option *emacspeak-eww-inhibit-images* [Variable]

Turn this on to avoid rendering images.

**12.75 emacspeak-extras**

Infrequently used wizards archived for posterity.

**12.75.1 Emacspeak-Extras Commands****12.75.1.1 emacspeak-annotate-add-annotation**

**emacspeak-annotate-add-annotation** (*&optional reset*) [Command]

Add annotation to the annotation working buffer.

Prompt for annotation buffer if not already set.  
 Interactive prefix arg ‘reset’ prompts for the annotation buffer even if one is already set.  
 Annotation is entered in a temporary buffer and the annotation is inserted into the working buffer when complete.

### 12.75.1.2 emacspeak-clipboard-copy

**emacspeak-clipboard-copy** (*start end &optional prompt*) [Command]

*C-e C-c*

*<fn> C-c*

Use file-based Emacspeak Clipboard —  
 dis a convenient way of sharing information between independent Emacspeak sessions running on different machines.

### 12.75.1.3 emacspeak-clipboard-paste

**emacspeak-clipboard-paste** (*&optional paste-table*) [Command]

*C-e C-y*

*<fn> C-y*

Yank contents of the Emacspeak clipboard at point.

### 12.75.1.4 emacspeak-curl

**emacspeak-curl** (*url*) [Command]

Grab URL using Curl, and preview it with a browser .

### 12.75.1.5 emacspeak-wizards-add-autoload-cookies

**emacspeak-wizards-add-autoload-cookies** (*&optional f*) [Command]

Add autoload cookies to file *f*.

Default is to add autoload cookies to current file.

### 12.75.1.6 emacspeak-wizards-bindings-from-org

**emacspeak-wizards-bindings-from-org** (*variable filename*) [Command]

Load bindings from a specified file.

### 12.75.1.7 emacspeak-wizards-bindings-to-org

**emacspeak-wizards-bindings-to-org** (*variable filename*) [Command]

Persists mapping to org file.

### 12.75.1.8 emacspeak-wizards-braille

**emacspeak-wizards-braille** (*s*) [Command]

Insert Braille string at point.



**12.75.1.9 emacspeak-wizards-display-pod-as-manpage**

`emacspeak-wizards-display-pod-as-manpage` (*filename*) [Command]  
 Create a virtual manpage in Emacs from the Perl Online Documentation.

**12.75.1.10 emacspeak-wizards-find-grep**

`emacspeak-wizards-find-grep` (*glob pattern*) [Command]  
 Run compile using find and grep.  
 Interactive arguments specify filename pattern and search pattern.

**12.75.1.11 emacspeak-wizards-fix-read-only-text**

`emacspeak-wizards-fix-read-only-text` (*start end*) [Command]  
 Nuke read-only property on text range.

**12.75.1.12 emacspeak-wizards-generate-voice-sampler**

`emacspeak-wizards-generate-voice-sampler` (*step*) [Command]  
 Generate a buffer that shows a sample line in all the ACSS settings  
 for the current voice family.

**12.75.1.13 emacspeak-wizards-list-voices**

`emacspeak-wizards-list-voices` (*pattern*) [Command]  
*C-h* "  
*<f1>* "  
*<help>* "  
 Show all defined voice-face mappings in a help buffer.  
 Sample text to use comes from variable  
 'ems-wizards-sampler-text

**12.75.1.14 emacspeak-wizards-midi-using-m-score**

`emacspeak-wizards-midi-using-m-score` (*midi-file*) [Command]  
 Play midi file using mscore from musescore package.

**12.75.1.15 emacspeak-wizards-show-voices**

`emacspeak-wizards-show-voices` [Command]  
 Display a buffer with sample text in the defined voices.

**12.75.1.16 emacspeak-wizards-tramp-open-location**

`emacspeak-wizards-tramp-open-location` (*name*) [Command]  
*C-;* *C-t*  
*C-x @ h C-t*  
 Open specified tramp location.  
 Location is specified by name.

### 12.75.1.17 emacspeak-wizards-voice-sampler

**emacspeak-wizards-voice-sampler** (*personality*) [Command]  
 Read a personality and apply it to the current line.

### 12.75.2 emacspeak-extras Options

**User Option** *emacspeak-clipboard-file* [Variable]  
 File used to save Emacspeak clipboard. The emacspeak clipboard provides a convenient mechanism for exchanging information between different Emacs sessions.

**User Option** *emacspeak-curl-cookie-store* [Variable]  
 Cookie store used by Curl.

**User Option** *emacspeak-wizards-tramp-locations* [Variable]  
 Tramp locations used by Emacspeak tramp wizard. Locations added here via custom can be opened using command *emacspeak-wizards-tramp-open-location* bound to C-x @ h C-t.

## 12.76 emacspeak-feeds

This module provides Feeds support for Emacspeak

### 12.76.1 Emacspeak-Feeds Commands

#### 12.76.1.1 emacspeak-feeds-add-feed

**emacspeak-feeds-add-feed** (*title url type*) [Command]  
 C-e M-u  
 <fn> M-u  
 Add specified feed to our feed store.  
 (fn TITLE URL TYPE)

#### 12.76.1.2 emacspeak-feeds-archive-feeds

**emacspeak-feeds-archive-feeds** [Command]  
 Archive list of subscribed fees to personal resource directory.  
 Archiving is useful when synchronizing feeds across multiple machines.

#### 12.76.1.3 emacspeak-feeds-atom-display

**emacspeak-feeds-atom-display** (*feed-url*) [Command]  
 C-, a  
 C-x @ a a  
 Display ATOM feed.  
 (fn FEED-URL)

**12.76.1.4 emacspeak-feeds-browse****emacspeak-feeds-browse** (*feed*) [Command]*C-e C-u*<*fn*> *C-u*Browse *feed*.

(fn FEED)

**12.76.1.5 emacspeak-feeds-fastload-feeds****emacspeak-feeds-fastload-feeds** [Command]

Fast load list of feeds from archive.

This directly updates emacspeak-feeds from the archive, rather than adding those entries to the current set of subscribed feeds.

**12.76.1.6 emacspeak-feeds-opml-display****emacspeak-feeds-opml-display** (*feed-url*) [Command]*C-, o**C-x @ a o*

Display OPML feed.

(fn FEED-URL)

**12.76.1.7 emacspeak-feeds-restore-feeds****emacspeak-feeds-restore-feeds** [Command]Restore list of subscribed fees from *personal resource directory*.

Archiving is useful when synchronizing feeds across multiple machines.

**12.76.1.8 emacspeak-feeds-rss-display****emacspeak-feeds-rss-display** (*feed-url*) [Command]*C-, r**C-x @ a r*

Display RSS feed.

(fn FEED-URL)

**12.76.2 emacspeak-feeds Options****User Option** *emacspeak-feeds* [Variable]Table of RSS/Atom feeds. The feed list is persisted to file *saved-feeds* on exit.

## 12.77 emacspeak-filtertext

It is often useful to view the results of filtering large amounts of text.;; Typically you do this with various combinations of grep and friends. When doing so it requires explicit effort to not destroy the original text being filtered.

### 12.77.1 Emacspeak-Filtertext Commands

#### 12.77.1.1 emacspeak-filtertext

**emacspeak-filtertext** (*start end*) [Command]

*C-e ^*

*<fn> ^*

Copy over text in region to special filtertext buffer to filter text.

(fn START END)

#### 12.77.1.2 emacspeak-filtertext-mode

**emacspeak-filtertext-mode** [Command]

Major mode for FilterText interaction.

|     |         |
|-----|---------|
| key | binding |
| —   | ———     |

= keep-lines

^ flush-lines

r emacspeak-filtertext-revert

In addition to any hooks its parent mode ‘text-mode’ might have run, this mode runs the hook ‘emacspeak-filtertext-mode-hook’, as the final or penultimate step during initialization.

#### 12.77.1.3 emacspeak-filtertext-revert

**emacspeak-filtertext-revert** [Command]

Revert to original text.

## 12.78 emacspeak-flycheck

FLYCHECK == On-the-fly checking.

## 12.79 emacspeak-flymake

Speech-enable flymake

## 12.80 emacspeak-flyspell

This module speech enables flyspell. it loads flyspell-correct if available, And when loading flyspell-correct sets up that module

### 12.80.1 emacspeak-flyspell Options

User Option *emacspeak-flyspell-correct* [Variable]  
Correction style to use with flyspell.

## 12.81 emacspeak-folding

Folding mode turns emacs into a folding editor.

## 12.82 emacspeak-forge

FORGE == Work with Github, Gitlab etc from inside magit. This module speech-enables magit/forge.

## 12.83 emacspeak-forms

Provide additional advice to forms-mode

### 12.83.1 Emacspeak-Forms Commands

#### 12.83.1.1 emacspeak-forms-find-file

*emacspeak-forms-find-file* (*filename*) [Command]  
Visit a forms file  
  
(fn FILENAME)

#### 12.83.1.2 emacspeak-forms-flush-unwanted-records

*emacspeak-forms-flush-unwanted-records* [Command]  
Prompt for pattern and flush matching lines

#### 12.83.1.3 emacspeak-forms-rerun-filter

*emacspeak-forms-rerun-filter* [Command]  
Rerun filter –allows us to nuke more matching records

#### 12.83.1.4 emacspeak-forms-speak-field

*emacspeak-forms-speak-field* [Command]  
Speak current form field name and value.  
Assumes that point is at the front of a field value.

#### 12.83.1.5 emacspeak-forms-summarize-current-position

*emacspeak-forms-summarize-current-position* [Command]  
Summarize current position in list of records

#### 12.83.1.6 emacspeak-forms-summarize-current-record

*emacspeak-forms-summarize-current-record* [Command]  
Summarize current record

## 12.84 emacspeak-geiser

geiser.el — GNU Emacs and Scheme talk to each other This module speech-enables all interactive aspects of geiser, including the geiser->scheme REPL. This is used by racket-mode for racket interaction, And also for interacting with Guile.

## 12.85 emacspeak-gh-explorer

GH-EXPLORER == GitHub Explorer This module speech-enables Github Explorer.

### 12.85.1 Emacspeak-Gh-Explorer Commands

#### 12.85.1.1 emacspeak-gh-explorer-next

`emacspeak-gh-explorer-next` [Command]  
Move forward and speak current entry.

#### 12.85.1.2 emacspeak-gh-explorer-previous

`emacspeak-gh-explorer-previous` [Command]  
Moveback and speak current entry.

## 12.86 emacspeak-gnuplot

This module speech-enables gnuplot-mode an Emacs add-on that enables fluent interaction with gnuplot. Use gnuplot to generate plots of mathematical functions for inclusion in documents.

## 12.87 emacspeak-gnus

This module advises gnus to speak. Updating support in 2014 (Emacspeak is nearly 20 years old) Updating in 2018 as I switch to gnus as my primary mail interface.

### 12.87.1 Emacspeak-Gnus Commands

#### 12.87.1.1 emacspeak-gnus-personal-gmail-last-week

`emacspeak-gnus-personal-gmail-last-week` [Command]  
Look for mail addressed personally in the last week.

#### 12.87.1.2 emacspeak-gnus-personal-gmail-recent

`emacspeak-gnus-personal-gmail-recent` [Command]  
Look for mail addressed personally in the last day.

#### 12.87.1.3 emacspeak-gnus-summary-catchup-quietly-and-exit

`emacspeak-gnus-summary-catchup-quietly-and-exit` [Command]  
Catch up on all articles in current group.

## 12.87.2 emacspeak-gnus Options

**User Option** *emacspeak-gnus-large-article* [Variable]  
 Articles having more than *emacspeak-gnus-large-article* lines will be considered to be a large article. A large article is not spoken all at once; instead you hear only the first screenful.

**User Option** *emacspeak-gnus-punctuation-mode* [Variable]  
 Pronunciation mode to use for gnus buffers.

## 12.88 emacspeak-go-mode

GO-MODE == Go Language support in emacs

## 12.89 emacspeak-gomoku

Auditory interface to gomoku

### 12.89.1 Emacspeak-Gomoku Commands

#### 12.89.1.1 emacspeak-gomoku-display-statistics

*emacspeak-gomoku-display-statistics* [Command]  
 Display statistics from previous games

#### 12.89.1.2 emacspeak-gomoku-goto-x-y

*emacspeak-gomoku-goto-x-y* (x y) [Command]  
 Prompt for and go to that square.

(fn X Y)

#### 12.89.1.3 emacspeak-gomoku-show-current-column

*emacspeak-gomoku-show-current-column* [Command]  
 Aurally display current column

#### 12.89.1.4 emacspeak-gomoku-show-current-negative-diagonal

*emacspeak-gomoku-show-current-negative-diagonal* [Command]  
 Aurally display current negative sloped diagonal

#### 12.89.1.5 emacspeak-gomoku-show-current-positive-diagonal

*emacspeak-gomoku-show-current-positive-diagonal* [Command]  
 Aurally display current positively sloped diagonal

#### 12.89.1.6 emacspeak-gomoku-show-current-row

*emacspeak-gomoku-show-current-row* [Command]  
 Aurally display current row

**12.89.1.7 emacspeak-gomoku-speak-emacs-previous-move**

**emacspeak-gomoku-speak-emacs-previous-move** [Command]  
 Speak emacs' previous move

**12.89.1.8 emacspeak-gomoku-speak-humans-previous-move**

**emacspeak-gomoku-speak-humans-previous-move** [Command]  
 Speak human' previous move

**12.89.1.9 emacspeak-gomoku-speak-number-of-moves**

**emacspeak-gomoku-speak-number-of-moves** [Command]  
 Speak number of moves so far

**12.89.1.10 emacspeak-gomoku-speak-square**

**emacspeak-gomoku-speak-square** [Command]  
 Speak coordinates and state of square at point

**12.90 emacspeak-google**

There are a number of search tools that can be implemented on the Google search page — in a JS-powered browser, these show up as the Google tool-belt. This module implements a minor mode for use in Google result pages that enables these tools via single keyboard commands. Originally all options were available as `tbs=p:v` Now, some specialized searches, e.g. blog search are `tbm=`

**12.90.1 Emacspeak-Google Commands****12.90.1.1 emacspeak-google-extract-from-cache**

**emacspeak-google-extract-from-cache** [Command]  
 Extract current page from the Google cache.

**12.90.1.2 emacspeak-google-knowledge-search**

**emacspeak-google-knowledge-search** (*query* &**optional** *limit*) [Command]  
`C-;` *k*

`C-x @ h k`

Perform a Google Knowledge Graph search.

Optional interactive prefix arg 'limit' prompts for number of results, default is 1.

(fn QUERY &optional LIMIT)

**12.90.1.3 emacspeak-google-on-this-site**

**emacspeak-google-on-this-site** [Command]  
 Perform a google search restricted to the current WWW site.



#### 12.90.1.4 emacspeak-google-open-link

`emacspeak-google-open-link` [Command]  
Open Google link under point.

#### 12.90.1.5 emacspeak-google-show-toolbelt

`emacspeak-google-show-toolbelt` [Command]  
Reload search page with toolbelt showing.

#### 12.90.1.6 emacspeak-google-sign-in

`emacspeak-google-sign-in` [Command]  
Sign in to Google.

#### 12.90.1.7 emacspeak-google-sign-out

`emacspeak-google-sign-out` [Command]  
Sign out to Google.

#### 12.90.1.8 emacspeak-google-similar-to-this-page

`emacspeak-google-similar-to-this-page` (*url*) [Command]  
Ask Google to find documents similar to this one.  
(fn URL)

#### 12.90.1.9 emacspeak-google-toolbelt-change

`emacspeak-google-toolbelt-change` [Command]  
Command to change values in the toolbelt and execute the query.

#### 12.90.1.10 emacspeak-google-toolbelt-change-Shopping

`emacspeak-google-toolbelt-change-Shopping` [Command]  
Change Shopping in the currently active toolbelt.

#### 12.90.1.11 emacspeak-google-toolbelt-change-blog

`emacspeak-google-toolbelt-change-blog` [Command]  
Change blog in the currently active toolbelt.

#### 12.90.1.12 emacspeak-google-toolbelt-change-books

`emacspeak-google-toolbelt-change-books` [Command]  
Change books in the currently active toolbelt.

#### 12.90.1.13 emacspeak-google-toolbelt-change-books-format

`emacspeak-google-toolbelt-change-books-format` [Command]  
Change books-format in the currently active toolbelt.

**12.90.1.14 emacspeak-google-toolbelt-change-books-type**

`emacspeak-google-toolbelt-change-books-type` [Command]  
Change `books-type` in the currently active toolbelt.

**12.90.1.15 emacspeak-google-toolbelt-change-books-viewability**

`emacspeak-google-toolbelt-change-books-viewability` [Command]  
Change `books-viewability` in the currently active toolbelt.

**12.90.1.16 emacspeak-google-toolbelt-change-commercial**

`emacspeak-google-toolbelt-change-commercial` [Command]  
Change `commercial` in the currently active toolbelt.

**12.90.1.17 emacspeak-google-toolbelt-change-commercial-prices**

`emacspeak-google-toolbelt-change-commercial-prices` [Command]  
Change `commercial-prices` in the currently active toolbelt.

**12.90.1.18 emacspeak-google-toolbelt-change-date-filter**

`emacspeak-google-toolbelt-change-date-filter` [Command]  
Change `date-filter` in the currently active toolbelt.

**12.90.1.19 emacspeak-google-toolbelt-change-forums**

`emacspeak-google-toolbelt-change-forums` [Command]  
Change `forums` in the currently active toolbelt.

**12.90.1.20 emacspeak-google-toolbelt-change-group-discussions**

`emacspeak-google-toolbelt-change-group-discussions` [Command]  
Change `group-discussions` in the currently active toolbelt.

**12.90.1.21 emacspeak-google-toolbelt-change-images**

`emacspeak-google-toolbelt-change-images` [Command]  
Change `images` in the currently active toolbelt.

**12.90.1.22 emacspeak-google-toolbelt-change-in-depth**

`emacspeak-google-toolbelt-change-in-depth` [Command]  
Change `in-depth` in the currently active toolbelt.

**12.90.1.23 emacspeak-google-toolbelt-change-literal**

`emacspeak-google-toolbelt-change-literal` [Command]  
Change `literal` in the currently active toolbelt.

**12.90.1.24 emacspeak-google-toolbelt-change-news**

`emacspeak-google-toolbelt-change-news` [Command]  
Change news in the currently active toolbelt.

**12.90.1.25 emacspeak-google-toolbelt-change-non-commercial**

`emacspeak-google-toolbelt-change-non-commercial` [Command]  
Change non-commercial in the currently active toolbelt.

**12.90.1.26 emacspeak-google-toolbelt-change-patents**

`emacspeak-google-toolbelt-change-patents` [Command]  
Change patents in the currently active toolbelt.

**12.90.1.27 emacspeak-google-toolbelt-change-places**

`emacspeak-google-toolbelt-change-places` [Command]  
Change places in the currently active toolbelt.

**12.90.1.28 emacspeak-google-toolbelt-change-recent**

`emacspeak-google-toolbelt-change-recent` [Command]  
Change recent in the currently active toolbelt.

**12.90.1.29 emacspeak-google-toolbelt-change-recipes**

`emacspeak-google-toolbelt-change-recipes` [Command]  
Change recipes in the currently active toolbelt.

**12.90.1.30 emacspeak-google-toolbelt-change-reviews**

`emacspeak-google-toolbelt-change-reviews` [Command]  
Change reviews in the currently active toolbelt.

**12.90.1.31 emacspeak-google-toolbelt-change-social**

`emacspeak-google-toolbelt-change-social` [Command]  
Change social in the currently active toolbelt.

**12.90.1.32 emacspeak-google-toolbelt-change-sort-by-date**

`emacspeak-google-toolbelt-change-sort-by-date` [Command]  
Change sort-by-date in the currently active toolbelt.

**12.90.1.33 emacspeak-google-toolbelt-change-structured-snippets**

`emacspeak-google-toolbelt-change-structured-snippets` [Command]  
Change structured-snippets in the currently active toolbelt.

**12.90.1.34 emacspeak-google-toolbelt-change-timeline**

**emacspeak-google-toolbelt-change-timeline** [Command]  
 Change timeline in the currently active toolbelt.

**12.90.1.35 emacspeak-google-toolbelt-change-timeline-high**

**emacspeak-google-toolbelt-change-timeline-high** [Command]  
 Change timeline-high in the currently active toolbelt.

**12.90.1.36 emacspeak-google-toolbelt-change-timeline-low**

**emacspeak-google-toolbelt-change-timeline-low** [Command]  
 Change timeline-low in the currently active toolbelt.

**12.90.1.37 emacspeak-google-toolbelt-change-video**

**emacspeak-google-toolbelt-change-video** [Command]  
 Change video in the currently active toolbelt.

**12.90.1.38 emacspeak-google-toolbelt-change-video-duration**

**emacspeak-google-toolbelt-change-video-duration** [Command]  
 Change video-duration in the currently active toolbelt.

**12.90.1.39 emacspeak-google-toolbelt-change-web-history-not-visited**

**emacspeak-google-toolbelt-change-web-history-not-visited** [Command]  
 Change web-history-not-visited in the currently active toolbelt.

**12.90.1.40 emacspeak-google-toolbelt-change-web-history-visited**

**emacspeak-google-toolbelt-change-web-history-visited** [Command]  
 Change web-history-visited in the currently active toolbelt.

**12.90.1.41 emacspeak-google-tts**

**emacspeak-google-tts** (*text* &**optional** *lang*) [Command]  
 Google Network TTS.  
 Optional interactive prefix arg ‘lang’ specifies language identifier.

(fn TEXT &optional LANG)

**12.90.1.42 emacspeak-google-tts-region**

**emacspeak-google-tts-region** (*start end* &**optional** *ask-lang*) [Command]  
 Speak region using Google Network TTS.

(fn START END &optional ASK-LANG)

**12.90.1.43 emacspeak-google-what-is-my-ip**

**emacspeak-google-what-is-my-ip** [Command]  
 Show my public IP

**12.90.1.44 emacspeak-google-who-links-to-this-page**

**emacspeak-google-who-links-to-this-page** [Command]  
 Perform a google search to locate documents that link to the current page.

**12.90.2 emacspeak-google Options**

**User Option** *emacspeak-google-kg-key* [Variable]  
 API Key for Google Knowledge Graph.

**User Option** *emacspeak-google-tts-default-language* [Variable]  
 Default language used for Google TTS.

**12.91 emacspeak-gridtext**

Emacspeak's table browsing mode allows one to efficiently access content that is tabular in nature. That module also provides functions for inferring table structure where possible. Often, such structure is hard to infer automatically –but might be known to the user e.g. treat columns 1 through 30 as one column of a table and so on. This module allows the user to specify a conceptual grid that is "overlaid" on the region of text to turn it into a table for tabular browsing. For now, elements of the grid are "one line" high –but that may change in the future if necessary. This module is useful for browsing structured text files and the output from programs that tabulate their output. It's also useful for handling multicolumn text. The "grid" is specified as a list of (start end) tuples..

**12.91.1 Emacspeak-Gridtext Commands****12.91.1.1 emacspeak-gridtext-apply**

**emacspeak-gridtext-apply** (*start end grid*) [Command]  
 Apply grid to region.

(fn START END GRID)

**12.91.1.2 emacspeak-gridtext-load**

**emacspeak-gridtext-load** (*file*) [Command]  
 Load saved grid settings.

(fn FILE)

**12.91.1.3 emacspeak-gridtext-save**

**emacspeak-gridtext-save** (*file*) [Command]  
 Save out grid settings.

(fn FILE)

## 12.92 emacspeak-gtags

GTAGS == Emacs support for GNU global. GNU global implements a modern tags solution. Package gtags interfaces Emacs to this tool.

## 12.93 emacspeak-gud

Provide additional advice to ease debugger interaction with gud

## 12.94 emacspeak-haskell

Speech-enable package haskell-mode

## 12.95 emacspeak-helm

HELM == Smart narrowing/selection in emacs. This module speech-enables Helm interaction. See `tvw/helm-prepare.el` in the GitHub repository for my helm setup. that file provides convenient emacspeak-centric keybindings for Helm interaction.

## 12.96 emacspeak-hide

Flexible hide and show for emacspeak. This module allows one to easily hide or expose blocks of lines starting with a common prefix. It is motivated by the need to flexibly hide quoted text in email but is designed to be more general. the prefix parsing is inspired by `filladapt.el`

### 12.96.1 Emacspeak-Hide Commands

#### 12.96.1.1 emacspeak-hide-or-expose-all-blocks

`emacspeak-hide-or-expose-all-blocks` [Command]  
Hide or expose all blocks.

#### 12.96.1.2 emacspeak-hide-or-expose-block

`emacspeak-hide-or-expose-block (&optional prefix)` [Command]

*C-e j*

*<fn> j*

Hide or expose a block of text.

Optional interactive prefix arg causes all blocks in current buffer to be hidden or exposed.

(fn &optional PREFIX)

**12.96.1.3 emacspeak-hide-speak-block-sans-prefix****emacspeak-hide-speak-block-sans-prefix**

[Command]

*C-e C-j**<fn> C-j*

Speaks current block after stripping its prefix.

**12.97 emacspeak-hide-lines**

HIDE-LINES == hide/show lines from melpa

**12.98 emacspeak-hideshow**

speech-enable hideshow.el

**12.99 emacspeak-hydra****12.99.1 Emacspeak-Hydra Commands****12.99.1.1 emacspeak-hydra-toggle-talkative****emacspeak-hydra-toggle-talkative**

[Command]

Toggle state of hydra-is-helpful

**12.100 emacspeak-ibuffer**

speech-enable ibuffer.el this is an alternative to buffer-menu

**12.100.1 Emacspeak-Ibuffer Commands****12.100.1.1 emacspeak-ibuffer-speak-buffer-line****emacspeak-ibuffer-speak-buffer-line**

[Command]

Speak information about this buffer

**12.101 emacspeak-ido**

speech-enable ido.el This is an interesting task since most of the value-add provided by package ido.el is visual feedback. Speech UI Challenge: What is the most efficient means of conveying a dynamically updating set of choices? current strategy is to walk the list using c-s and c-r as provided by ido Set number matches shown (ido-max-prospects) to 3 using Custom so you dont hear the entire list.

**12.101.1 emacspeak-ido Options****User Option** *emacspeak-ido-typing-delay*

[Variable]

How long we wait before speaking completions.

## 12.102 emacspeak-iedit

IEDIT == Edit multiple regions This module speech-enables iedit.

## 12.103 emacspeak-indium

INDIUM == Javascript IDE This module speech-enables Indium.

## 12.104 emacspeak-info

This module speech-enables the Emacs Info Reader.

### 12.104.1 Emacspeak-Info Commands

#### 12.104.1.1 emacspeak-info-next-section

`emacspeak-info-next-section` [Command]  
Move forward to next section in this node.

#### 12.104.1.2 emacspeak-info-previous-section

`emacspeak-info-previous-section` [Command]  
Move backward to previous section in this node.

#### 12.104.1.3 emacspeak-info-speak-header

`emacspeak-info-speak-header` [Command]  
Speak info header line.

#### 12.104.1.4 emacspeak-info-wizard

`emacspeak-info-wizard` (*node-spec*) [Command]  
*C-h TAB*  
*<f1> TAB*  
*<help> TAB*  
Read a node spec from the minibuffer and launch  
Info-goto-node.  
See documentation for command ‘Info-goto-node’ for details on  
node-spec.  
(fn NODE-SPEC)

### 12.104.2 emacspeak-info Options

User Option `emacspeak-info-select-node-speak-chunk` [Variable]  
Specifies how much of the selected node gets spoken. Possible values are: screenfull  
– speak the displayed screen node – speak the entire node.



## 12.105 emacspeak-ispell

This module speech enables ispell. Implementation note: This is hard because of how ispell.el is written. Namely, all of the work is done by one huge hairy function. This makes advising it hard. The ispell commands work well with Emacspeak as long as the list of correction choices are few. For interactively moving through corrections, install package flyspell-correct from MELPA (package-install "flyspell-correct") Then use M-x flyspell-mode. Package flyspell is speech-enabled by Emacspeak module emacspeak-flyspell And that module sets up flyspell-correct to use IDO-style completion, i.e. you can move through corrections with C-r and C-s.

### 12.105.1 emacspeak-ispell Options

User Option *emacspeak-ispell-max-choices* [Variable]  
Emacspeak will not speak the choices if there are more than this many available corrections.

## 12.106 emacspeak-ivy

IVY == One More Smart Completion Technique Speech-enable ivy-style completion. This is still experimental and preliminary.

## 12.107 emacspeak-jabber

emacs-jabber.el implements a jabber client for emacs emacs-jabber is hosted at sourceforge. I use emacs-jabber with my gmail.com account

### 12.107.1 Emacspeak-Jabber Commands

#### 12.107.1.1 emacspeak-jabber-chat-next-message

*emacspeak-jabber-chat-next-message* [Command]  
Move forward to and speak the next message in this chat session.

#### 12.107.1.2 emacspeak-jabber-chat-previous-message

*emacspeak-jabber-chat-previous-message* [Command]  
Move backward to and speak the previous message in this chat session.

#### 12.107.1.3 emacspeak-jabber-chat-speak-this-message

*emacspeak-jabber-chat-speak-this-message* (&optional *copy-as-kill*) [Command]  
Speak chat message under point.  
With optional interactive prefix arg ‘copy-as-kill’, copy it to the kill ring as well.

(fn &optional COPY-AS-KILL)

### 12.107.1.4 emacspeak-jabber-popup-roster

**emacspeak-jabber-popup-roster** [Command]

*C-e x j*

*<fn> x j*

Pop to Jabber roster.

### 12.107.1.5 emacspeak-jabber-speak-recent-message

**emacspeak-jabber-speak-recent-message** [Command]

*C-e x SPC*

*<fn> x SPC*

Speak most recent message if one exists.

## 12.107.2 emacspeak-jabber Options

**User Option *emacspeak-jabber-speak-presence-alerts*** [Variable]

Set to T if you want to hear presence alerts.

## 12.108 emacspeak-jdee

Speech enable Java IDE. The Java IDE –JDEE– can be found at <http://sunsite.auc.dk/jdee/>

## 12.109 emacspeak-js2

JS2-mode <http://js2-mode.googlecode.com/svn/trunk> is a new, powerful Emacs mode for working with JavaScript. This module speech-enables js2.

## 12.110 emacspeak-keymap

This module defines the emacspeak keybindings. Note that the *<fn>* key found on laptops is denoted *<fn>*

### 12.110.1 emacspeak-keymap Options

**User Option *emacspeak-alt-keys*** [Variable]

Alt key bindings.

**User Option *emacspeak-ctl-z-keys*** [Variable]

CTL-z keymap.

**User Option *emacspeak-hyper-keys*** [Variable]

Hyper-Key bindings.

**User Option *emacspeak-personal-ctlx-keys*** [Variable]

Key bindings for use with C-e C-x.

**User Option *emacspeak-personal-keys*** [Variable]

Key bindings for C-e x.

**User Option *emacspeak-super-keys*** [Variable]

Super key bindings.

### 12.111 emacspeak-kmacro

speech-enables kmacro — a kbd macro interface

### 12.112 emacspeak-librivox

LIBRIVOX == <http://www.librivox.org> — Free Audio Books. API Info: <https://librivox.org/api/info> It provides a simple Web API This module implements an Emacspeak Librivox client.

#### 12.112.1 Usage

main entry point is command `emacspeak-librivox` bound to `C-; 1`.

#### 12.112.2 Emacspeak-Librivox Commands

##### 12.112.2.1 emacspeak-librivox

`emacspeak-librivox` (*search-type*) [Command]

`C-; 1`

`C-x @ h 1`

Launch a Librivox Search.

(fn SEARCH-TYPE)

##### 12.112.2.2 emacspeak-librivox-play

`emacspeak-librivox-play` (*rss-url*) [Command]

Play book stream

(fn RSS-URL)

##### 12.112.2.3 emacspeak-librivox-search-by-author

`emacspeak-librivox-search-by-author` (*author* &*optional* *offset*) [Command]

Search by author. Both exact and partial matches for ‘author’. Optional interactive prefix arg ‘offset’ prompts for offset — use this for retrieving next set of results.

(fn AUTHOR &optional OFFSET)

##### 12.112.2.4 emacspeak-librivox-search-by-genre

`emacspeak-librivox-search-by-genre` (*genre* &*optional* *offset*) [Command]

Search by genre.

Optional prefix arg ‘offset’ prompts for offset.

(fn GENRE &optional OFFSET)

### 12.112.2.5 emacspeak-librivox-search-by-title

**emacspeak-librivox-search-by-title** (*title* &**optional** *offset*) [Command]

Search by title. Both exact and partial matches for ‘title’. Optional prefix arg ‘offset’ prompts for offset — use this for retrieving more results.

(fn TITLE &optional OFFSET)

### 12.112.3 emacspeak-librivox Options

**User Option** *emacspeak-librivox-local-cache* [Variable]

Location where we cache LIBRIVOX playlists.

## 12.113 emacspeak-lispy

LISPY == smart Navigation Of Lisp code This module speech-enables lispy.

### 12.113.1 Overview

Lispy editing keeps delimiters balanced and Lispy navigators reliably place point on either the opening or closing delimiter of the current s-expression. Emacspeak leverages this fact in the

### 12.114 emacspeak-lua

LUA == lua-mode Speech-enable lua-mode.

### 12.115 emacspeak-m-player

Defines an Emacspeak front-end for interacting with **mplayer**. Program **mplayer** is a versatile media player capable of playing many streaming media formats. This module provides complete access to all **mplayer** functionality from a convenient Emacs interface.

#### 12.115.1 Usage

The main entry-point is command **emacspeak-multimedia** bound to **C-e ;**. This prompts for and launches the desired media stream. Once a stream is playing, you can control it with single-letter keystrokes in the **\*M-Player\*** buffer. Alternatively, you can switch away from that buffer to do real work, And invoke **m-player** commands by first pressing **C-e ;**. As an example, pressing **v** in the **\*M-Player\*** buffer prompts for and sets the volume; When not in the **\*M-Player\*** buffer, you can achieve the same by pressing **C-e ; v**. Press **C-h b** in the **\*M-Player\*** buffer to list **m-player** keybindings.

#### 12.115.2 Emacspeak-M-Player Commands

##### 12.115.2.1 emacspeak-m-player

**emacspeak-m-player** (*resource* &**optional** *play-list*) [Command]

Play *resource*, or play dynamic playlist if set. Optional prefix argument *play-list* interprets *resource* as a play-list. Second interactive

prefix arg adds option -allow-dangerous-playlist-parsing to mplayer.  
See command M-x emacspeak-m-player-add-to-dynamic for adding to the  
dynamic playlist.

(fn RESOURCE &optional PLAY-LIST)

### 12.115.2.2 emacspeak-m-player-add-autopan

**emacspeak-m-player-add-autopan** [Command]  
Add autopan effect.

### 12.115.2.3 emacspeak-m-player-add-autosat

**emacspeak-m-player-add-autosat** [Command]  
Add ZamAutoSat (auto saturation) effect.

### 12.115.2.4 emacspeak-m-player-add-equalizer

**emacspeak-m-player-add-equalizer** (&optional *reset*) [Command]  
Add equalizer. Equalizer is updated as each change  
is made, and the final effect set by pressing RET. Interactive prefix  
arg ‘reset’ starts with all filters set to 0.

(fn &optional RESET)

### 12.115.2.5 emacspeak-m-player-add-filter

**emacspeak-m-player-add-filter** (*filter-name* &optional *edit*) [Command]  
Adds filter with completion.  
Optional interactive prefix arg ‘edit’ edits the.

(fn FILTER-NAME &optional EDIT)

### 12.115.2.6 emacspeak-m-player-add-ladspa

**emacspeak-m-player-add-ladspa** [Command]  
Apply plugin to running MPlayer.  
Copies invocation string to kill-ring so it can be added easily to  
our pre-defined filters if appropriate.

### 12.115.2.7 emacspeak-m-player-add-to-dynamic

**emacspeak-m-player-add-to-dynamic** (*file*) [Command]  
Add file to the current dynamic playlist.

(fn FILE)

**12.115.2.8 emacspeak-m-player-alt-src-step**

**emacspeak-m-player-alt-src-step** (*step*) [Command]  
 Move within an ASF playlist.

(fn STEP)

**12.115.2.9 emacspeak-m-player-amarck-add**

**emacspeak-m-player-amarck-add** (*name* &*optional*  
*prompt-position*) [Command]  
 Set AMark ‘name’ at current position.  
 Interactive prefix arg prompts for position.  
 As the default, use current position.

(fn NAME &optional PROMPT-POSITION)

**12.115.2.10 emacspeak-m-player-amarck-jump**

**emacspeak-m-player-amarck-jump** [Command]  
 Jump to AMark.

**12.115.2.11 emacspeak-m-player-amarck-save**

**emacspeak-m-player-amarck-save** [Command]  
 Save amarks.

**12.115.2.12 emacspeak-m-player-apply-reverb-preset**

**emacspeak-m-player-apply-reverb-preset** (*preset*) [Command]  
 Prompt for and apply a reverb preset.  
 You need to use mplayer built with ladspa support, and have package  
 tap-reverb already installed.

(fn PRESET)

**12.115.2.13 emacspeak-m-player-backward-10min**

**emacspeak-m-player-backward-10min** [Command]  
 Move backward ten minutes.

**12.115.2.14 emacspeak-m-player-backward-10s**

**emacspeak-m-player-backward-10s** [Command]  
 Move back 10 seconds.

**12.115.2.15 emacspeak-m-player-backward-1min**

**emacspeak-m-player-backward-1min** [Command]  
 Move back 1 minute.

**12.115.2.16 emacspeak-m-player-balance**

**emacspeak-m-player-balance** [Command]  
Set left/right balance.

**12.115.2.17 emacspeak-m-player-beginning-of-track**

**emacspeak-m-player-beginning-of-track** [Command]  
Move to beginning.

**12.115.2.18 emacspeak-m-player-bind-accelerator**

**emacspeak-m-player-bind-accelerator** (*directory key*) [Command]  
Binds key to invoke m-player on specified directory.  
  
(fn DIRECTORY KEY)

**12.115.2.19 emacspeak-m-player-clear-filters**

**emacspeak-m-player-clear-filters** [Command]  
Clear all filters

**12.115.2.20 emacspeak-m-player-command**

**emacspeak-m-player-command** (*key*) [Command]  
Invoke MPlayer commands.  
  
(fn KEY)

**12.115.2.21 emacspeak-m-player-customize-options**

**emacspeak-m-player-customize-options** [Command]  
Use Customize to set MPlayer options.

**12.115.2.22 emacspeak-m-player-delete-filter**

**emacspeak-m-player-delete-filter** (*filter*) [Command]  
Delete filter.  
  
(fn FILTER)

**12.115.2.23 emacspeak-m-player-delete-ladspa**

**emacspeak-m-player-delete-ladspa** [Command]  
Delete plugin from running MPlayer.

**12.115.2.24 emacspeak-m-player-display-metadata**

**emacspeak-m-player-display-metadata** [Command]  
Display metadata after refreshing it if needed.

**12.115.2.25 emacspeak-m-player-display-percent**

**emacspeak-m-player-display-percent** [Command]  
 Display current percentage.

**12.115.2.26 emacspeak-m-player-display-position**

**emacspeak-m-player-display-position** [Command]  
 Display current position in track.

**12.115.2.27 emacspeak-m-player-double-speed**

**emacspeak-m-player-double-speed** [Command]  
 Scale speed by 2.0

**12.115.2.28 emacspeak-m-player-edit-reverb**

**emacspeak-m-player-edit-reverb** [Command]  
 Edit ladspa reverb filter.  
 You need to use mplayer built with ladspa support, and have package tap-reverb already installed.

**12.115.2.29 emacspeak-m-player-end-of-track**

**emacspeak-m-player-end-of-track** [Command]  
 Move to end.

**12.115.2.30 emacspeak-m-player-equalizer-control**

**emacspeak-m-player-equalizer-control** (*v*) [Command]  
 Manipulate values in *vector* using minibuffer.  
 Applies *the* resulting value at each step.

(fn *V*)

**12.115.2.31 emacspeak-m-player-equalizer-preset**

**emacspeak-m-player-equalizer-preset** (*name*) [Command]  
 Prompts for *and* apply equalizer preset.

The following presets are available:

flat classical club dance full-bass full-bass-and-treble  
 full-treble headphones large-hall live party pop reggae rock  
 ska soft soft-rock techno

(fn *NAME*)

**12.115.2.32 emacspeak-m-player-faster**

**emacspeak-m-player-faster** [Command]  
 Speed up *playback*.



**12.115.2.33 emacspeak-m-player-forward-10min**

`emacspeak-m-player-forward-10min` [Command]  
Move forward ten minutes.

**12.115.2.34 emacspeak-m-player-forward-10s**

`emacspeak-m-player-forward-10s` [Command]  
Move forward 10 seconds.

**12.115.2.35 emacspeak-m-player-forward-1min**

`emacspeak-m-player-forward-1min` [Command]  
Move forward by 1 minute.

**12.115.2.36 emacspeak-m-player-from-history**

`emacspeak-m-player-from-history` (*posn*) [Command]  
*C-; h*  
*C-x @ h h*  
Play media from position ‘posn’media-history.  
(fn POSN)

**12.115.2.37 emacspeak-m-player-get-length**

`emacspeak-m-player-get-length` [Command]  
Display length of track.

**12.115.2.38 emacspeak-m-player-half-speed**

`emacspeak-m-player-half-speed` [Command]  
Scale speed by 0.5.

**12.115.2.39 emacspeak-m-player-left-channel**

`emacspeak-m-player-left-channel` [Command]  
Play both channels on left.

**12.115.2.40 emacspeak-m-player-load**

`emacspeak-m-player-load` (*resource* &**optional** *append*) [Command]  
Load specified resource into a running m-player.  
Interactive prefix arg appends the new resource to what is playing.  
(fn RESOURCE &optional APPEND)

**12.115.2.41 emacspeak-m-player-load-playlist****emacspeak-m-player-load-playlist** (*f*) [Command]

Load playlist.

(fn F)

**12.115.2.42 emacspeak-m-player-locate-media****emacspeak-m-player-locate-media** (*pattern*) [Command]*C-. l**C-' l**C-x @ s l*

Locate media matching *pattern*. The results can be played as a play-list by pressing [RET] on the first line, see M-x emacspeak-dired-open-this-file locally bound to C-RET to play *tracks*.

(fn PATTERN)

**12.115.2.43 emacspeak-m-player-loop****emacspeak-m-player-loop** (&*optional raw*) [Command]*C-e x ;*<*fn*> *x ;*

M-Player with repeat indefinitely turned on.  
Interactive prefix 'raw' reads a raw URL.

(fn &*optional RAW*)**12.115.2.44 emacspeak-m-player-mode****emacspeak-m-player-mode** [Command]

Major mode for m-player interaction.

|     |         |
|-----|---------|
| key | binding |
| —   | —       |

C-l ladspa

RET emacspeak-m-player-load

ESC Prefix Command

SPC emacspeak-m-player-pause

% emacspeak-m-player-display-percent

( emacspeak-m-player-left-channel

) emacspeak-m-player-right-channel

+ emacspeak-m-player-volume-up

, emacspeak-m-player-backward-10s  
- emacspeak-m-player-volume-down  
. emacspeak-m-player-forward-10s  
/ emacspeak-m-player-restore-process  
1 .. 9 emacspeak-m-player-volume-set  
; emacspeak-m-player-pop-to-player  
< emacspeak-m-player-backward-1min  
= emacspeak-m-player-volume-up  
> emacspeak-m-player-forward-1min  
? emacspeak-m-player-display-position  
A emacspeak-m-player-amarck-add  
C emacspeak-m-player-clear-filters  
E emacspeak-m-player-add-equalizer  
G emacspeak-m-player-seek-percentage  
L emacspeak-m-player-locate-media  
M emacspeak-m-player-display-metadata  
O emacspeak-m-player-reset-options  
P emacspeak-m-player-apply-reverb-preset  
Q emacspeak-m-player-quit  
R emacspeak-m-player-edit-reverb  
S emacspeak-m-player-amarck-save  
[ emacspeak-m-player-slower  
\ emacspeak-m-player-persist-process  
] emacspeak-m-player-faster  
a emacspeak-m-player-add-autopan  
b emacspeak-wizards-view-buffers-filtered-by-m-player-mode  
c emacspeak-m-player-slave-command  
d emacspeak-m-player-delete-filter  
e emacspeak-m-player-equalizer-preset  
f emacspeak-m-player-add-filter  
g emacspeak-m-player-seek-absolute  
i emacspeak-m-player-stream-info  
j emacspeak-m-player-amarck-jump  
k emacspeak-m-player-quit  
l emacspeak-m-player-get-length  
m emacspeak-m-player-mode-line  
n emacspeak-m-player-next-track  
o emacspeak-m-player-customize-options  
p emacspeak-m-player-previous-track  
q bury-buffer  
r emacspeak-m-player-seek-relative  
s emacspeak-m-player-scale-speed  
t emacspeak-m-player-play-tracks-jump  
u emacspeak-m-player-url  
v emacspeak-m-player-volume-change  
w emacspeak-m-player-write-clip  
x emacspeak-m-player-pan

```

z emacspeak-m-player-add-autosat
{ emacspeak-m-player-half-speed
} emacspeak-m-player-double-speed
DEL emacspeak-m-player-reset-speed
<down> emacspeak-m-player-forward-1min
<end> emacspeak-m-player-end-of-track
<home> emacspeak-m-player-beginning-of-track
<left> emacspeak-m-player-backward-10s
<next> emacspeak-m-player-forward-10min
<prior> emacspeak-m-player-backward-10min
<right> emacspeak-m-player-forward-10s
<up> emacspeak-m-player-backward-1min

```

```

M-, emacspeak-m-player-set-clip-start
M-. emacspeak-m-player-set-clip-end
M-l emacspeak-m-player-load-playlist

```

In addition to any hooks its parent mode ‘comint-mode’ might have run, this mode runs the hook ‘emacspeak-m-player-mode-hook’, as the final or penultimate step during initialization.

#### 12.115.2.45 emacspeak-m-player-mode-line

**emacspeak-m-player-mode-line** [Command]  
 Mode-line for M-Player buffers.

#### 12.115.2.46 emacspeak-m-player-next-track

**emacspeak-m-player-next-track** [Command]  
 Next track.

#### 12.115.2.47 emacspeak-m-player-pan

**emacspeak-m-player-pan** [Command]  
 Pan from left to right and back one step at a time.

#### 12.115.2.48 emacspeak-m-player-pause

**emacspeak-m-player-pause** [Command]  
 Pause or unpauses.

#### 12.115.2.49 emacspeak-m-player-persist-process

**emacspeak-m-player-persist-process (&optional name)** [Command]  
 Persists m-player process instance by renaming its buffer.  
 Optional interactive prefix arg prompts for name to use for player.

(fn &optional NAME)

**12.115.2.50 emacspeak-m-player-play-rss**

**emacspeak-m-player-play-rss** (*rss-url*) [Command]  
Play an RSS stream.

(fn RSS-URL)

**12.115.2.51 emacspeak-m-player-play-tracks-jump**

**emacspeak-m-player-play-tracks-jump** (*step*) [Command]  
Skip tracks.

(fn STEP)

**12.115.2.52 emacspeak-m-player-play-tree-up**

**emacspeak-m-player-play-tree-up** (*step*) [Command]  
Move within the play tree.

(fn STEP)

**12.115.2.53 emacspeak-m-player-pop-to-player**

**emacspeak-m-player-pop-to-player** [Command]  
Pop to m-player buffer.

**12.115.2.54 emacspeak-m-player-previous-track**

**emacspeak-m-player-previous-track** [Command]  
Previous track.

**12.115.2.55 emacspeak-m-player-quit**

**emacspeak-m-player-quit** [Command]  
Quit.

**12.115.2.56 emacspeak-m-player-reset-options**

**emacspeak-m-player-reset-options** [Command]  
Reset MPlayer options.

**12.115.2.57 emacspeak-m-player-reset-speed**

**emacspeak-m-player-reset-speed** [Command]  
Reset speed.

**12.115.2.58 emacspeak-m-player-restore-process**

**emacspeak-m-player-restore-process** [Command]  
Restore emacspeak-m-player-process from current buffer.  
Check first if current buffer is in emacspeak-m-player-mode.

**12.115.2.59 emacspeak-m-player-right-channel**

`emacspeak-m-player-right-channel` [Command]  
Play on right channel.

**12.115.2.60 emacspeak-m-player-scale-speed**

`emacspeak-m-player-scale-speed` (*factor*) [Command]  
Scale speed by factor.

(fn FACTOR)

**12.115.2.61 emacspeak-m-player-seek-absolute**

`emacspeak-m-player-seek-absolute` (*pos*) [Command]  
Seek to absolute pos in seconds.  
The time position can also be specified as HH:MM:SS.

(fn POS)

**12.115.2.62 emacspeak-m-player-seek-percentage**

`emacspeak-m-player-seek-percentage` (*pos*) [Command]  
Seek to absolute pos in percent.

(fn POS)

**12.115.2.63 emacspeak-m-player-seek-relative**

`emacspeak-m-player-seek-relative` (*offset*) [Command]  
Seek by offset from current position.  
Time offset can be specified as a number of seconds, or as HH:MM:SS.

(fn OFFSET)

**12.115.2.64 emacspeak-m-player-set-clip-end**

`emacspeak-m-player-set-clip-end` (&optional *prompt*) [Command]  
Set end of clip marker.  
Optional interactive prefix arg prompts for the timestamp.

(fn &optional PROMPT)

**12.115.2.65 emacspeak-m-player-set-clip-start**

`emacspeak-m-player-set-clip-start` (&optional *prompt*) [Command]  
Set start of clip marker.  
Interactive prefix arg prompts for the timestamp.

(fn &optional PROMPT)

**12.115.2.66 emacspeak-m-player-shuffle**

**emacspeak-m-player-shuffle** [Command]

*C-e* :

*<fn>* :

M-Player with shuffle turned on.

**12.115.2.67 emacspeak-m-player-slave-command**

**emacspeak-m-player-slave-command** (*command*) [Command]

Dispatch slave command.

(fn COMMAND)

**12.115.2.68 emacspeak-m-player-slower**

**emacspeak-m-player-slower** [Command]

Slow down playback.

**12.115.2.69 emacspeak-m-player-stream-info**

**emacspeak-m-player-stream-info** (&optional *toggle-cue*) [Command]

Speak and display metadata.

Interactive prefix arg toggles automatic cueing of ICY info updates.

(fn &optional TOGGLE-CUE)

**12.115.2.70 emacspeak-m-player-toggle-extrastereo**

**emacspeak-m-player-toggle-extrastereo** [Command]

Toggle application of extrastereo filter to all streams.

**12.115.2.71 emacspeak-m-player-url**

**emacspeak-m-player-url** (*url* &optional *playlist-p*) [Command]

*C-, u*

*C-x @ a u*

Call emacspeak-m-player on URL.

(fn URL &optional PLAYLIST-P)

**12.115.2.72 emacspeak-m-player-using-hrtf**

**emacspeak-m-player-using-hrtf** [Command]

*C-; '*

*C-x @ h '*

Add af resample=48000,hrtf to startup options.

This will work if the soundcard is set to 48000.

**12.115.2.73 emacspeak-m-player-using-openal**

**emacspeak-m-player-using-openal** (*resource* &**optional** *play-list*) [Command]

*C-*; ;

*C-x @ h* ;

Use openal.

(fn RESOURCE &optional PLAY-LIST)

**12.115.2.74 emacspeak-m-player-volume-change**

**emacspeak-m-player-volume-change** (*value*) [Command]

Set volume.

(fn VALUE)

**12.115.2.75 emacspeak-m-player-volume-down**

**emacspeak-m-player-volume-down** [Command]

Volume down.

**12.115.2.76 emacspeak-m-player-volume-set**

**emacspeak-m-player-volume-set** (&**optional** *arg*) [Command]

Set Volume in steps from 1 to 9.

(fn &optional ARG)

**12.115.2.77 emacspeak-m-player-volume-up**

**emacspeak-m-player-volume-up** [Command]

Volume up.

**12.115.2.78 emacspeak-m-player-write-clip**

**emacspeak-m-player-write-clip** [Command]

Split selected range using SoX

**12.115.2.79 emacspeak-m-player-youtube-live**

**emacspeak-m-player-youtube-live** (*url*) [Command]

*C-e x l*

<*fn*> *x l*

Use youtube-dl and mplayer to live-stream from Youtube.

(fn URL)



**12.115.2.80 emacspeak-m-player-youtube-player****emacspeak-m-player-youtube-player** (*url* &**optional** *best*) [Command]*C-*, *y**C-x* @ *a y*

Use youtube-dl and mplayer to stream audio from Youtube.

Default picks lowest quality —

Optional prefix arg ‘best’ chooses highest.

(fn URL &amp;optional BEST)

**12.115.2.81 emacspeak-multimedia****emacspeak-multimedia** [Command]*C-e* ;<*fn*> ;

Start or control Emacspeak multimedia player.

Controls media playback when already playing.

key binding

— —

*C-l* ladspa*RET* emacspeak-m-player-load*ESC* Prefix Command*SPC* emacspeak-m-player-pause

% emacspeak-m-player-display-percent

( emacspeak-m-player-left-channel

) emacspeak-m-player-right-channel

+ emacspeak-m-player-volume-up

, emacspeak-m-player-backward-10s

- emacspeak-m-player-volume-down

. emacspeak-m-player-forward-10s

/ emacspeak-m-player-restore-process

1 .. 9 emacspeak-m-player-volume-set

; emacspeak-m-player-pop-to-player

&lt; emacspeak-m-player-backward-1min

= emacspeak-m-player-volume-up

&gt; emacspeak-m-player-forward-1min

? emacspeak-m-player-display-position

*A* emacspeak-m-player-amarck-add*C* emacspeak-m-player-clear-filters*E* emacspeak-m-player-add-equalizer*G* emacspeak-m-player-peek-percentage*L* emacspeak-m-player-locate-media*M* emacspeak-m-player-display-metadata

O emacspeak-m-player-reset-options  
 P emacspeak-m-player-apply-reverb-preset  
 Q emacspeak-m-player-quit  
 R emacspeak-m-player-edit-reverb  
 S emacspeak-m-player-amark-save  
 [ emacspeak-m-player-slower  
 \ emacspeak-m-player-persist-process  
 ] emacspeak-m-player-faster  
 a emacspeak-m-player-add-autopan  
 b emacspeak-wizards-view-buffers-filtered-by-m-player-mode  
 c emacspeak-m-player-slave-command  
 d emacspeak-m-player-delete-filter  
 e emacspeak-m-player-equalizer-preset  
 f emacspeak-m-player-add-filter  
 g emacspeak-m-player-seek-absolute  
 i emacspeak-m-player-stream-info  
 j emacspeak-m-player-amark-jump  
 k emacspeak-m-player-quit  
 l emacspeak-m-player-get-length  
 m emacspeak-m-player-mode-line  
 n emacspeak-m-player-next-track  
 o emacspeak-m-player-customize-options  
 p emacspeak-m-player-previous-track  
 q bury-buffer  
 r emacspeak-m-player-seek-relative  
 s emacspeak-m-player-scale-speed  
 t emacspeak-m-player-play-tracks-jump  
 u emacspeak-m-player-url  
 v emacspeak-m-player-volume-change  
 w emacspeak-m-player-write-clip  
 x emacspeak-m-player-pan  
 z emacspeak-m-player-add-autosat  
 { emacspeak-m-player-half-speed  
 } emacspeak-m-player-double-speed  
 DEL emacspeak-m-player-reset-speed  
 <down> emacspeak-m-player-forward-1min  
 <end> emacspeak-m-player-end-of-track  
 <home> emacspeak-m-player-beginning-of-track  
 <left> emacspeak-m-player-backward-10s  
 <next> emacspeak-m-player-forward-10min  
 <prior> emacspeak-m-player-backward-10min  
 <right> emacspeak-m-player-forward-10s  
 <up> emacspeak-m-player-backward-1min  
  
 M-, emacspeak-m-player-set-clip-start  
 M-. emacspeak-m-player-set-clip-end  
 M-l emacspeak-m-player-load-playlist

### 12.115.3 emacspeak-m-player Options

User Option *emacspeak-m-player-clips* [Variable]  
Directory where we store clips.

User Option *emacspeak-m-player-custom-filters* [Variable]  
Additional filters to apply to streams.

User Option *emacspeak-m-player-program* [Variable]  
Media player program.

User Option *emacspeak-media-location-bindings* [Variable]  
Map keys to launch MPlayer on a directory.

### 12.116 emacspeak-magit

MAGIT == Git interface in Emacs git clone [git://github.com/magit/magit.git](https://github.com/magit/magit.git)

### 12.117 emacspeak-make-mode

This module speech enables make-mode

### 12.118 emacspeak-man

Provide additional advice to man-mode

#### 12.118.1 Emacspeak-Man Commands

##### 12.118.1.1 emacspeak-man-browse-man-page

*emacspeak-man-browse-man-page* [Command]  
Browse the man page –read it a paragraph at a time

##### 12.118.1.2 emacspeak-man-speak-this-section

*emacspeak-man-speak-this-section* [Command]  
Speak current section

### 12.119 emacspeak-markdown

MARKDOWN == Light-weight markup. This module speech-enables markdown.el

### 12.120 emacspeak-maths

#### 12.120.1 Setup

Do not try what follows until you have read [js/node/README.org](https://nodejs.org/en/README) and successfully set up nvm (Node Version Manager) as described there.

### 12.120.2 Technical Overview

Spoken mathematics on the emacspeak audio desktop. Use a NodeJS based speech-rule-engine for Mathematics as the backend for processing mathematical markup. The result of this processing is an annotated S-expression that is rendered via Emacspeak's speech facilities. Annotations follow Aural CSS as implemented in Emacspeak, This allows us to map these expressions to aural properties supported by specific TTS engines.

### 12.120.3 Emacspeak-Maths Commands

#### 12.120.3.1 emacspeak-maths-depth

`emacspeak-maths-depth` [Command]  
Move depth in current Math expression. (auto-generated)

#### 12.120.3.2 emacspeak-maths-down

`emacspeak-maths-down` [Command]  
Move down in current Math expression. (auto-generated)

#### 12.120.3.3 emacspeak-maths-enter

`emacspeak-maths-enter` (*latex*) [Command]  
Send a LaTeX expression to Maths server,  
guess based on context.

#### 12.120.3.4 emacspeak-maths-enter-guess

`emacspeak-maths-enter-guess` [Command]  
Send the guessed LaTeX expression to Maths server.

#### 12.120.3.5 emacspeak-maths-flush-output

`emacspeak-maths-flush-output` [Command]  
Flush client buffer if things go out of sync.

#### 12.120.3.6 emacspeak-maths-left

`emacspeak-maths-left` [Command]  
Move left in current Math expression. (auto-generated)

#### 12.120.3.7 emacspeak-maths-restart

`emacspeak-maths-restart` [Command]  
Restart Node math-server if running. Otherwise starts a new one.

#### 12.120.3.8 emacspeak-maths-right

`emacspeak-maths-right` [Command]  
Move right in current Math expression. (auto-generated)

**12.120.3.9 emacspeak-maths-root**

**emacspeak-maths-root** [Command]  
 Move root in current Math expression. (auto-generated)

**12.120.3.10 emacspeak-maths-shutdown**

**emacspeak-maths-shutdown** [Command]  
 Shutdown client and server processes.

**12.120.3.11 emacspeak-maths-speak-alt**

**emacspeak-maths-speak-alt** [Command]  
 Speak alt text as Maths.  
 For use on Wikipedia pages for example.

**12.120.3.12 emacspeak-maths-spoken-mode**

**emacspeak-maths-spoken-mode** [Command]  
 Special mode for interacting with Spoken Math.

This mode is used by the special buffer that displays spoken math returned from the Node server.

This mode is similar to Emacs' 'view-mode'.

see the key-binding list at the end of this description.

Emacs online help facility to look up help on these commands.

| key | binding |
|-----|---------|
| —   | —       |

|   |                       |
|---|-----------------------|
| [ | backward-page         |
| ] | forward-page          |
| h | emacspeak-maths-left  |
| j | emacspeak-maths-down  |
| k | emacspeak-maths-up    |
| l | emacspeak-maths-right |

In addition to any hooks its parent mode 'special-mode' might have run, this mode runs the hook 'emacspeak-maths-spoken-mode-hook', as the final or penultimate step during initialization.

**12.120.3.13 emacspeak-maths-start**

**emacspeak-maths-start** [Command]  
 Start Maths server bridge.

**12.120.3.14 emacspeak-maths-switch-to-output**

**emacspeak-maths-switch-to-output** [Command]  
 Switch to output buffer.

**12.120.3.15 emacspeak-maths-up**

**emacspeak-maths-up** [Command]  
 Move up in current Math expression. (auto-generated)

**12.121 emacspeak-message**

advice for posting message commands

**12.121.1 emacspeak-message Options**

**User Option** *emacspeak-message-punctuation-mode* [Variable]  
 Pronunciation mode to use for message buffers.

**12.122 emacspeak-metapost**

Speech-enables metapost mode. metapost is a powerful drawing package typically installed as mpost by modern TeX installations.

**12.123 emacspeak-midge**

This module speech enables midge. Midge is a MIDI composer/editor tool. From the package README file: ; Midge, for midi generator, is a text to midi translator. ; It creates type 1 (ie multitrack) midi files from text ; descriptions of music. It is a single perl script, which ; does not require any additional modules. The package also provides a convenient emacs mode for editing and playing midge files. Midge's homepage is at: <http://www.dmriley.demon.co.uk/code/midge/>

**12.124 emacspeak-mines**

MINES == Minesweeper game in emacs. The game itself provides a fully keyboard driven interface. In addition, Emacspeak provides

**12.124.1 Emacspeak-Mines Commands****12.124.1.1 emacspeak-mines-beginning-of-row**

**emacspeak-mines-beginning-of-row** [Command]  
 Move to beginning of row

**12.124.1.2 emacspeak-mines-end-of-row**

**emacspeak-mines-end-of-row** [Command]  
 Move to end of row

**12.124.1.3 emacspeak-mines-goto**

**emacspeak-mines-goto** (*index*) [Command]  
 Move to specified cell.

(fn INDEX)

**12.124.1.4 emacspeak-mines-jump-to-uncovered-cell****emacspeak-mines-jump-to-uncovered-cell** (*from-beginning*) [Command]

Jump to next uncovered cell. With interactive prefix-arg, jump to beginning of board before searching.

(fn FROM-BEGINNING)

**12.124.1.5 emacspeak-mines-speak-board****emacspeak-mines-speak-board** [Command]

Speak the board.

**12.124.1.6 emacspeak-mines-speak-cell****emacspeak-mines-speak-cell** [Command]

Speak current cell.

**12.124.1.7 emacspeak-mines-speak-mark-count****emacspeak-mines-speak-mark-count** [Command]

Count and speak number of marks.

**12.124.1.8 emacspeak-mines-speak-neighbors****emacspeak-mines-speak-neighbors** [Command]

Speak neighboring cells in sorted order.

**12.124.1.9 emacspeak-mines-speak-uncovered-count****emacspeak-mines-speak-uncovered-count** [Command]

Speak number of uncovered cells.

**12.125 emacspeak-mspools**

Speech-enable mspools –a package that lets you monitor multiple maildrops

**12.126 emacspeak-muggles**

MUGGLES == Emacspeak spells for power-users. This module implements no new functionality — contrast with emacspeak-wizards. Instead, it uses package hydra to provide convenience key-bindings that access existing Emacspeak functionality.

**12.126.1 Emacspeak-Muggles Commands****12.126.1.1 emacspeak-muggles-brightness/body****emacspeak-muggles-brightness/body** [Command]

<print>

Call the body in the "emacspeak-muggles-brightness" hydra.

The heads for the associated hydra are:

```
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-brightness")',
"s": 'xbacklight-set',
"g": 'xbacklight-get',
"t": 'emacspeak-hydra-toggle-talkative',
"<print>": 'xbacklight-black',
"0": 'xbacklight-black',
"1": 'xbacklight-white',
"d": 'xbacklight-decrement',
"i": 'xbacklight-increment',
"SPC": 'xbacklight-increment'
```

The body can be accessed via 'emacspeak-muggles-brightness/body'.

### 12.126.1.2 emacspeak-muggles-hideshow/body

**emacspeak-muggles-hideshow/body**

[Command]

*C-*, *h*

*C-x @ a h*

Call the body in the "emacspeak-muggles-hideshow" hydra.

The heads for the associated hydra are:

```
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-hideshow")',
"h": 'hs-hide-block',
"s": 'hs-show-block',
"H": 'hs-hide-all',
"S": 'hs-show-all',
"a": 'hs-show-all',
"l": 'hs-hide-level',
"i": 'hs-hide-initial-comment-block'
```

The body can be accessed via 'emacspeak-muggles-hideshow/body'.

### 12.126.1.3 emacspeak-muggles-ido-yank

**emacspeak-muggles-ido-yank**

[Command]

*C-M-y*

Pick what to yank using ido completion.

### 12.126.1.4 emacspeak-muggles-lispy-or-sp

**emacspeak-muggles-lispy-or-sp**

[Command]

Toggle between lispy and smartparens.



### 12.126.1.5 emacspeak-muggles-maths-navigator/body

emacspeak-muggles-maths-navigator/body

[Command]

*s-SPC*

Call the body in the "emacspeak-muggles-maths-navigator" hydra.

The heads for the associated hydra are:

```
"o": 'emacspeak-maths-switch-to-output',
"RET": 'emacspeak-maths-enter-guess',
"SPC": 'emacspeak-maths-enter',
"a": 'emacspeak-maths-speak-alt',
"d": 'emacspeak-maths-depth',
"r": 'emacspeak-maths-root',
"<up>": 'emacspeak-maths-up',
"<down>": 'emacspeak-maths-down',
"<left>": 'emacspeak-maths-left',
"<right>": 'emacspeak-maths-right'
```

The body can be accessed via 'emacspeak-muggles-maths-navigator/body'.

### 12.126.1.6 emacspeak-muggles-navigate/body

emacspeak-muggles-navigate/body

[Command]

*s-n*

Call the body in the "emacspeak-muggles-navigate" hydra.

The heads for the associated hydra are:

```
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-navigate")',
"s": 'emacspeak-hydra-toggle-talkative',
"n": 'next-line',
"p": 'previous-line',
"f": 'forward-char',
"b": 'backward-char',
"a": 'beginning-of-line',
"e": 'move-end-of-line',
"j": 'next-line',
"k": 'previous-line',
"v": 'scroll-up-command',
"V": 'scroll-down-command',
"l": 'recenter-top-bottom',
"<": 'beginning-of-buffer',
">": 'end-of-buffer'
```

The body can be accessed via 'emacspeak-muggles-navigate/body'.

### 12.126.1.7 emacspeak-muggles-org-nav/body

**emacspeak-muggles-org-nav/body**

[Command]

Call the body in the "emacspeak-muggles-org-nav" hydra.

The heads for the associated hydra are:

```
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-org-nav")',
"SPC": 'emacspeak-outline-speak-this-heading',
"n": 'emacspeak-outline-speak-next-heading',
"p": 'emacspeak-outline-speak-previous-heading',
"f": 'org-forward-heading-same-level',
"b": 'org-backward-heading-same-level',
"u": 'outline-up-heading',
"g": 'org-goto'
```

The body can be accessed via 'emacspeak-muggles-org-nav/body'.

### 12.126.1.8 emacspeak-muggles-org-table/body

**emacspeak-muggles-org-table/body**

[Command]

Call the body in the "emacspeak-muggles-org-table" hydra.

The heads for the associated hydra are:

```
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-org-table")',
"j": 'org-table-next-row',
"k": 'org-table-previous-row',
"h": 'org-table-previous-field',
"l": 'org-table-next-field',
"SPC": 'emacspeak-org-table-speak-current-element',
".": 'emacspeak-org-table-speak-coordinates',
"b": 'emacspeak-org-table-speak-both-headers-and-element',
"r": 'emacspeak-org-table-speak-row-header-and-element',
"c": 'emacspeak-org-table-speak-column-header-and-element'
```

The body can be accessed via 'emacspeak-muggles-org-table/body'.

### 12.126.1.9 emacspeak-muggles-toggle-option/body

**emacspeak-muggles-toggle-option/body**

[Command]

*C-c o*

Call the body in the "emacspeak-muggles-toggle-option" hydra.

The heads for the associated hydra are:

```
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-toggle-option")',
"C-f": '(call-interactively #'folding-mode)',
```

```

"C":  '(call-interactively #'flycheck-mode)',
"F":  '(call-interactively #'flyspell-mode)',
"a":  '(call-interactively #'abbrev-mode)',
"d":  '(call-interactively #'toggle-debug-on-error)',
"f":  '(call-interactively #'auto-fill-mode)',
"e":  '(call-interactively #'emacspeak-m-player-toggle-extrastereo)',
"g":  '(call-interactively #'toggle-debug-on-quit)',
"h":  '(setq hydra-is-helpful (not hydra-is-helpful))',
"i":  '(call-interactively #'ido-everywhere)',
"I":  '(call-interactively #'flx-ido-mode)',
"p":  'emacspeak-muggles-lispy-or-sp',
"t":  '(call-interactively #'toggle-truncate-lines)',
"u":  '(call-interactively #'ido-ubiquitous-mode)',
"q":  'nil'

```

The body can be accessed via 'emacspeak-muggles-toggle-option/body'.

### 12.126.1.10 emacspeak-muggles-undo-only/undo-redo/body

**emacspeak-muggles-undo-only/undo-redo/body** [Command]

**C-/**

Call the body in the "emacspeak-muggles-undo-only/undo-redo" hydra.

The heads for the associated hydra are:

```

"?":  '(emacspeak-hydra-self-help "emacspeak-muggles-undo-only/undo-redo")',
"/":  'undo-only',
"\":  'undo-redo'

```

The body can be accessed via 'emacspeak-muggles-undo-only/undo-redo/body'.

### 12.126.1.11 emacspeak-muggles-yank-pop/body

**emacspeak-muggles-yank-pop/body** [Command]

Call the body in the "emacspeak-muggles-yank-pop" hydra.

The heads for the associated hydra are:

```

"?":  '(emacspeak-hydra-self-help "emacspeak-muggles-yank-pop")',
"C-y": 'yank',
"M-y": 'yank-pop',
"y":  '(funcall-interactively #'yank-pop 1)',
"Y":  '(funcall-interactively #'yank-pop -1)',
"i":  'emacspeak-muggles-ido-yank',
"s":  'emacspeak-muggles-ido-yank',
"l":  'browse-kill-ring'

```

The body can be accessed via 'emacspeak-muggles-yank-pop/body'.

**12.127 emacspeak-muse**

Speech enable Muse

**12.128 emacspeak-navi-mode**

NAVI-MODE == Remote control for buffer navigation

**12.129 emacspeak-net-utils**

This module speech enables net-utils

**12.130 emacspeak-newsticker**

Newsticker provides a continuously updating newsticker using RSS Provides functionality similar to amphetadesk –but in pure elisp

**12.131 emacspeak-nov**

NOV == Yet Another EPub Reader Package nov.el is an alternative to Emacspeak’s built-in EPub reader. This module speech-enables nov.el In addition, opening an epub using nov results in directory-specific settings being loaded from file *emacspeak-speak-directory-settings* — That file can set book-specific settings such as speech-rate and punctuation-mode among others.

**12.132 emacspeak-nxml**

nxml-mode is a new XML mode for emacs by James Clark. Package nxml is available from the Emacs package archive.

**12.132.1 Emacspeak-Nxml Commands****12.132.1.1 emacspeak-nxml-summarize-outline**

`emacspeak-nxml-summarize-outline` [Command]  
Intelligent spoken display of current outline entry.

**12.133 emacspeak-ocr**

This module defines Emacspeak front-end to OCR. This module assumes that sane is installed and working for image acquisition, and that there is an OCR engine that can take acquired images and produce text.

**12.133.1 Emacspeak-Ocr Commands****12.133.1.1 emacspeak-ocr**

`emacspeak-ocr` [Command]  
*C-e C-o*  
*<fn> C-o*

An OCR front-end for the Emacspeak desktop.

Page image is acquired using tools from the SANE package. The acquired image is run through the OCR engine if one is available, and the results placed in a buffer that is suitable for browsing the results.

For detailed help, invoke command `emacspeak-ocr` bound to C-e C-o to launch `emacspeak-ocr-mode`, and press ‘?’ to display mode-specific help for `emacspeak-ocr-mode`.

### 12.133.1.2 `emacspeak-ocr-backward-page`

`emacspeak-ocr-backward-page` (**&optional** *count-ignored*) [Command]  
Like backward page, but tracks page number of current document.

(fn &optional COUNT-IGNORED)

### 12.133.1.3 `emacspeak-ocr-customize`

`emacspeak-ocr-customize` [Command]  
Customize OCR settings.

### 12.133.1.4 `emacspeak-ocr-flipflop-and-recognize-image`

`emacspeak-ocr-flipflop-and-recognize-image` [Command]  
Run OCR engine on current image after flip-flopping it.  
Useful if you’ve scanned a page upside down and are using an engine that does not automatically flip the image for you.  
You need the `imagemagik` family of tools — we use `mogrify` to transform the image.  
Prompts for image file if file corresponding to the expected ‘current page’ is not found.

### 12.133.1.5 `emacspeak-ocr-forward-page`

`emacspeak-ocr-forward-page` (**&optional** *count-ignored*) [Command]  
Like forward page, but tracks page number of current document.

(fn &optional COUNT-IGNORED)

### 12.133.1.6 `emacspeak-ocr-mode`

`emacspeak-ocr-mode` [Command]  
An OCR front-end for the Emacspeak desktop.

Pre-requisites:

- 1) A working scanner back-end like SANE on Linux.

## 2) An OCR engine.

1: Make sure your scanner back-end works, and that you have the utilities to scan a document and acquire an image as a tiff file. Then set variable `emacspeak-ocr-scan-image-program` to point at this utility. By default, this is set to ‘`scanimage`’ which is the image scanning utility provided by SANE.

By default, this front-end attempts to compress the acquired tiff image; make sure you have a utility like `tiffcp`. Variable `emacspeak-ocr-compress-image` is set to ‘`tiffcp`’ by default; if you use something else, you should customize this variable.

2: Next, make sure you have an OCR engine installed and working. By default this front-end assumes that OCR is available as `/usr/bin/ocr`.

Once you have ensured that acquiring an image and applying OCR to it work independently of Emacs, you can use this Emacspeak front-end to enable easy OCR access from within Emacspeak.

The Emacspeak OCR front-end is launched by command `emacspeak-ocr` bound to C-e C-o.

This command switches to a special buffer that has OCR commands bounds to single keystrokes— see the key-binding list at the end of this description. Use Emacs online help facility to look up help on these commands.

`emacspeak-ocr-mode` provides the necessary functionality to scan, OCR, read and save documents. By default, scanned images and the resulting text are saved under directory `~/ocr`; see variable `emacspeak-ocr-working-directory`. Invoking command `emacspeak-ocr-open-working-directory` bound to M-x `emacspeak-ocr-open-working-directory` will open this directory.

By default, the document being scanned is named ‘untitled’. You can name the document by using command `emacspeak-ocr-name-document` bound to M-x `emacspeak-ocr-name-document`. The document name is used in constructing the name of the image and text files.

Key Bindings:

See key            binding

---

RET emacspeak-ocr-scan-and-recognize  
 SPC emacspeak-ocr-read-current-page  
 1 .. 9 emacspeak-ocr-page  
 ? describe-mode  
 C emacspeak-ocr-set-compress-image-options  
 I emacspeak-ocr-set-scan-image-options  
 [ emacspeak-ocr-backward-page  
 ] emacspeak-ocr-forward-page  
 c emacspeak-ocr-customize  
 d emacspeak-ocr-open-working-directory  
 f emacspeak-ocr-flipflop-and-recognize-image  
 i emacspeak-ocr-scan-image  
 j emacspeak-ocr-scan-photo  
 n emacspeak-ocr-name-document  
 o emacspeak-ocr-recognize-image  
 p emacspeak-ocr-page  
 q bury-buffer  
 s emacspeak-ocr-save-current-page  
 w emacspeak-ocr-write-document

.

In addition to any hooks its parent mode ‘text-mode’ might have run, this mode runs the hook ‘emacspeak-ocr-mode-hook’, as the final or penultimate step during initialization.

### 12.133.1.7 emacspeak-ocr-name-document

**emacspeak-ocr-name-document** (*name*) [Command]

Name document being scanned in the current OCR buffer.  
 Pick a short but meaningful name.

(fn NAME)

### 12.133.1.8 emacspeak-ocr-open-working-directory

**emacspeak-ocr-open-working-directory** [Command]

Launch dired on OCR working directory.

### 12.133.1.9 emacspeak-ocr-page

**emacspeak-ocr-page** [Command]

Move to specified page.

**12.133.1.10 emacspeak-ocr-read-current-page**

**emacspeak-ocr-read-current-page** [Command]  
Speaks current page.

**12.133.1.11 emacspeak-ocr-recognize-image**

**emacspeak-ocr-recognize-image** [Command]  
Run OCR engine on current image.  
Prompts for image file if file corresponding to the expected  
‘current page’ is not found.

**12.133.1.12 emacspeak-ocr-save-current-page**

**emacspeak-ocr-save-current-page** [Command]  
Writes out recognized text from current page  
to an appropriately named file.

**12.133.1.13 emacspeak-ocr-scan-and-recognize**

**emacspeak-ocr-scan-and-recognize** [Command]  
Scan in a page and run OCR engine on it.  
Use this command once you’ve verified that the separate  
steps of acquiring an image and running the OCR engine work  
correctly by themselves.

**12.133.1.14 emacspeak-ocr-scan-image**

**emacspeak-ocr-scan-image** [Command]  
Acquire page image.

**12.133.1.15 emacspeak-ocr-scan-photo**

**emacspeak-ocr-scan-photo** (&optional *metadata*) [Command]  
Scan in a photograph.  
The scanned image is converted to JPEG.  
  
(fn &optional METADATA)

**12.133.1.16 emacspeak-ocr-set-compress-image-options**

**emacspeak-ocr-set-compress-image-options** (*setting*) [Command]  
Interactively update image compression options.  
Prompts with current setting in the minibuffer.  
Setting persists for current Emacs session.  
  
(fn SETTING)



**12.133.1.17 emacspeak-ocr-set-scan-image-options****emacspeak-ocr-set-scan-image-options** (*setting*) [Command]

Interactively update scan image options.  
 Prompts with current setting in the minibuffer.  
 Setting persists for current Emacs session.

(fn SETTING)

**12.133.1.18 emacspeak-ocr-write-document****emacspeak-ocr-write-document** [Command]

Writes out recognized text from all pages in current document.

**12.133.2 emacspeak-ocr Options**

User Option *emacspeak-ocr-compress-image* [Variable]  
 Command used to compress the scanned tiff file.

User Option *emacspeak-ocr-compress-image-options* [Variable]  
 Options used for compressing tiff image.

User Option *emacspeak-ocr-compress-photo-options* [Variable]  
 Options used when created JPEG from scanned photographs.

User Option *emacspeak-ocr-engine* [Variable]  
 OCR engine to process acquired image.

User Option *emacspeak-ocr-engine-options* [Variable]  
 Command line options to pass to OCR engine.

User Option *emacspeak-ocr-image-extension* [Variable]  
 Filename extension used for acquired image.

User Option *emacspeak-ocr-jpeg-metadata-writer* [Variable]  
 Program to add metadata to JPEG files.

User Option *emacspeak-ocr-keep-uncompressed-image* [Variable]  
 If set to T, uncompressed image is not removed.

User Option *emacspeak-ocr-photo-compress* [Variable]  
 Program to create JPEG compressed images.

User Option *emacspeak-ocr-scan-image* [Variable]  
 Name of image acquisition program.

User Option *emacspeak-ocr-scan-image-options* [Variable]  
 Command line options to pass to image acquisition program.

User Option *emacspeak-ocr-scan-photo-options* [Variable]  
 Options used when scanning in photographs.

User Option *emacspeak-ocr-working-directory* [Variable]  
 Directory where images and OCR results will be placed.

## 12.134 emacspeak-org

Speech-enable org — Org allows you to keep organized notes and todo lists. Homepage: <http://www.astro.uva.nl/~dominik/Tools/org/> or <http://orgmode.org/>

### 12.134.1 Emacspeak-Org Commands

#### 12.134.1.1 emacspeak-org-capture-link

**emacspeak-org-capture-link** (&optional *open*) [Command]

*C-. h*

*C-' h*

*C-x @ s h*

Capture hyperlink to current context.

To use this command, first do ‘customize-variable’

‘org-capture-template’ and assign letter ‘h’ to a template that creates the hyperlink on capture. Optional interactive prefix arg just opens the file

(fn &optional OPEN)

#### 12.134.1.2 emacspeak-org-popup-input

**emacspeak-org-popup-input** [Command]

Pops up an org input area.

#### 12.134.1.3 emacspeak-org-popup-input-buffer

**emacspeak-org-popup-input-buffer** (*mode*) [Command]

Provide an input buffer in a specified mode.

(fn MODE)

#### 12.134.1.4 emacspeak-org-table-speak-both-headers-and-element

**emacspeak-org-table-speak-both-headers-and-element** [Command]

echoes both row and col headers.

#### 12.134.1.5 emacspeak-org-table-speak-column-header

**emacspeak-org-table-speak-column-header** [Command]

echoes column header

#### 12.134.1.6 emacspeak-org-table-speak-column-header-and-element

**emacspeak-org-table-speak-column-header-and-element** [Command]

echoes col header and element

**12.134.1.7 emacspeak-org-table-speak-coordinates**

**emacspeak-org-table-speak-coordinates** [Command]  
 echoes coordinates

**12.134.1.8 emacspeak-org-table-speak-current-element**

**emacspeak-org-table-speak-current-element** [Command]  
 echoes current table element

**12.134.1.9 emacspeak-org-table-speak-row-header**

**emacspeak-org-table-speak-row-header** [Command]  
 echoes row header

**12.134.1.10 emacspeak-org-table-speak-row-header-and-element**

**emacspeak-org-table-speak-row-header-and-element** [Command]  
 echoes row header and element

**12.134.2 emacspeak-org Options**

**User Option** *emacspeak-org-table-after-movement-function* [Variable]  
 The function to call after moving in a table

**12.135 emacspeak-orgalist**

Speech-enable orgalist — create org-like lists everywhere.

**12.136 emacspeak-origami**

ORIGAMI == One More Flexible Folding Mechanism This module speech-enables origami-mode.

**12.137 emacspeak-outline**

Provide additional advice to outline-mode

**12.137.1 Emacspeak-Outline Commands****12.137.1.1 emacspeak-outline-speak-backward-heading**

**emacspeak-outline-speak-backward-heading** [Command]  
 Analogous to outline-backward-same-level  
 except that the outline section is spoken

**12.137.1.2 emacspeak-outline-speak-forward-heading**

**emacspeak-outline-speak-forward-heading** [Command]  
 Analogous to outline-forward-same-level,  
 except that the outline section is spoken

### 12.137.1.3 emacspeak-outline-speak-next-heading

`emacspeak-outline-speak-next-heading` [Command]

Analogous to `outline-next-visible-heading`,  
except that the outline section is spoken

### 12.137.1.4 emacspeak-outline-speak-previous-heading

`emacspeak-outline-speak-previous-heading` [Command]

Analogous to `outline-previous-visible-heading`,  
except that the outline section is spoken

### 12.137.1.5 emacspeak-outline-speak-this-heading

`emacspeak-outline-speak-this-heading` [Command]

Speak current outline section starting from point

## 12.138 emacspeak-package

`PACKAGE == package.el` Manage Emacs packages. This module speech-enables `package.el` with a few convenience commands.

### 12.138.1 Emacspeak-Package Commands

#### 12.138.1.1 emacspeak-package-next-line

`emacspeak-package-next-line` [Command]

Move to next line and speak it.

#### 12.138.1.2 emacspeak-package-previous-line

`emacspeak-package-previous-line` [Command]

Move to next line and speak it.

#### 12.138.1.3 emacspeak-package-summarize-line

`emacspeak-package-summarize-line` [Command]

Succinct Summary.

## 12.139 emacspeak-paradox

`PARADOX == paradox.el` Improved package management interface Manage Emacs packages. This module speech-enables `paradox.el` with a few convenience commands.

### 12.139.1 Emacspeak-Paradox Commands

#### 12.139.1.1 emacspeak-paradox-summarize-line

`emacspeak-paradox-summarize-line` [Command]

Succinct Summary.

## 12.140 emacspeak-perl

Provide additional advice to perl-mode

## 12.141 emacspeak-pianobar

### 12.141.1 PIANOBAR == Pandora Client for Emacs

### 12.141.2 Emacspeak-Pianobar Commands

#### 12.141.2.1 emacspeak-pianobar

`emacspeak-pianobar` [Command]

`C-e` '

`<fn>` '

Start or control Emacspeak Pianobar player.

#### 12.141.2.2 emacspeak-pianobar-command

`emacspeak-pianobar-command` (*key*) [Command]

Invoke Pianobar commands.

(fn KEY)

#### 12.141.2.3 emacspeak-pianobar-electric-mode-toggle

`emacspeak-pianobar-electric-mode-toggle` [Command]

Toggle electric mode in pianobar buffer.

If electric mode is on, keystrokes invoke pianobar commands directly.

#### 12.141.2.4 emacspeak-pianobar-next-preset

`emacspeak-pianobar-next-preset` [Command]

Switch to next preset.

#### 12.141.2.5 emacspeak-pianobar-previous-preset

`emacspeak-pianobar-previous-preset` [Command]

Switch to previous preset.

#### 12.141.2.6 emacspeak-pianobar-send-raw

`emacspeak-pianobar-send-raw` (*string*) [Command]

Send raw string with newline added to pianobar.

(fn STRING)

#### 12.141.2.7 emacspeak-pianobar-switch-to-preset

`emacspeak-pianobar-switch-to-preset` [Command]

Switch to one of the presets.

**12.141.2.8 emacspeak-pianobar-volume-down**

`emacspeak-pianobar-volume-down` [Command]  
 Decrease volume

**12.141.2.9 emacspeak-pianobar-volume-up**

`emacspeak-pianobar-volume-up` [Command]  
 Increase volume

**12.142 emacspeak-popup**

POPUP == popup.el from MELPA

**12.143 emacspeak-proced**

PROCED == Process Editor A new Task Manager for Emacs. Proced is part of emacs 23.

**12.143.1 Emacspeak-Proced Commands****12.143.1.1 emacspeak-proced-jump-to-process**

`emacspeak-proced-jump-to-process` (*name*) [Command]  
 Jump to process by name.  
 (fn NAME)

**12.143.1.2 emacspeak-proced-next-field**

`emacspeak-proced-next-field` [Command]  
 Navigate to next field.

**12.143.1.3 emacspeak-proced-next-line**

`emacspeak-proced-next-line` [Command]  
 Move to next line and speak a summary.

**12.143.1.4 emacspeak-proced-previous-field**

`emacspeak-proced-previous-field` [Command]  
 Navigate to previous field.

**12.143.1.5 emacspeak-proced-previous-line**

`emacspeak-proced-previous-line` [Command]  
 Move to next line and speak a summary.

**12.143.1.6 emacspeak-proced-speak-args**

`emacspeak-proced-speak-args` [Command]  
 Speak command invocation for this process.

**12.143.1.7 emacspeak-proced-speak-field**

**emacspeak-proced-speak-field** (*field-name*) [Command]  
 Speak value of specified field in current line.

(fn FIELD-NAME)

**12.143.1.8 emacspeak-proced-speak-that-field**

**emacspeak-proced-speak-that-field** [Command]  
 Speak desired field via single keystroke.

**12.143.1.9 emacspeak-proced-speak-this-field**

**emacspeak-proced-speak-this-field** (&optional *position*) [Command]  
 Speak field at specified column — defaults to current column.

(fn &optional POSITION)

**12.144 emacspeak-project**

Speech-enable project.el

**12.145 emacspeak-projectile**

PROJECTILE == 'M-x package-install projectile'. Project management in Emacs.

**12.146 emacspeak-pronounce**

This module implements user customizable pronunciation dictionaries for emacspeak. Custom pronunciations can be defined per file, per directory and/or per major mode. Emacspeak maintains a persistent user dictionary upon request and loads these in new emacspeak sessions. This module implements the user interface to the custom dictionary as well as providing the internal API used by the rest of emacspeak in using the dictionary.

**12.146.1 Emacspeak-Pronounce Commands****12.146.1.1 emacspeak-pronounce-clear-dictionaries**

**emacspeak-pronounce-clear-dictionaries** [Command]  
 Clear all current pronunciation dictionaries.

**12.146.1.2 emacspeak-pronounce-define-local-pronunciation**

**emacspeak-pronounce-define-local-pronunciation** (*word pron*) [Command]  
 Define buffer local pronunciation.  
 Argument 'word' specified the word to be pronounced.  
 Argument 'pron' specifies the new pronunciation.

(fn WORD PRON)

**12.146.1.3 emacspeak-pronounce-define-pronunciation****emacspeak-pronounce-define-pronunciation** [Command]

Interactively define entries in the pronunciation dictionaries.

Default term to define is delimited by region.

First loads any persistent dictionaries if not already loaded.

**12.146.1.4 emacspeak-pronounce-define-template-pronunciation****emacspeak-pronounce-define-template-pronunciation** [Command]

Interactively define template entries in the pronunciation dictionaries.

Default term to define is delimited by region.

First loads any persistent dictionaries if not already loaded.

**12.146.1.5 emacspeak-pronounce-dispatch****emacspeak-pronounce-dispatch** [Command]*C-e M-d**<fn> M-d*

Pronounce Frontend

**12.146.1.6 emacspeak-pronounce-edit-pronunciations****emacspeak-pronounce-edit-pronunciations** (*key*) [Command]

Prompt for and launch a pronunciation editor on the specified pronunciation dictionary key.

(fn KEY)

**12.146.1.7 emacspeak-pronounce-load-dictionaries****emacspeak-pronounce-load-dictionaries** (&optional *filename*) [Command]

Load pronunciation dictionaries.

Optional argument FILENAME specifies the dictionary file,

Default is emacspeak-pronounce-dictionaries-file.

(fn &amp;optional FILENAME)

**12.146.1.8 emacspeak-pronounce-merge-dictionaries****emacspeak-pronounce-merge-dictionaries** (*from into*) [Command]

Merge dic ‘from’ into dict ‘into’

(fn FROM INTO)

**12.146.1.9 emacspeak-pronounce-refresh-pronunciations****emacspeak-pronounce-refresh-pronunciations** [Command]

Refresh pronunciation table for current buffer.



**12.146.1.10 emacspeak-pronounce-save-dictionaries**

**emacspeak-pronounce-save-dictionaries** [Command]  
 Saves pronunciation dictionaries.

**12.146.1.11 emacspeak-pronounce-toggle-use-of-dictionaries**

**emacspeak-pronounce-toggle-use-of-dictionaries** (&optional *state*) [Command]  
 Toggle pronunciation dictionaries.  
 (fn &optional STATE)

**12.146.1.12 emacspeak-pronounce-toggle-voice**

**emacspeak-pronounce-toggle-voice** [Command]  
 Toggle use of pronunciation personality.

**12.146.2 emacspeak-pronounce Options**

**User Option** [Variable]  
*emacspeak-pronounce-common-xml-namespace-uri-pronunciations*  
 Namespace URIs.

**User Option** *emacspeak-pronounce-dictionaries-file* [Variable]  
 File that holds emacspeak pronunciations.

**User Option** *emacspeak-pronounce-internet-smileys-pronunciations* [Variable]  
 Smileys

**12.147 emacspeak-py**

This speech-enables python-mode available on sourceforge and ELPA

**12.148 emacspeak-pydoc**

PYDOC == Python Documentation Viewer

**12.149 emacspeak-python**

This speech-enables python-mode bundled with Emacs

**12.150 emacspeak-racer**

RACER == Rust documentation and completion

**12.151 emacspeak-racket**

racket-mode implements an IDE for racket, a dialect of scheme.

## 12.152 emacspeak-re-builder

Speech-enable re-builder. Will be used to advantage in efficiently setting up outline regexp wizards

## 12.153 emacspeak-reftex

This module speech-enables reftex – reftex is a minor mode that makes navigation of TeX documents possible via a table of contents buffer.

## 12.154 emacspeak-related

RELATED == Switch among related buffers (melpa). Speech-enable interactive commands.

## 12.155 emacspeak-rg

RG == Emacs front-end to ripgrep (rg).

## 12.156 emacspeak-rmail

emacspeak extensions to rmail

### 12.156.1 Emacspeak-Rmail Commands

#### 12.156.1.1 emacspeak-rmail-speak-current-message-labels

`emacspeak-rmail-speak-current-message-labels` [Command]  
Speak labels of current message

#### 12.156.1.2 emacspeak-rmail-summarize-current-message

`emacspeak-rmail-summarize-current-message` [Command]  
Summarize current message

## 12.157 emacspeak-rpm-spec

speech-enable rpm-spec-mode –part of Emacs 21 on RH 7.3

## 12.158 emacspeak-rst

RST == rst-mode for editing rst text files. This module speech-enables rst-mode.

## 12.159 emacspeak-ruby

Provide additional advice to Ruby mode

## 12.160 emacspeak-rust-mode

Speech-enable rust-mode

## 12.161 emacspeak-sage

Speech-enable `sage-shell-mode`. This is a major mode for interacting with `sage`, <http://www.sagemath.org/> An Open-source Mathematical Software System.

### 12.161.1 Emacspeak-Sage Commands

#### 12.161.1.1 emacspeak-sage-describe-symbol

`emacspeak-sage-describe-symbol` (s) [Command]

Describe Sage symbol at point.

(fn S)

#### 12.161.1.2 emacspeak-sage-get-output

`emacspeak-sage-get-output` [Command]

Return most recent Sage output

#### 12.161.1.3 emacspeak-sage-get-output-as-latex

`emacspeak-sage-get-output-as-latex` [Command]

Return most recent Sage output as LaTeX markup.

#### 12.161.1.4 emacspeak-sage-speak-output

`emacspeak-sage-speak-output` [Command]

Speak last output from Sage.

## 12.162 emacspeak-sdcv

SDCV == Stardict Dictionary Interface This module sets up Emacspeak for use with `sdcv`. You need to have command-line `sdcv` installed. You can install additional stardict dictionaries, see <https://wiki.archlinux.org/index.php/sdcv> This module sets up Emacs module `sdcv` to use all the installed dictionaries found on the system.

## 12.163 emacspeak-selectrum

SELECTRUM == Flexibly select from lists.

## 12.164 emacspeak-ses

ses implements a simple spread sheet and is part of Emacs This module speech-enables ses

### 12.164.1 Emacspeak-Ses Commands

#### 12.164.1.1 emacspeak-ses-backward-column-and-summarize

`emacspeak-ses-backward-column-and-summarize` [Command]

Move to previous column and summarize.

**12.164.1.2 emacspeak-ses-backward-row-and-summarize**

`emacspeak-ses-backward-row-and-summarize` [Command]  
 Move to previous row and summarize.

**12.164.1.3 emacspeak-ses-forward-column-and-summarize**

`emacspeak-ses-forward-column-and-summarize` [Command]  
 Move to next column and summarize.

**12.164.1.4 emacspeak-ses-forward-row-and-summarize**

`emacspeak-ses-forward-row-and-summarize` [Command]  
 Move to next row and summarize.

**12.164.1.5 emacspeak-ses-summarize-cell**

`emacspeak-ses-summarize-cell` (*cell-name*) [Command]  
 Summarize specified cell.

(fn CELL-NAME)

**12.164.1.6 emacspeak-ses-summarize-current-cell**

`emacspeak-ses-summarize-current-cell` (&rest *ignore*) [Command]  
 Summarize current cell.

(fn &rest IGNORE)

**12.165 emacspeak-setup**

Entry point for Emacspeak.

**12.166 emacspeak-sgml-mode**

emacspeak extensions to sgml mode

**12.167 emacspeak-sh-script**

This module speech-enables sh-script.el

**12.168 emacspeak-shx**

SHX == Shell Extras For emacs

**12.169 emacspeak-slime**

SLIME == Superior Lisp Interaction Mode For Emacs Slime is a powerful IDE for developing in Common Lisp and Clojure. It's similar but more modern than package ILisp that I used as a graduate student when developing AsTeR.

## 12.170 emacspeak-smart-window

SMART-WINDOW == Smart Window switching for Emacs

## 12.171 emacspeak-smartparens

SMARTPARENS == Automatic insertion, wrapping and paredit-like navigation with user defined pairs this module speech-enables smartparens. Insertion of a matching delimiter is indicated by a short auditory icon. Structured navigation speaks the current line with the position of point aurally highlighted.

## 12.172 emacspeak-solitaire

Auditory interface to solitaire

### 12.172.1 Emacspeak-Solitaire Commands

#### 12.172.1.1 emacspeak-solitaire-show-column

`emacspeak-solitaire-show-column` [Command]  
Audio format current column.

#### 12.172.1.2 emacspeak-solitaire-show-row

`emacspeak-solitaire-show-row` [Command]  
Audio format current row.

#### 12.172.1.3 emacspeak-solitaire-speak-coordinates

`emacspeak-solitaire-speak-coordinates` [Command]  
Speak coordinates of current position

#### 12.172.1.4 emacspeak-solitaire-speak-row

`emacspeak-solitaire-speak-row` [Command]  
Speak current row.

#### 12.172.1.5 emacspeak-solitaire-speak-stones

`emacspeak-solitaire-speak-stones` [Command]  
Speak number of stones remaining.

## 12.173 emacspeak-sounds

This module provides the interface for generating auditory icons in emacspeak.

### 12.173.1 Emacspeak-Sounds Commands

**12.173.1.1 emacspeak-audio-setup****emacspeak-audio-setup** (&optional *prefix*) [Command]

*C-e* (  
*<fn>* (  
 Call `amixer` command.  
  
 (fn &optional PREFIX)

**12.173.1.2 emacspeak-sounds-select-theme****emacspeak-sounds-select-theme** (*theme*) [Command]

*C-e* )  
*<fn>* )  
 Select theme for auditory icons.  
  
 (fn THEME)

**12.173.1.3 emacspeak-toggle-auditory-icons****emacspeak-toggle-auditory-icons** (&optional *prefix*) [Command]

*C-e C-a*  
*<fn> C-a*  
 Toggle use of auditory icons.  
 Optional interactive PREFIX arg toggles global value.  
  
 (fn &optional PREFIX)

**12.173.2 emacspeak-sounds Options**

User Option *emacspeak-play-args* [Variable]  
 Set this to nil if using `paplay` from `pulseaudio`.

User Option *emacspeak-play-program* [Variable]  
 Play program.

User Option *emacspeak-sounds-default-theme* [Variable]  
 Default theme for auditory icons.

**12.174 emacspeak-speak**

This module defines the core speech services used by `emacspeak`. It depends on the speech server interface modules. It protects other parts of `emacspeak` from becoming dependent on the speech server modules.

**12.174.1 Emacspeak-Speak Commands**

**12.174.1.1 emacspeak-choose-completion**

**emacspeak--choose-completion** [Command]  
 Choose the completion at point.

**12.174.1.2 emacspeak-persist-variable**

**emacspeak--persist-variable** (*var file*) [Command]  
 Persist variable ‘var’ to file ‘FILE’.  
 Arranges for ‘VAR’ to be restored when ‘file’ is loaded.

(fn VAR FILE)

**12.174.1.3 emacspeak-blink-matching-open**

**emacspeak-blink-matching-open** [Command]  
 Move cursor momentarily to the beginning of the sexp before point.  
 Also display match context in minibuffer.

**12.174.1.4 emacspeak-completions-move-to-completion-group**

**emacspeak-completions-move-to-completion-group** [Command]  
 Move to group of choices beginning with character last typed. If no such group exists, then we try to search for that char, or dont move.

**12.174.1.5 emacspeak-describe-tapestry**

**emacspeak-describe-tapestry** (&optional *details*) [Command]  
*C-e M-t*  
*<fn> M-t*  
 Describe the current layout of visible buffers in current frame.  
 Use interactive prefix arg to get coordinate positions of the displayed buffers.

(fn &optional DETAILS)

**12.174.1.6 emacspeak-execute-repeatedly**

**emacspeak-execute-repeatedly** (*command*) [Command]  
 Execute COMMAND repeatedly.

(fn COMMAND)

**12.174.1.7 emacspeak-goto-percent**

**emacspeak-goto-percent** (*percent*) [Command]  
*C-e M-%*

*<fn> M-%*

Move to end PERCENT of buffer like in View mode.

Display is centered at point.

Also set the mark at the position where point was.

(fn PERCENT)

### 12.174.1.8 emacspeak-mark-backward-mark

`emacspeak-mark-backward-mark`

[Command]

*C-<up>*

Cycle backward through the mark ring.

To cycle forward, use pop-to-mark-command bound to C-<down>

### 12.174.1.9 emacspeak-minibuffer-choose-completion

`emacspeak-minibuffer-choose-completion`

[Command]

Choose current completion.

### 12.174.1.10 emacspeak-minibuffer-next-completion

`emacspeak-minibuffer-next-completion`

[Command]

Move to next available minibuffer completion.

### 12.174.1.11 emacspeak-minibuffer-previous-completion

`emacspeak-minibuffer-previous-completion`

[Command]

Move to previous available minibuffer completion.

### 12.174.1.12 emacspeak-open-info

`emacspeak-open-info`

[Command]

*C-e TAB*

*<fn> TAB*

Open Emacspeak Info Manual.

### 12.174.1.13 emacspeak-owindow-next-line

`emacspeak-owindow-next-line (count)`

[Command]

*ESC <down>*

Move to the next line in the other window and speak it.

Numeric prefix arg COUNT can specify number of lines to move.

(fn COUNT)



**12.174.1.14 emacspeak-owindow-previous-line****emacspeak-owindow-previous-line** (*count*) [Command]*ESC* <*up*>

Move to the next line in the other window and speak it.

Numeric prefix arg COUNT specifies number of lines to move.

(fn COUNT)

**12.174.1.15 emacspeak-owindow-scroll-down****emacspeak-owindow-scroll-down** [Command]*ESC* <*prior*>

Scroll down the window that command ‘other-window’ would move to.

Speak the window contents after scrolling.

**12.174.1.16 emacspeak-owindow-scroll-up****emacspeak-owindow-scroll-up** [Command]*ESC* <*next*>

Scroll up the window that command ‘other-window’ would move to.

Speak the window contents after scrolling.

**12.174.1.17 emacspeak-owindow-speak-line****emacspeak-owindow-speak-line** [Command]

Speak the current line in the other window.

**12.174.1.18 emacspeak-read-next-line****emacspeak-read-next-line** (&optional *arg*) [Command]*C-e* <*down*><*fn*> <*down*>

Read next line, specified by an offset, without moving.

Default is to read the next line.

(fn &amp;optional ARG)

**12.174.1.19 emacspeak-read-previous-line****emacspeak-read-previous-line** (&optional *arg*) [Command]*C-e* <*up*><*fn*> <*up*>

Read previous line, specified by an offset, without moving.

Default is to read the previous line.

(fn &amp;optional ARG)

**12.174.1.20 emacspeak-select-window-by-name****emacspeak-select-window-by-name** (*buffer-name*) [Command]*C-e W*<*fn*> *W*

Select window by the name of the buffer it displays.

This is useful when using modes like ECB or the new GDB UI where  
 you want to preserve the window layout  
 but quickly switch to a window by name.

(fn BUFFER-NAME)

**12.174.1.21 emacspeak-shell-command****emacspeak-shell-command** (*command*) [Command]*C-e \$*<*fn*> *\$*

Run shell command COMMANDAND speak its output.

(fn COMMAND)

**12.174.1.22 emacspeak-silence****emacspeak-silence** [Command]<*silence*>

Silence is golden. Stop speech, and pause/resume any media  
 streams. Runs ‘emacspeak-silence-hook’ which can be used to  
 configure which media players get silenced or paused/resumed.

**12.174.1.23 emacspeak-speak-buffer****emacspeak-speak-buffer** (&**optional** *arg*) [Command]*C-e b*<*fn*> *b*

Speak current buffer contents.

With prefix ARG, speaks the rest of the buffer from point.

Negative prefix arg speaks from start of buffer to point.

(fn &amp;optional ARG)

**12.174.1.24 emacspeak-speak-buffer-filename****emacspeak-speak-buffer-filename** (&**optional** *filename*) [Command]*C-e f*<*fn*> *f*

Speak name of file being visited in current buffer.  
 Speak default directory if invoked in a dired buffer, or when the  
 buffer is not visiting any file. Interactive prefix arg  
 ‘filename’ speaks only the final path component. The result is  
 put in the kill ring for convenience.

(fn &optional FILENAME)

### 12.174.1.25 emacspeak-speak-buffer-interactively

**emacspeak-speak-buffer-interactively** [Command]

*C-e B*

*<fn> B*

Speak the start of, rest of, or the entire buffer.  
 ‘s’ to speak the start.  
 ‘r’ to speak the rest.  
 any other key to speak entire buffer.

### 12.174.1.26 emacspeak-speak-char

**emacspeak-speak-char** (&optional *prefix*) [Command]

*C-e c*

*<fn> c*

Speak character under point.  
 Pronounces character phonetically unless called with a PREFIX arg.

(fn &optional PREFIX)

### 12.174.1.27 emacspeak-speak-char-name

**emacspeak-speak-char-name** (*char*) [Command]

tell me what this is

(fn CHAR)

### 12.174.1.28 emacspeak-speak-completions-if-available

**emacspeak-speak-completions-if-available** [Command]

Speak completions if available.

### 12.174.1.29 emacspeak-speak-continuously

**emacspeak-speak-continuously** [Command]

*C-e RET*

*<fn> RET*

Speak a buffer continuously.

First prompts using the minibuffer for the kind of action to perform after speaking each chunk. E.G. speak a line at a time etc. Speaking commences at current buffer position. Pressing C-g breaks out, leaving point on last chunk that was spoken. Any other key continues to speak the buffer.

### 12.174.1.30 emacspeak-speak-current-column

emacspeak-speak-current-column

[Command]

C-e =

<fn> =

Speak the current column.

### 12.174.1.31 emacspeak-speak-current-kill

emacspeak-speak-current-kill (&optional *count*)

[Command]

C-e k

<fn> k

Speak the current kill.

This is what will be yanked by the next S-<insertchar>. Prefix numeric arg, COUNT, specifies that the text that will be yanked as a result of a S-<insertchar> followed by count-1 M-x yank-pop be spoken. The kill number that is spoken says what numeric prefix arg to give to command yank.

(fn &optional COUNT)

### 12.174.1.32 emacspeak-speak-current-mark

emacspeak-speak-current-mark (*count*)

[Command]

C-e C-SPC

C-e C-@

<fn> C-SPC

<fn> C-@

Speak the line containing the mark.

With no argument, speaks the line containing the mark—this is where ‘exchange-point-and-mark’ C-x C-x would jump. Numeric prefix arg ‘COUNT’ speaks line containing mark ‘n’ where ‘n’ is one less than the number of times one has to jump using ‘set-mark-command’ to get to this marked position. The location of the mark is indicated by an aural highlight.

(fn COUNT)

**12.174.1.33 emacspeak-speak-current-percentage****emacspeak-speak-current-percentage** [Command]*C-e %**<fn> %*

Announce the percentage into the current buffer.

**12.174.1.34 emacspeak-speak-current-window****emacspeak-speak-current-window** [Command]

Speak contents of current window.

Speaks entire window irrespective of point.

**12.174.1.35 emacspeak-speak-date-as-seconds****emacspeak-speak-date-as-seconds** (*time*) [Command]

Read time value as a human-readable string, return seconds.

Seconds value is also placed in the kill-ring.

*(fn TIME)***12.174.1.36 emacspeak-speak-face-backward****emacspeak-speak-face-backward** [Command]*C-z ,*

Property search for face at point — see M-x text-property-search-backward

**12.174.1.37 emacspeak-speak-face-browse****emacspeak-speak-face-browse** [Command]*C-e C-.**<fn> C-.*

Use C-f and C-b to browse by current face.

**12.174.1.38 emacspeak-speak-face-forward****emacspeak-speak-face-forward** [Command]*C-z .*

Property search for face — see M-x text-property-search-forward

**12.174.1.39 emacspeak-speak-field****emacspeak-speak-field** [Command]

Speak current field.

**12.174.1.40 emacspeak-speak-header-line****emacspeak-speak-header-line** [Command]*C-e SPC**<fn> SPC*

Speak header line if set.

**12.174.1.41 emacspeak-speak-help****emacspeak-speak-help (&optional arg)** [Command]*C-e h**<fn> h*

Speak help buffer if one present.

With prefix arg, speaks the rest of the buffer from point.

Negative prefix arg speaks from start of buffer to point.

(fn &amp;optional ARG)

**12.174.1.42 emacspeak-speak-help-interactively****emacspeak-speak-help-interactively** [Command]

Speak the start of, rest of, or the entire help.

's' to speak the start.

'r' to speak the rest.

any other key to speak entire help.

**12.174.1.43 emacspeak-speak-line****emacspeak-speak-line (&optional arg)** [Command]*C-e l**<fn> l*

Speaks current line. With prefix ARG, speaks the rest of the line from point. Negative prefix optional arg speaks from start of line to point. Indicates indentation with a spoken message if audio indentation is on see 'emacspeak-toggle-audio-indentation' bound to C-e d i. Indicates

position of point with an aural highlight if option

'emacspeak-show-point' is on –see command

'emacspeak-toggle-show-point' bound to

C-e C-d. Lines that start hidden blocks

of text, e.g. outline header lines, or header lines of blocks

created by command 'emacspeak-hide-or-expose-block' are indicated

with auditory icon ellipses. Presence of additional

presentational overlays (created via property display,

before-string, or after-string) is indicated with auditory icon

'more'. These can then be spoken using command

C-e C-M-l.

(fn &optional ARG)

#### 12.174.1.44 emacspeak-speak-line-interactively

emacspeak-speak-line-interactively [Command]

C-e L

<fn> L

Speak the start of, rest of, or the entire line.

's' to speak the start.

'r' to speak the rest.

any other key to speak entire line.

#### 12.174.1.45 emacspeak-speak-line-set-column-filter

emacspeak-speak-line-set-column-filter (*filter*) [Command]

C-e |

<fn> |

Set up filter for selectively speaking or ignoring portions of lines.  
The filter is specified as a list of pairs.

For example, to filter columns 1 – 10 and 20 – 25,  
specify filter as

((0 9) (20 25)). Filter settings are persisted across sessions. A  
persisted filter is used as the default when prompting for a filter.  
This allows one to accumulate a set of filters for specific files like  
/var/adm/messages and /var/adm/maillog over time.  
Option emacspeak-speak-line-invert-filter determines  
the sense of the filter.

(fn FILTER)

#### 12.174.1.46 emacspeak-speak-load-directory-settings

emacspeak-speak-load-directory-settings (&optional *dir*) [Command]

C-e x d

<fn> x d

Load a directory specific Emacspeak settings file.

This is typically used to load up settings that are specific to  
an electronic book consisting of many files in the same  
directory.

(fn &optional DIR)

**12.174.1.47 emacspeak-speak-message-again****emacspeak-speak-message-again** (*&optional from-message-cache*) [Command]*C-e a**<fn> a*

Speak the last message from Emacs once again.

The message is also placed in the kill ring for convenient yanking

(fn *&optional* FROM-MESSAGE-CACHE)**12.174.1.48 emacspeak-speak-message-at-time****emacspeak-speak-message-at-time** (*time message*) [Command]*C-e @**<fn> @*

Speak message at specified time.

Provides simple stop watch functionality.

See documentation for command run-at-time for details on time-spec.

(fn TIME MESSAGE)

**12.174.1.49 emacspeak-speak-microseconds-since-epoch****emacspeak-speak-microseconds-since-epoch** (*ms*) [Command]

Speaks time value specified as microseconds since epoch, e.g. as from float-time.

(fn MS)

**12.174.1.50 emacspeak-speak-milliseconds-since-epoch****emacspeak-speak-milliseconds-since-epoch** (*ms*) [Command]

Speaks time value specified as milliseconds since epoch, e.g. as from float-time.

(fn MS)

**12.174.1.51 emacspeak-speak-minor-mode-line****emacspeak-speak-minor-mode-line** (*&optional log-msg*) [Command]*C-e M**<fn> M*

Speak the minor mode-information.

Optional interactive prefix arg ‘log-msg’ logs spoken info to \*Messages\*.

(fn *&optional* LOG-MSG)



**12.174.1.52 emacspeak-speak-mode-line****emacspeak-speak-mode-line** (*&optional buffer-info*) [Command]*C-e m**<fn> m*

Speak the mode-line.

Speaks header-line if that is set when called non-interactively.

Interactive prefix arg speaks buffer info.

(fn &amp;optional BUFFER-INFO)

**12.174.1.53 emacspeak-speak-next-field****emacspeak-speak-next-field** [Command]

Move to and speak next field.

**12.174.1.54 emacspeak-speak-other-buffer****emacspeak-speak-other-buffer** (*buffer*) [Command]*C-e M-b**<fn> M-b*

Speak specified buffer.

Useful to listen to a buffer without switching contexts.

(fn BUFFER)

**12.174.1.55 emacspeak-speak-overlay-properties****emacspeak-speak-overlay-properties** [Command]*C-e C-M-l**<fn> C-M-l*

Speak display, before-string or after-string property if any.

**12.174.1.56 emacspeak-speak-page****emacspeak-speak-page** (*&optional arg*) [Command]*C-e [**<fn> [*

Speak a page.

With prefix ARG, speaks rest of current page.

Negative prefix arg will read from start of current page to point.

(fn &amp;optional ARG)

**12.174.1.57 emacspeak-speak-page-interactively****emacspeak-speak-page-interactively** [Command]*C-e ]**<fn> ]*

Speak the start of, rest of, or the entire page.

's' to speak the start.

'r' to speak the rest.

any other key to speak entire page.

**12.174.1.58 emacspeak-speak-paragraph****emacspeak-speak-paragraph (&optional arg)** [Command]*C-e p**<fn> p*

Speak paragraph.

With prefix arg, speaks rest of current paragraph.

Negative prefix arg will read from start of current paragraph to point.

(fn &amp;optional ARG)

**12.174.1.59 emacspeak-speak-paragraph-interactively****emacspeak-speak-paragraph-interactively** [Command]*C-e P**<fn> P*

Speak the start of, rest of, or the entire paragraph.

's' to speak the start.

'r' to speak the rest.

any other key to speak entire paragraph.

**12.174.1.60 emacspeak-speak-preceding-char****emacspeak-speak-preceding-char** [Command]

Speak character before point.

**12.174.1.61 emacspeak-speak-predefined-window****emacspeak-speak-predefined-window (&optional arg)** [Command]*C-e 9**C-e 8**C-e 7**C-e 6**C-e 5*

`C-e 4`  
`C-e 3`  
`C-e 2`  
`C-e 1`  
`C-e 0`  
`<fn> 9`  
`<fn> 8`  
`<fn> 7`  
`<fn> 6`  
`<fn> 5`  
`<fn> 4`  
`<fn> 3`  
`<fn> 2`  
`<fn> 1`  
`<fn> 0`

Speak one of the first 10 windows on the screen, 0 is current window.  
 Speaks entire window irrespective of point. Semantics of ‘other’  
 is the same as for the Emacs builtin ‘other-window’.

(fn &optional ARG)

### 12.174.1.62 emacspeak-speak-previous-field

`emacspeak-speak-previous-field` [Command]  
 Move to previous field and speak it.

### 12.174.1.63 emacspeak-speak-range

`emacspeak-speak-range (&optional prop)` [Command]  
 Speak and return range at point

(fn &optional PROP)

### 12.174.1.64 emacspeak-speak-rectangle

`emacspeak-speak-rectangle (start end)` [Command]

`C-e R`  
`<fn> R`

Speak a rectangle of text.  
 Rectangle is delimited by point and mark. When call from a  
 program, arguments specify the START and END of the rectangle.

(fn START END)

**12.174.1.65 emacspeak-speak-region****emacspeak-speak-region** (*start end*) [Command]*C-e r**<fn> r*

Speak region bounded by start and end.

(fn START END)

**12.174.1.66 emacspeak-speak-rest-of-buffer****emacspeak-speak-rest-of-buffer** [Command]*C-e n**<fn> n*

Speak remainder of the buffer starting at point

**12.174.1.67 emacspeak-speak-run-shell-command****emacspeak-speak-run-shell-command** (*command &optional read-as-csv*) [Command]*C-e !**<fn> !*

Invoke shell COMMAND and display its output as a table. The results are placed in a buffer in Emacspeak's table browsing mode. Optional interactive prefix arg read-as-csv interprets the result as csv. . Use this for running shell commands that produce tabulated output. This command should be used for shell commands that produce tabulated output that works with Emacspeak's table recognizer. Verify this first by running the command in a shell and executing command 'emacspeak-table-display-table-in-region' normally bound to C-e M-i.

(fn COMMAND &amp;optional READ-AS-CSV)

**12.174.1.68 emacspeak-speak-seconds-since-epoch****emacspeak-speak-seconds-since-epoch** (*seconds*) [Command]  
Speaks time value specified as seconds since epoch, e.g. as from float-time.

(fn SECONDS)

**12.174.1.69 emacspeak-speak-sentence****emacspeak-speak-sentence** (*&optional arg*) [Command]

Speak current sentence.

With prefix ARG, speaks the rest of the sentence from point.

Negative prefix arg speaks from start of sentence to point.

(fn &optional ARG)

### 12.174.1.70 emacspeak-speak-sexp

**emacspeak-speak-sexp** (&optional *arg*) [Command]

*C-e* "

*<fn>* "

Speak current sexp.

With prefix ARG, speaks the rest of the sexp from point.

Negative prefix arg speaks from start of sexp to point.

(fn &optional ARG)

### 12.174.1.71 emacspeak-speak-sexp-interactively

**emacspeak-speak-sexp-interactively** [Command]

Speak the start of, rest of, or the entire sexp.

's' to speak the start.

'r' to speak the rest.

any other key to speak entire sexp.

### 12.174.1.72 emacspeak-speak-skim-buffer

**emacspeak-speak-skim-buffer** [Command]

*C-e C-<return>*

*<fn> C-<return>*

Skim the current buffer a paragraph at a time.

### 12.174.1.73 emacspeak-speak-spaces-at-point

**emacspeak-speak-spaces-at-point** [Command]

*C-e C-M-SPC*

*C-e C-M-@*

*<fn> C-M-SPC*

*<fn> C-M-@*

Speak the white space at point.

### 12.174.1.74 emacspeak-speak-spell-current-word

**emacspeak-speak-spell-current-word** [Command]

Spell word at point.

### 12.174.1.75 emacspeak-speak-time

**emacspeak-speak-time** (&optional *world*) [Command]

*C-e t*

**<fn> t**

Speak the time.

Spoken time is available in the *\*notifications\** buffer via C-h N.

Optional interactive prefix arg ‘C-u’ invokes world clock.

Timezone is specified using minibuffer completion.

Second interactive prefix sets clock to new timezone.

(fn &optional WORLD)

### 12.174.1.76 emacspeak-speak-version

**emacspeak-speak-version** (&optional *speak-rev*) [Command]

*C-e V*

**<fn> V**

Announce version information for running emacspeak.

Optional interactive prefix arg ‘speak-rev’ speaks only the Git revision number.

(fn &optional SPEAK-REV)

### 12.174.1.77 emacspeak-speak-visual-line

**emacspeak-speak-visual-line** [Command]

Speaks current visual line.

Cues the start of a physical line with auditory icon ‘left’.

### 12.174.1.78 emacspeak-speak-voice-annotate-paragraphs

**emacspeak-speak-voice-annotate-paragraphs** [Command]

Locate paragraphs and voice annotate the first word.

Here, paragraph is taken to mean a chunk of text preceded by a blank line.

Useful to do this before you listen to an entire buffer.

### 12.174.1.79 emacspeak-speak-which-function

**emacspeak-speak-which-function** [Command]

*C-e M-w*

**<fn> M-w**

Speak which function we are on. Uses which-function from which-func without turning that mode on.

### 12.174.1.80 emacspeak-speak-window-information

**emacspeak-speak-window-information** [Command]

*C-e C-w*

**<fn> C-w**

Speaks information about current window.

**12.174.1.81 emacspeak-speak-word****emacspeak-speak-word** (&optional *arg*) [Command]*C-e w*<*fn*> *w*

Speak current word.

With prefix ARG, speaks the rest of the word from point.

Negative prefix arg speaks from start of word to point.

If executed on the same buffer position a second time, the word is spelled out instead of being spoken.

(fn &amp;optional ARG)

**12.174.1.82 emacspeak-speak-word-interactively****emacspeak-speak-word-interactively** [Command]

Speak the start of, rest of, or the entire word.

's' to speak the start.

'r' to speak the rest.

any other key to speak entire word.

**12.174.1.83 emacspeak-speak-world-clock****emacspeak-speak-world-clock** (*zone* &optional *set*) [Command]

Display current date and time for specified zone.

Optional second arg 'set' sets the TZ environment variable as well.

(fn ZONE &amp;optional SET)

**12.174.1.84 emacspeak-switch-to-reference-buffer****emacspeak-switch-to-reference-buffer** [Command]

Switch back to buffer that generated completions.

**12.174.1.85 emacspeak-toggle-action-mode****emacspeak-toggle-action-mode** (&optional *prefix*) [Command]

Toggle state of Emacspeak action mode.

Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

**12.174.1.86 emacspeak-toggle-audio-indentation****emacspeak-toggle-audio-indentation** (&optional *prefix*) [Command]*C-e d i*<*fn*> *d i*

Toggle state of Emacspeak audio indentation.  
 Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.  
 Specifying the method of indentation as ‘tones’ results in the Dectalk producing a tone whose length is a function of the line’s indentation. Specifying ‘speak’ results in the number of initial spaces being spoken.

### 12.174.1.87 emacspeak-toggle-character-echo

**emacspeak-toggle-character-echo** (&optional *prefix*) [Command]

*C-e d k*

*<fn> d k*

Toggle state of Emacspeak character echo.  
 Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 12.174.1.88 emacspeak-toggle-header-line

**emacspeak-toggle-header-line** [Command]

Toggle Emacspeak’s default header line.

### 12.174.1.89 emacspeak-toggle-line-echo

**emacspeak-toggle-line-echo** (&optional *prefix*) [Command]

*C-e d l*

*<fn> d l*

Toggle state of Emacspeak line echo.  
 Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 12.174.1.90 emacspeak-toggle-mail-alert

**emacspeak-toggle-mail-alert** (&optional *prefix*) [Command]

*C-e M-m*

*<fn> M-m*

Toggle state of Emacspeak mail alert.  
 Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.  
 Turning on this option results in Emacspeak producing an auditory icon indicating the arrival of new mail when displaying the mode line.

### 12.174.1.91 emacspeak-toggle-show-point

**emacspeak-toggle-show-point** (&optional *prefix*) [Command]

*C-e C-d*



**<fn> C-d**

Toggle state of Emacspeak-show-point.

Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 12.174.1.92 emacspeak-toggle-speak-line-invert-filter

**emacspeak-toggle-speak-line-invert-filter (&optional prefix)** [Command]

**C-e \**

**<fn> \**

Toggle state of how column filter is interpreted.

Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 12.174.1.93 emacspeak-toggle-speak-messages

**emacspeak-toggle-speak-messages (&optional prefix)** [Command]

**C-e q**

**<fn> q**

Toggle the state of whether emacspeak echoes messages.

### 12.174.1.94 emacspeak-toggle-word-echo

**emacspeak-toggle-word-echo (&optional prefix)** [Command]

**C-e d w**

**<fn> d w**

Toggle state of Emacspeak word echo.

Interactive PREFIX arg means toggle the global default value, and then set the current local value to the result.

### 12.174.1.95 emacspeak-view-notifications

**emacspeak-view-notifications** [Command]

**C-h N**

**<f1> N**

**<help> N**

Display notifications.

### 12.174.1.96 emacspeak-zap-tts

**emacspeak-zap-tts** [Command]

**C-e d z**

**<fn> d z**

Send this command to the TTS directly.

## 12.174.2 emacspeak-speak Options

**User Option** *emacspeak-audio-indentation* [Variable]

Option indicating if line indentation is cued. You can use command ‘emacspeak-toggle-audio-indentation’ bound to C-e d i to toggle this setting.

**User Option** *emacspeak-character-echo* [Variable]

If t, then emacspeak echoes characters as you type. You can use C-e d k to toggle this setting.

**User Option** *emacspeak-line-echo* [Variable]

If t, then emacspeak echoes lines as you type. You can use C-e d l to set this option.

**User Option** *emacspeak-mail-alert* [Variable]

If t, emacspeak will alert you about newly arrived mail with an auditory icon when displaying the mode line. You can use command ‘emacspeak-toggle-mail-alert’ bound to C-e M-m to set this option.

**User Option** *emacspeak-mail-alert-interval* [Variable]

Interval in seconds between mail alerts for the same pending message.

**User Option** *emacspeak-mail-spool-file* [Variable]

Mail spool file examined to alert you about newly arrived mail.

**User Option** *emacspeak-silence-hook* [Variable]

Functions run after emacspeak-silence is called.

**User Option** *emacspeak-speak-filter-persistent-store* [Variable]

File where emacspeak filters are persisted.

**User Option** *emacspeak-speak-messages* [Variable]

Option indicating if messages are spoken. If nil, emacspeak will not speak messages as they are echoed to the message area. You can use command ‘emacspeak-toggle-speak-messages’ bound to C-e q.

**User Option** *emacspeak-speak-time-format-string* [Variable]

Format string that specifies how the time should be spoken. See the documentation for function ‘format-time-string’

**User Option** *emacspeak-speak-zoneinfo-directory* [Variable]

Directory containing timezone data.

**User Option** *emacspeak-word-echo* [Variable]

If t, then emacspeak echoes words as you type. You can use C-e d w to toggle this option.

## 12.175 emacspeak-speedbar

This module advises speedbar.el for use with Emacs. The latest speedbar can be obtained from <ftp://ftp.ultranet.com/pub/zappo/>. This module ensures that speedbar works smoothly outside a windowing system in addition to speech enabling all interactive commands. Emacspeak also adds an Emacspeak environment specific entry point to speedbar—emacspeak-speedbar-goto-speedbar— and binds this

### 12.175.1 Emacspeak-Speedbar Commands

#### 12.175.1.1 emacspeak-speedbar-click

`emacspeak-speedbar-click` [Command]  
Does the equivalent of the mouse click from the keyboard

#### 12.175.1.2 emacspeak-speedbar-goto-speedbar

`emacspeak-speedbar-goto-speedbar` [Command]  
Switch to the speedbar

## 12.176 emacspeak-sql

This module speech enables sql-mode— available from the Emacs package archive. sql-mode.el implemented by the above package sets up an Emacs to SQL interface where you can interactively evaluate SQL expressions.

## 12.177 emacspeak-sudoku

Playing SuDoku using speech output. Written to discover what type of feedback one needs for this task. See <http://emacspeak.blogspot.com/2006/02/playing-sudoku-using-auditory-feedback.html>

### 12.177.1 Emacspeak-Sudoku Commands

#### 12.177.1.1 emacspeak-sudoku-board-columns-summarize

`emacspeak-sudoku-board-columns-summarize` [Command]  
Summarize columns — speaks number of remaining cells.

#### 12.177.1.2 emacspeak-sudoku-board-distribution-summarize

`emacspeak-sudoku-board-distribution-summarize` [Command]  
Shows distribution of filled numbers.

#### 12.177.1.3 emacspeak-sudoku-board-rows-summarize

`emacspeak-sudoku-board-rows-summarize` [Command]  
Summarize rows — speaks number of remaining cells.

### 12.177.1.4 emacspeak-sudoku-board-sub-squares-summarize

**emacspeak-sudoku-board-sub-squares-summarize** [Command]  
Summarize sub-squares — speaks number of remaining cells.

### 12.177.1.5 emacspeak-sudoku-board-summarizer

**emacspeak-sudoku-board-summarizer** [Command]  
Dispatch to appropriate summarizer.

d Number Distribution  
r Row Distribution  
c Column Distribution  
s Sub-square Distribution.

### 12.177.1.6 emacspeak-sudoku-down-sub-square

**emacspeak-sudoku-down-sub-square** [Command]  
Move to top-left corner of sub-square below current one.

### 12.177.1.7 emacspeak-sudoku-erase-current-column

**emacspeak-sudoku-erase-current-column** [Command]  
Erase current column.

### 12.177.1.8 emacspeak-sudoku-erase-current-row

**emacspeak-sudoku-erase-current-row** [Command]  
Erase current row.

### 12.177.1.9 emacspeak-sudoku-erase-current-sub-square

**emacspeak-sudoku-erase-current-sub-square** [Command]  
Erase current sub-square.

### 12.177.1.10 emacspeak-sudoku-hint

**emacspeak-sudoku-hint** [Command]  
Provide hint for current cell.

### 12.177.1.11 emacspeak-sudoku-history-pop

**emacspeak-sudoku-history-pop** [Command]  
Pop saved state off stack and redraw board.

### 12.177.1.12 emacspeak-sudoku-history-push

**emacspeak-sudoku-history-push** [Command]  
Push current state on to history stack.

**12.177.1.13 emacspeak-sudoku-how-many-remaining**

`emacspeak-sudoku-how-many-remaining` [Command]  
Speak number of remaining squares to fill.

**12.177.1.14 emacspeak-sudoku-next-sub-square**

`emacspeak-sudoku-next-sub-square` [Command]  
Move to top-left corner of next sub-square.

**12.177.1.15 emacspeak-sudoku-previous-sub-square**

`emacspeak-sudoku-previous-sub-square` [Command]  
Move to top-left corner of previous sub-square.

**12.177.1.16 emacspeak-sudoku-speak-current-cell-coordinates**

`emacspeak-sudoku-speak-current-cell-coordinates` [Command]  
speak current cell coordinates.

**12.177.1.17 emacspeak-sudoku-speak-current-cell-value**

`emacspeak-sudoku-speak-current-cell-value` [Command]  
Speak value in current cell.

**12.177.1.18 emacspeak-sudoku-speak-current-column**

`emacspeak-sudoku-speak-current-column` [Command]  
Speak current column.

**12.177.1.19 emacspeak-sudoku-speak-current-row**

`emacspeak-sudoku-speak-current-row` [Command]  
Speak current row.

**12.177.1.20 emacspeak-sudoku-speak-current-sub-square**

`emacspeak-sudoku-speak-current-sub-square` [Command]  
Speak current sub-square.

**12.177.1.21 emacspeak-sudoku-speak-remaining-in-column**

`emacspeak-sudoku-speak-remaining-in-column` [Command]  
Speaks number of remaining cells in current column.

**12.177.1.22 emacspeak-sudoku-speak-remaining-in-row**

`emacspeak-sudoku-speak-remaining-in-row` [Command]  
Speaks number of remaining cells in current row.

**12.177.1.23 emacspeak-sudoku-speak-remaining-in-sub-square****emacspeak-sudoku-speak-remaining-in-sub-square** [Command]

Speaks number of remaining cells in current sub-square.

**12.177.1.24 emacspeak-sudoku-up-sub-square****emacspeak-sudoku-up-sub-square** [Command]

Move to top-left corner of sub-square above current one.

**12.178 emacspeak-supercite**

Speech-enable supercite.

**12.179 emacspeak-syslog**

SYSLOG-MODE == Working with various log files. Install package syslog-mode from melpa.

**12.180 emacspeak-tab-bar**tab-bar == tabs for window configuration. Speech-enable tab-bar interaction. If you have *browse-url-new-window-flag* set to T to have EWW open Web pages in a new buffer, then set *eww-browse-url-new-window-is-tab* to nil to avoid leaking tabs.**12.181 emacspeak-table**

Implements a module that provides a high level interface to tabulated information.

**12.182 emacspeak-table-ui**

User interface to tables

**12.182.1 Emacspeak-Table-Ui Commands****12.182.1.1 emacspeak-table-copy-current-element-to-kill-ring****emacspeak-table-copy-current-element-to-kill-ring** [Command]*C-e C-t w**<fn> C-t w*

Copy current table element to kill ring.

**12.182.1.2 emacspeak-table-copy-current-element-to-register****emacspeak-table-copy-current-element-to-register** (*register*) [Command]*C-e C-t x**<fn> C-t x*

Copy current table element to specified register.

(fn REGISTER)

### 12.182.1.3 emacspeak-table-copy-to-clipboard

**emacspeak-table-copy-to-clipboard** [Command]

*C-e C-t k*

*<fn> C-t k*

Copy table in current buffer to the table clipboard.

Current buffer must be in emacspeak-table mode.

### 12.182.1.4 emacspeak-table-display-table-in-region

**emacspeak-table-display-table-in-region** (*start end*) [Command]

*C-e M-i*

*<fn> M-i*

Recognize tabular data in current region and display it in table browsing mode in a a separate buffer.

emacspeak table mode is designed to let you browse tabular data using all the power of the two-dimensional spatial layout while giving you sufficient contextual information. The tables subdirectory of the emacspeak distribution contains some sample tables –these are the CalTrain schedules. Execute command ‘describe-mode’ bound to C-h m in a buffer that is in emacspeak table mode to read the documentation on the table browser.

(fn START END)

### 12.182.1.5 emacspeak-table-find-csv-file

**emacspeak-table-find-csv-file** (*filename*) [Command]

*C-e C-t ,*

*<fn> C-t ,*

Process a csv (comma separated values) file.

The processed data is presented using emacspeak table navigation.

(fn FILENAME)

### 12.182.1.6 emacspeak-table-find-file

**emacspeak-table-find-file** (*filename*) [Command]

Open a file containing table data and display it in table mode.

emacspeak table mode is designed to let you browse tabular data using all the power of the two-dimensional spatial layout while giving you sufficient contextual information. The etc/tables subdirectory of the emacspeak distribution contains some sample tables –these are the CalTrain schedules. Execute command ‘describe-mode’ bound to C-h m in a buffer that is in emacspeak table mode to read the documentation on the table browser.

(fn FILENAME)

### 12.182.1.7 emacspeak-table-goto

emacspeak-table-goto (*row column*) [Command]

*C-e C-t j*

*<fn> C-t j*

Prompt for a table cell coordinates and jump to it.

(fn ROW COLUMN)

### 12.182.1.8 emacspeak-table-goto-bottom

emacspeak-table-goto-bottom [Command]

*C-e C-t B*

*<fn> C-t B*

*C-e C-t M->*

*<fn> C-t M->*

Goes to the bottom of the current column.

### 12.182.1.9 emacspeak-table-goto-left

emacspeak-table-goto-left [Command]

*C-e C-t A*

*C-e C-t <*

*<fn> C-t A*

*<fn> C-t <*

Goes to the left of the current row.

### 12.182.1.10 emacspeak-table-goto-right

emacspeak-table-goto-right [Command]

*C-e C-t E*

*C-e C-t >*

*<fn> C-t E*

*<fn> C-t >*

Goes to the right of the current row.

### 12.182.1.11 emacspeak-table-goto-top

emacspeak-table-goto-top [Command]

*C-e C-t T*

*<fn> C-t T*

*C-e C-t M-<*

*<fn> C-t M-<*

Goes to the top of the current column.



**12.182.1.12 emacspeak-table-mode****emacspeak-table-mode**

[Command]

Major mode for browsing tables.

Table mode is designed to allow speech users to browse tabular data with full contextual feedback while retaining all the power of the two-dimensional spatial layout of tables.

In table mode, the arrow keys move between cells of the table.

Emacspeak speaks the cell contents in a user-customizable way. The visual display is kept in sync with the speech you hear; however Emacspeak is examining the entire table in order to speak the current cell content intelligently.

You can interactively specify that emacspeak should speak either the row or column header (or both) while speaking each cell. You can also specify a row or column filter that should be applied when speaking entire rows or columns –this lets you view slices of a table. You can move to a specific row or column by searching the cell contents or by searching the row or column headers to locate items of interest.

Here is a short description of the special commands provided in this mode.

The next four commands help you move to the edges of the table:

|   |                             |
|---|-----------------------------|
| E | emacspeak-table-goto-right  |
| A | emacspeak-table-goto-left   |
| B | emacspeak-table-goto-bottom |
| T | emacspeak-table-goto-top    |

The next two commands let you search the table.

The commands ask you if you want to search rows or columns.

When searching headers remember that row 0 is the column header, and that column 0 is the row header.

|   |                                |
|---|--------------------------------|
| h | emacspeak-table-search-headers |
| s | emacspeak-table-search         |

The next command lets you specify how cell contents should be spoken. Specify one of: ‘b’ for both, ‘c’ for column, ‘r’ for row, ‘f’ for row filtering and ‘g’ for column filtering. –table cells with then be spoken with both (or either)row and column headers, or with the filter applied.

|   |  |
|---|--|
| a | emacspeak-table-select-automatic-speaking-method |
|---|--|

The next set of commands speak the current table cell:

|     |   |
|-----|---|
| .   | emacspeak-table-speak-coordinates               |
| b   | emacspeak-table-speak-both-headers-and-element  |
| SPC | emacspeak-table-speak-current-element           |
| c   | emacspeak-table-speak-column-header-and-element |
| r   | emacspeak-table-speak-row-header-and-element    |

The next set of commands navigate the table:

|       |                                 |
|-------|---------------------------------|
| right | emacspeak-table-next-column     |
| left  | emacspeak-table-previous-column |
| down  | emacspeak-table-next-row        |
| up    | emacspeak-table-previous-row    |
| j     | emacspeak-table-goto            |
| S-tab | emacspeak-table-previous-column |
| TAB   | emacspeak-table-next-column     |

### Row and Column Filtering

Filtering is designed to let you view slices of a table.

They are specified as lists of numbers and strings.

The concept is best explained with an example.

A row filter specifies which of the entries in the current row should be spoken. Entries are numbered starting with 0. Thus, when working with a table having 8 columns, a row filter of (1 2 3) will speak only entries 1 2 and 3. Use the sample tables in etc/tables to familiarize yourself with this feature. Note that you can intersperse meaningful strings in the list that specifies the filter.

### Full List Of Keybindings:

| key                | binding                                |
|--------------------|--|
| —                  | —                                      |
| C-b                | emacspeak-table-previous-column        |
| C-f                | emacspeak-table-next-column            |
| TAB                | emacspeak-table-next-column            |
| C-n                | emacspeak-table-next-row               |
| C-p                | emacspeak-table-previous-row           |
| ESC Prefix Command |  |
| SPC                | emacspeak-table-speak-current-element  |
| #                  | emacspeak-table-sort-on-current-column |
| ,                  | emacspeak-table-find-csv-file          |
| .                  | emacspeak-table-speak-coordinates      |
| <                  | emacspeak-table-goto-left              |
| =                  | emacspeak-table-speak-dimensions       |
| >                  | emacspeak-table-goto-right             |
| A                  | emacspeak-table-goto-left              |

B emacspeak-table-goto-bottom  
 C emacspeak-table-search-column  
 E emacspeak-table-goto-right  
 Q emacspeak-kill-buffer-quietly  
 R emacspeak-table-search-row  
 T emacspeak-table-goto-top  
 a emacspeak-table-select-automatic-speaking-method  
 b emacspeak-table-speak-both-headers-and-element  
 c emacspeak-table-speak-column-header-and-element  
 f emacspeak-table-speak-row-filtered  
 g emacspeak-table-speak-column-filtered  
 h emacspeak-table-search-headers  
 j emacspeak-table-goto  
 k emacspeak-table-copy-to-clipboard  
 n emacspeak-table-next-row  
 p emacspeak-table-previous-row  
 q quit-window  
 r emacspeak-table-speak-row-header-and-element  
 s emacspeak-table-search  
 v emacspeak-table-view-csv-buffer  
 w emacspeak-table-copy-current-element-to-kill-ring  
 x emacspeak-table-copy-current-element-to-register  
 S-<tab> emacspeak-table-previous-column  
 <down> emacspeak-table-next-row  
 <left> emacspeak-table-previous-column  
 <right> emacspeak-table-next-column  
 <up> emacspeak-table-previous-row  
  
 M-< emacspeak-table-goto-top  
 M-> emacspeak-table-goto-bottom  
 M-l emacspeak-table-ui-filter-load  
 M-s emacspeak-table-ui-filter-save

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘emacspeak-table-mode-hook’, as the final or penultimate step during initialization.

### 12.182.1.13 emacspeak-table-next-column

**emacspeak-table-next-column** (&optional *count*)

[Command]

*C-e C-t TAB*  
*C-e C-t C-f*  
*C-e C-t <right>*  
*<fn> C-t TAB*  
*<fn> C-t C-f*  
*<fn> C-t <right>*  
 Move to the next column if possible

(fn &optional COUNT)

#### 12.182.1.14 emacspeak-table-next-row

**emacspeak-table-next-row (&optional count)** [Command]

*C-e C-t n*

*C-e C-t C-n*

*C-e C-t <down>*

*<fn> C-t n*

*<fn> C-t C-n*

*<fn> C-t <down>*

Move to the next row if possible

(fn &optional COUNT)

#### 12.182.1.15 emacspeak-table-paste-from-clipboard

**emacspeak-table-paste-from-clipboard** [Command]

Paste the emacspeak table clipboard into the current buffer.

Use the major mode of this buffer to decide what kind of table markup to use.

#### 12.182.1.16 emacspeak-table-previous-column

**emacspeak-table-previous-column (&optional count)** [Command]

*C-e C-t C-b*

*C-e C-t <left>*

*C-e C-t S-<tab>*

*<fn> C-t C-b*

*<fn> C-t <left>*

*<fn> C-t S-<tab>*

Move to the previous column if possible

(fn &optional COUNT)

#### 12.182.1.17 emacspeak-table-previous-row

**emacspeak-table-previous-row (&optional count)** [Command]

*C-e C-t p*

*C-e C-t C-p*

*C-e C-t <up>*

*<fn> C-t p*

*<fn> C-t C-p*

*<fn> C-t <up>*

Move to the previous row if possible

(fn &optional COUNT)

**12.182.1.18 emacspeak-table-search****emacspeak-table-search** (*&optional what*) [Command]*C-e C-t s**<fn> C-t s*

Search the table for matching elements. Interactively prompts for row or column to search and pattern to look for. If there is a match, makes the matching cell current. When called from a program, ‘what’ can be either ‘row’ or ‘column’.

(fn &amp;optional WHAT)

**12.182.1.19 emacspeak-table-search-column****emacspeak-table-search-column** [Command]*C-e C-t C**<fn> C-t C*

Search in current table column.

**12.182.1.20 emacspeak-table-search-headers****emacspeak-table-search-headers** [Command]*C-e C-t h**<fn> C-t h*

Search the table row or column headers. Interactively prompts for row or column to search and pattern to look for. If there is a match, makes the matching row or column current.

**12.182.1.21 emacspeak-table-search-row****emacspeak-table-search-row** [Command]*C-e C-t R**<fn> C-t R*

Search in current table row.

**12.182.1.22 emacspeak-table-select-automatic-speaking-method****emacspeak-table-select-automatic-speaking-method** [Command]*C-e C-t a**<fn> C-t a*

Interactively select the kind of automatic speech to produce when browsing table elements

**12.182.1.23 emacspeak-table-sort-on-current-column**

emacspeak-table-sort-on-current-column [Command]

*C-e C-t #*

*<fn> C-t #*

Sort table on current column.

**12.182.1.24 emacspeak-table-speak-both-headers-and-element**

emacspeak-table-speak-both-headers-and-element [Command]

*C-e C-t b*

*<fn> C-t b*

Speak both row and column header and table element

**12.182.1.25 emacspeak-table-speak-column-filtered**

emacspeak-table-speak-column-filtered (&optional *prefix*) [Command]

*C-e C-t g*

*<fn> C-t g*

Speaks a table column after applying a specified column filter.

Optional prefix arg prompts for a new filter.

(fn &optional PREFIX)

**12.182.1.26 emacspeak-table-speak-column-header-and-element**

emacspeak-table-speak-column-header-and-element [Command]

*C-e C-t c*

*<fn> C-t c*

Speak column header and table element

**12.182.1.27 emacspeak-table-speak-coordinates**

emacspeak-table-speak-coordinates [Command]

*C-e C-t .*

*<fn> C-t .*

Speak current table coordinates.

**12.182.1.28 emacspeak-table-speak-current-element**

emacspeak-table-speak-current-element [Command]

*C-e C-t SPC*

*<fn> C-t SPC*

Speak current table element

**12.182.1.29 emacspeak-table-speak-dimensions**

emacspeak-table-speak-dimensions [Command]

*C-e C-t =*

*<fn> C-t =*

Speak current table dimensions.

**12.182.1.30 emacspeak-table-speak-row-filtered**

emacspeak-table-speak-row-filtered (&optional *prefix*) [Command]

*C-e C-t f*

*<fn> C-t f*

Speaks a table row after applying a specified row filter.

Optional prefix arg prompts for a new filter.

(fn &optional PREFIX)

**12.182.1.31 emacspeak-table-speak-row-header-and-element**

emacspeak-table-speak-row-header-and-element [Command]

*C-e C-t r*

*<fn> C-t r*

Speak row header and table element

**12.182.1.32 emacspeak-table-ui-filter-load**

emacspeak-table-ui-filter-load (*file*) [Command]

*C-e C-t M-l*

*<fn> C-t M-l*

Load saved filter settings.

(fn FILE)

**12.182.1.33 emacspeak-table-ui-filter-save**

emacspeak-table-ui-filter-save (*file*) [Command]

*C-e C-t M-s*

*<fn> C-t M-s*

Save out filter settings.

(fn FILE)

**12.182.1.34 emacspeak-table-view-csv-buffer**

emacspeak-table-view-csv-buffer (&optional *buffer-name*) [Command]

*C-e C-t v*

`<fn> C-t v`

Process a csv (comma separated values) data.

The processed data is presented using emacspeak table navigation.

(fn &optional BUFFER-NAME)

### 12.182.1.35 emacspeak-table-view-csv-url

`emacspeak-table-view-csv-url (url &optional buffer-name)` [Command]

Process a csv (comma separated values) data at 'URL'.

The processed data is presented using emacspeak table navigation.

(fn URL &optional BUFFER-NAME)

## 12.183 emacspeak-tabulate

This module is a simple table recognizer. Can recognize the columns in tabulated output, e.g. ps, ls output

## 12.184 emacspeak-tar

Auditory interface to tar mode

### 12.184.1 Emacspeak-Tar Commands

#### 12.184.1.1 emacspeak-tar-speak-file-date

`emacspeak-tar-speak-file-date` [Command]

Speak date of file current entry

#### 12.184.1.2 emacspeak-tar-speak-file-permissions

`emacspeak-tar-speak-file-permissions` [Command]

Speak permissions of file current entry

#### 12.184.1.3 emacspeak-tar-speak-file-size

`emacspeak-tar-speak-file-size` [Command]

Speak size of file current entry

## 12.185 emacspeak-tcl

Provide additional advice to tcl-mode

## 12.186 emacspeak-tempo

tempo.el provides the infrastructure for building up templates. This is used by html-helper-mode to allow for easy writing of HTML This module extends Emacspeak to provide fluent spoken feedback



**12.187 emacspeak-tetris**

Speech-enables tetris.

**12.187.1 Emacspeak-Tetris Commands****12.187.1.1 emacspeak-tetris-goto-bottom-row**

`emacspeak-tetris-goto-bottom-row` [Command]  
Move to and speak bottom row

**12.187.1.2 emacspeak-tetris-goto-top-row**

`emacspeak-tetris-goto-top-row` [Command]  
Move to and speak the top row

**12.187.1.3 emacspeak-tetris-speak-column**

`emacspeak-tetris-speak-column (&optional x)` [Command]  
Speak column –default is to speak current column  
  
(fn &optional X)

**12.187.1.4 emacspeak-tetris-speak-coordinates**

`emacspeak-tetris-speak-coordinates` [Command]  
Speak current position

**12.187.1.5 emacspeak-tetris-speak-current-shape**

`emacspeak-tetris-speak-current-shape` [Command]  
Speak current shape

**12.187.1.6 emacspeak-tetris-speak-current-shape-and-coordinates**

`emacspeak-tetris-speak-current-shape-and-coordinates` [Command]  
Speak shape orientation and coordinates

**12.187.1.7 emacspeak-tetris-speak-next-shape**

`emacspeak-tetris-speak-next-shape` [Command]  
Speak next shape

**12.187.1.8 emacspeak-tetris-speak-row**

`emacspeak-tetris-speak-row` [Command]  
Speak current tetris row

**12.187.1.9 emacspeak-tetris-speak-row-number**

`emacspeak-tetris-speak-row-number` [Command]  
Speak where on the tetris board we are

**12.187.1.10 emacspeak-tetris-speak-score**

**emacspeak-tetris-speak-score** [Command]  
 Speak the score

**12.187.1.11 emacspeak-tetris-speak-x-coordinate**

**emacspeak-tetris-speak-x-coordinate** [Command]  
 Speak current position

**12.188 emacspeak-texinfo**

This module speech enables net-texinfo mode

**12.189 emacspeak-threes**

THREES == threes game. This module speech-enable the game. <https://en.wikipedia.org/wiki/Threes> for history of the game and details of game play. This module adds additional convenience keybindings to the default arrow-key bindings implemented in threes.el. In addition, this module implements commands that speak the board as well as getting a column-specific view of the board.

|            |                                     |
|------------|-------------------------------------|
| <i>f</i>   | Move right                          |
| <i>b</i>   | Move left                           |
| <i>n</i>   | Move down                           |
| <i>p</i>   | Move up                             |
| <i>SPC</i> | Speak the board                     |
| <i>/</i>   | Speak board by column.              |
| <i>.</i>   | Speak current score.                |
| <i>,</i>   | Speak number of zeros on the board. |
| <i>s</i>   | Save current state                  |
| <i>u</i>   | Pop state from stack                |
| <i>?</i>   | Speak next tile                     |

The updated board is spoken after each turn. The next upcoming tile is spoken after the current state of the board. You can use *SPC* and */* to review the board.

**12.189.1 Emacspeak-Threes Commands****12.189.1.1 emacspeak-threes-0**

**emacspeak-threes-0** [Command]  
 Set next tile.

**12.189.1.2 emacspeak-threes-1**

**emacspeak-threes-1** [Command]  
 Set next tile.

### 12.189.1.3 emacspeak-threes-2

**emacspeak-threes-2** [Command]  
Set next tile.

### 12.189.1.4 emacspeak-threes-3

**emacspeak-threes-3** [Command]  
Set next tile.

### 12.189.1.5 emacspeak-threes-export

**emacspeak-threes-export** (*&optional prompt*) [Command]  
Exports game stack to a file.  
Optional interactive prefix arg prompts for a file.  
Note that the file is overwritten silently.  
  
(fn &optional PROMPT)

### 12.189.1.6 emacspeak-threes-import

**emacspeak-threes-import** (*&optional prompt*) [Command]  
Import game.  
Optional interactive prefix arg prompts for a filename.  
  
(fn &optional PROMPT)

### 12.189.1.7 emacspeak-threes-pop-state

**emacspeak-threes-pop-state** [Command]  
Reset state from stack.

### 12.189.1.8 emacspeak-threes-prune-stack

**emacspeak-threes-prune-stack** (*drop*) [Command]  
Prune game stack to specified length.  
  
(fn DROP)

### 12.189.1.9 emacspeak-threes-push-state

**emacspeak-threes-push-state** [Command]  
Push current game state on stack.

### 12.189.1.10 emacspeak-threes-score

**emacspeak-threes-score** [Command]  
Speak the score.

### 12.189.1.11 emacspeak-threes-speak-board

`emacspeak-threes-speak-board` [Command]  
Speak the board.

### 12.189.1.12 emacspeak-threes-speak-empty-count

`emacspeak-threes-speak-empty-count` [Command]  
Speak number of cells that are non-empty.

### 12.189.1.13 emacspeak-threes-speak-next

`emacspeak-threes-speak-next` [Command]  
Speak upcoming tile.

### 12.189.1.14 emacspeak-threes-speak-transposed-board

`emacspeak-threes-speak-transposed-board` [Command]  
Speak the board by columns.

## 12.190 emacspeak-tide

TIDE == Typescript IDE for emacs. This module speech-enables both tide and typescript-mode.

## 12.191 emacspeak-todo-mode

todo-mode (part of Emacs 21) provides todo-lists that can be integrated with the Emacs calendar. This module speech-enables todo-mode

## 12.192 emacspeak-transient

TRANSIENT == Transient commands — used by magit and friends. This module speech-enables transient.

### 12.192.1 Introduction

Package Transient is similar to package Hydra in the sense that it can be used to create a sequence of chained/hierarchical commands that are invoked via a sequence of keys. It is used by Magit for dispatching to the various Git commands. Speech-enabling package Transient results in the various interactive commands producing auditory feedback. Transient shows an ephemeral window with the currently available commands, Emacspeak speech-enables transient-show to cache that content so it can be browsed if desired.

Finally, this module defines a new minor mode called transient-emacspeak that enables interactive browsing of the contents displayed temporarily. Note that without this functionality, learning complex packages like Magit would be difficult because the list of available commands can be very long.

### 12.192.2 Recommended Customizations

I use the following customizations via `.custom`, adjust to taste, but use these only after reading the transient info documentations.

- `transient-force-single-column`: `t`
- `transient-show-popup`: `1`
- `transient-enable-popup-navigation`: `t`

this pops up the transient buffer after a short delay and lets you move through the buttons with the up/down arrows.

### 12.192.3 Browsing Contents Of `transient-show`

When executing a command defined via Transient — e.g. command `Magit-dispatch` and friends, press `C-z` (`transient-suspend`) to temporarily suspend the currently active transient. Emacspeak now displays a `*transient-emacspeak*` buffer that displays the contents of the most recently displayed transient choices. Pressing `C-c` resumes the transient; Pressing `C-q` quits the transient.

### 12.192.4 Emacspeak-Transient Commands

#### 12.192.4.1 `emacspeak-transient-mode`

`emacspeak-transient-mode` [Command]  
 emacspeak integration with Transient.

In addition to any hooks its parent mode ‘`special-mode`’ might have run, this mode runs the hook ‘`emacspeak-transient-mode-hook`’, as the final or penultimate step during initialization.

|     |         |
|-----|---------|
| key | binding |
| —   | ——      |

#### 12.192.4.2 `emacspeak-transient-next-section`

`emacspeak-transient-next-section` [Command]  
 Next transient section.

#### 12.192.4.3 `emacspeak-transient-previous-section`

`emacspeak-transient-previous-section` [Command]  
 Previous transient section.

### 12.193 `emacspeak-twittering`

module `twittering-mode.el` is found on the emacs wiki This module speech-enables `twittering-mode` which works using oauth for authentication. Note: As of Thu Sep 2 08:11:25 PDT 2010 `twit.el` is broken.

Advises interactive functions to speak

### 12.193.1 Emacspeak-Twittering Commands

#### 12.193.1.1 emacspeak-tweeting-jump-to-following-url

**emacspeak-tweeting-jump-to-following-url** [Command]  
Move to and open closest URI following point.

#### 12.193.1.2 emacspeak-tweeting-speak-this-tweet

**emacspeak-tweeting-speak-this-tweet** (**&optional** *copy-as-kill*) [Command]  
Speak tweet under point.  
With interactive prefix arg ‘copy-as-kill’, copy it to kill ring as well.  
  
(fn &optional COPY-AS-KILL)

#### 12.193.1.3 emacspeak-tweeting-twarc

**emacspeak-tweeting-twarc** (**&optional** *whose*) [Command]  
Download data using credentials for signed-in user.  
Interactive prefix arg ‘whose’ prompts for a username whose timeline we download.  
  
(fn &optional WHOSE)

### 12.194 emacspeak-typo

TYPO == Typographical Editing This module speech-enables typo-mode. Typo-mode’s magic insertion commands are speech-enabled to speak the inserted char.

### 12.195 emacspeak-url-template

It is often useful to have “parametrized hot list entries” i.e., hotlist entries that are “templates” for the actual URL. The user provides values for the parametrized portions of the URL e.g. the date. See Section 12.233 [URL Templates], page 280, for details on the URL templates that are presently defined.

#### 12.195.1 Emacspeak-Url-Template Commands

##### 12.195.1.1 emacspeak-url-template-fetch

**emacspeak-url-template-fetch** (**&optional** *documentation*) [Command]  
*C-e u*  
*<fn> u*  
Fetch a pre-defined resource.  
Use Emacs completion to obtain a list of available resources.  
Resources typically prompt for the relevant information before completing the request.

Optional interactive prefix arg displays documentation for specified resource.

(fn &optional DOCUMENTATION)

### 12.195.1.2 emacspeak-url-template-help

**emacspeak-url-template-help** [Command]

Display documentation for a URL template.  
Use Emacs completion to obtain a list of available resources.

### 12.195.1.3 emacspeak-url-template-load

**emacspeak-url-template-load** (*file*) [Command]

Load URL template resources from specified location.

(fn FILE)

### 12.195.1.4 emacspeak-url-template-nls-add-to-wishlist

**emacspeak-url-template-nls-add-to-wishlist** (*book*) [Command]

Add book under point to wishlist.

(fn BOOK)

### 12.195.1.5 emacspeak-url-template-save

**emacspeak-url-template-save** (*file*) [Command]

Save out url templates.

(fn FILE)

## 12.196 emacspeak-vdiff

VDIFF == vimdiff Installable from melpa, vdiff enables synchronized movement through diff buffers without resorting to an extra control-panel as is the case with ediff. In addition to speech-enabling interactive commands and setting up face->voice mappings, this module provides commands that speak the current hunk. These are bound in **vdiff-mode-prefix-map**.

- **emacspeak-vdiff-speak-this-hunk** bound to *SPC*.
- **emacspeak-vdiff-speak-other-hunk** bound to *C-SPC*.
- **emacspeak-vdiff-speak-other-line** bound to *l*.

### 12.196.1 Emacspeak-Vdiff Commands

#### 12.196.1.1 emacspeak-vdiff-speak-other-hunk

**emacspeak-vdiff-speak-other-hunk** [Command]

Speak corresponding hunk from other buffer.

### 12.196.1.2 emacspeak-vdiff-speak-other-line

`emacspeak-vdiff-speak-other-line` [Command]  
Speak corresponding line from other buffer.

### 12.196.1.3 emacspeak-vdiff-speak-this-hunk

`emacspeak-vdiff-speak-this-hunk` [Command]  
Speak VDiff hunk under point.

## 12.197 emacspeak-vertico

Vertico is a modern completion UI that uses Emacs's native completion engine. This module speech-enables Vertico's UI.

## 12.198 emacspeak-view

Provide additional advice to view-mode.

### 12.198.1 Emacspeak-View Commands

#### 12.198.1.1 emacspeak-view-line-to-top

`emacspeak-view-line-to-top` [Command]  
Moves current line to top of window.

## 12.199 emacspeak-vm

This module extends the mail reader vm. Uses voice locking for message headers and cited messages.

### 12.199.1 Emacspeak-Vm Commands

#### 12.199.1.1 emacspeak-vm-browse-message

`emacspeak-vm-browse-message` [Command]  
Browse an email message –read it paragraph at a time.

#### 12.199.1.2 emacspeak-vm-catch-up-all-messages

`emacspeak-vm-catch-up-all-messages` [Command]  
Mark all messages in folder to be deleted. Use with caution.

#### 12.199.1.3 emacspeak-vm-locate-subject-line

`emacspeak-vm-locate-subject-line` [Command]  
Locates the subject line in a message being read.  
Useful when you're reading a message  
that has been forwarded multiple times.



**12.199.1.4 emacspeak-vm-mode-line**

**emacspeak-vm-mode-line** [Command]  
 VM mode line information.

**12.199.1.5 emacspeak-vm-speak-labels**

**emacspeak-vm-speak-labels** [Command]  
 Speak a message's labels

**12.199.1.6 emacspeak-vm-speak-message**

**emacspeak-vm-speak-message** [Command]  
 Move point to the message body.

**12.199.1.7 emacspeak-vm-toggle-html-mime-demotion**

**emacspeak-vm-toggle-html-mime-demotion** [Command]  
 Toggle state of HTML Mime promotion/Demotion.

**12.199.1.8 emacspeak-vm-yank-header**

**emacspeak-vm-yank-header** [Command]  
 Yank specified header into kill ring.

**12.199.2 emacspeak-vm Options**

User Option *emacspeak-vm-cal2text* [Variable]  
 Executable that converts calendar invitations on standard input to plain text.

User Option *emacspeak-vm-customize-mime-settings* [Variable]  
 Non-nil will cause Emacspeak to configure VM mime settings to match what the author of Emacspeak uses.

User Option *emacspeak-vm-pdf2text* [Variable]  
 Executable that converts PDF on standard input to plain text using pdftotext.

User Option *emacspeak-vm-use-raman-settings* [Variable]  
 Should VM use the customizations used by the author of Emacspeak.

User Option *emacspeak-vm-voice-loc* [Variable]  
 Set this to T if you want messages automatically voice locked. Note that some badly formed mime messages cause trouble.

**12.200 emacspeak-vterm**

VTERM == vterm using native vterm library

**12.200.1 Usage**

- Turn on *emacspeak-comint-autospeak* for using the shell.
- Turn off *emacspeak-comint-autospeak* when using full-screen ncurses apps like *vi*.
- Use *vterm-copy-mode* to review the contents of the terminal — *C-c C-t*.

## 12.201 emacspeak-vuiet

VUIET == Emacs Music Explorer And Player with last.fm integration This module speech-enables vuiet.

### 12.201.1 Emacspeak-Vuiet Commands

#### 12.201.1.1 emacspeak-vuiet-track-info

**emacspeak-vuiet-track-info** [Command]  
 Speak current playing state.

## 12.202 emacspeak-wdired

Speech-enable wdired to permit in-place renaming of groups of files.

## 12.203 emacspeak-we

we is for webedit Invoke XSLT to edit/transform Web pages before they get rendered. we makes emacspeak's webedit layer independent of a given Emacs web browser EWW This module will use the abstraction provided by browse-url to handle Web pages.

### 12.203.1 Emacspeak-We Commands

#### 12.203.1.1 emacspeak-we-class-filter-and-follow

**emacspeak-we-class-filter-and-follow** (*class url &optional prompt*) [Command]

*C-e x e y*

*<fn> x e y*

Follow url and point, and filter the result by specified class.

Class can be set locally for a buffer, and overridden with an interactive prefix arg. If there is a known rewrite url rule, that is used as well.

(fn CLASS URL &optional PROMPT)

#### 12.203.1.2 emacspeak-we-class-filter-and-follow-link

**emacspeak-we-class-filter-and-follow-link** (*&optional prompt*) [Command]

*C-e x e v*

*<fn> x e v*

Follow url and point, and filter the result by specified class.

Class can be set locally for a buffer, and overridden with an interactive prefix arg. If there is a known rewrite url rule, that is used as well.

(fn &optional PROMPT)

**12.203.1.3 emacspeak-we-count-matches****emacspeak-we-count-matches** (*url locator*) [Command]*C-e x e C-f**<fn> x e C-f*

Count matches for locator in Web page.

(fn URL LOCATOR)

**12.203.1.4 emacspeak-we-count-nested-tables****emacspeak-we-count-nested-tables** (*url*) [Command]*C-e x e C-x**<fn> x e C-x*

Count nested tables in Web page.

(fn URL)

**12.203.1.5 emacspeak-we-count-tables****emacspeak-we-count-tables** (*url*) [Command]*C-e x e C-t**<fn> x e C-t*

Count tables in Web page.

(fn URL)

**12.203.1.6 emacspeak-we-extract-by-class****emacspeak-we-extract-by-class** (*class url &optional speak*) [Command]*C-e x e c**<fn> x e c*

Extract elements having specified class attribute from HTML. Extracts specified elements from current WWW page and displays it in a separate buffer. Interactive use provides list of class values as completion.

(fn CLASS URL &amp;optional SPEAK)

**12.203.1.7 emacspeak-we-extract-by-class-list****emacspeak-we-extract-by-class-list** (*classes url &optional speak*) [Command]*C-e x e C**<fn> x e C*

Extract elements having class specified in list 'classes' from HTML. Extracts specified elements from current WWW page and displays it in a separate buffer. Interactive use provides list of class

values as completion.

(fn CLASSES URL &optional SPEAK)

### 12.203.1.8 emacspeak-we-extract-by-id

**emacspeak-we-extract-by-id** (*id url &optional speak*) [Command]

*C-e x e i*

*<fn> x e i*

Extract elements having specified id attribute from HTML. Extracts specified elements from current WWW page and displays it in a separate buffer.

Interactive use provides list of id values as completion.

(fn ID URL &optional SPEAK)

### 12.203.1.9 emacspeak-we-extract-by-id-list

**emacspeak-we-extract-by-id-list** (*ids url &optional speak*) [Command]

*C-e x e I*

*<fn> x e I*

Extract elements having id specified in list ‘ids’ from HTML.

Extracts specified elements from current WWW page and displays it in a separate buffer. Interactive use provides list of id values as completion.

(fn IDS URL &optional SPEAK)

### 12.203.1.10 emacspeak-we-extract-by-role

**emacspeak-we-extract-by-role** (*role url &optional speak*) [Command]

*C-e x e r*

*<fn> x e r*

Extract elements having specified role attribute from HTML. Extracts specified elements from current WWW page and displays it in a separate buffer. Interactive use provides list of role values as completion.

(fn ROLE URL &optional SPEAK)

### 12.203.1.11 emacspeak-we-extract-matching-urls

**emacspeak-we-extract-matching-urls** (*pattern url &optional speak*) [Command]

*C-e x e u*

*<fn> x e u*

Extracts links whose URL matches pattern.

(fn PATTERN URL &optional SPEAK)

**12.203.1.12 emacspeak-we-extract-nested-table****emacspeak-we-extract-nested-table** (*index url &optional speak*) [Command]*C-e x e x**<fn> x e x*

Extract nested table specified by ‘table-index’. Default is to operate on current web page when in a browser buffer; otherwise prompt for URL. Optional arg ‘speak’ specifies if the result should be spoken automatically.

(fn INDEX URL &amp;optional SPEAK)

**12.203.1.13 emacspeak-we-extract-nested-table-list****emacspeak-we-extract-nested-table-list** (*tables url &optional speak*) [Command]*C-e x e X**<fn> x e X*

Extract specified list of tables from a Web page.

(fn TABLES URL &amp;optional SPEAK)

**12.203.1.14 emacspeak-we-extract-speakable****emacspeak-we-extract-speakable** (*url &optional speak*) [Command]*C-e x e z**<fn> x e z*

Extract elements having class ‘speakable’ from HTML.

(fn URL &amp;optional SPEAK)

**12.203.1.15 emacspeak-we-extract-table-by-match****emacspeak-we-extract-table-by-match** (*match url &optional speak*) [Command]*C-e x e m**<fn> x e m*

Extract table containing specified match.

Optional arg url specifies the page to extract content from.

(fn MATCH URL &amp;optional SPEAK)

**12.203.1.16 emacspeak-we-extract-table-by-position****emacspeak-we-extract-table-by-position** (*pos url &optional speak*) [Command]*C-e x e t*

*<fn> x e t*

Extract table at specified pos.

Default is to extract from current page.

(fn POS URL &optional SPEAK)

### 12.203.1.17 emacspeak-we-extract-tables-by-match-list

**emacspeak-we-extract-tables-by-match-list** (*match-list url* [Command]  
                   &optional *speak*)

*C-e x e M*

*<fn> x e M*

Extract specified tables from a WWW page.

Tables are specified by containing match pattern  
 found in the match list.

(fn MATCH-LIST URL &optional SPEAK)

### 12.203.1.18 emacspeak-we-extract-tables-by-position-list

**emacspeak-we-extract-tables-by-position-list** (*positions url* [Command]  
                   &optional *speak*)

*C-e x e T*

*<fn> x e T*

Extract specified list of nested tables from a WWW page.

Tables are specified by their position in the list  
 of nested tables found in the page.

(fn POSITIONS URL &optional SPEAK)

### 12.203.1.19 emacspeak-we-follow-and-extract-main

**emacspeak-we-follow-and-extract-main** (&optional *speak*) [Command]

*C-e x e P*

*<fn> x e P*

Follow URL, then extract role=main.

(fn &optional SPEAK)

### 12.203.1.20 emacspeak-we-follow-and-filter-by-id

**emacspeak-we-follow-and-filter-by-id** (*id prompt*) [Command]

*C-e x e b*

*<fn> x e b*

Follow url and point, and filter the result by specified id.

Id can be set locally for a buffer, and overridden with an

interactive prefix arg. If there is a known rewrite url rule, that is used as well.

(fn ID PROMPT)

### 12.203.1.21 emacspeak-we-junk-by-class

**emacspeak-we-junk-by-class** (*class url &optional speak*) [Command]

*C-e x e d*

*<fn> x e d*

Extract elements not having specified class attribute from HTML. Extracts specified elements from current WWW page and displays it in a separate buffer. Interactive use provides list of class values as completion.

(fn CLASS URL &optional SPEAK)

### 12.203.1.22 emacspeak-we-junk-by-class-list

**emacspeak-we-junk-by-class-list** (*classes url &optional speak*) [Command]

*C-e x e D*

*C-e x e C-c*

*<fn> x e D*

*<fn> x e C-c*

Extract elements not having class specified in list ‘classes’ from HTML. Extracts specified elements from current WWW page and displays it in a separate buffer. Interactive use provides list of class values as completion.

(fn CLASSES URL &optional SPEAK)

### 12.203.1.23 emacspeak-we-style-filter

**emacspeak-we-style-filter** (*style url &optional speak*) [Command]

*C-e x e S*

*<fn> x e S*

Extract elements matching specified style from HTML. Extracts specified elements from current WWW page and displays it in a separate buffer. Optional arg url specifies the page to extract contents from.

(fn STYLE URL &optional SPEAK)

### 12.203.1.24 emacspeak-we-toggle-xsl-keep-result

**emacspeak-we-toggle-xsl-keep-result** [Command]

*C-e x e k*

**<fn> x e k**

Toggle xsl keep result flag.

### 12.203.1.25 emacspeak-we-url-expand-and-execute

**emacspeak-we-url-expand-and-execute (&optional *prefix*)**

[Command]

**C-e x e e**

**<fn> x e e**

Applies buffer-specific URL expander/executor function.

(fn &optional PREFIX)

### 12.203.1.26 emacspeak-we-url-rewrite-and-follow

**emacspeak-we-url-rewrite-and-follow (&optional *prompt*)**

[Command]

**C-e x e ]**

**<fn> x e ]**

Apply a url rewrite rule as specified in the current buffer before following link under point. If no rewrite rule is defined, first prompt for one. Rewrite rules are of the form '(from to)' where from and to are strings. Typically, the rewrite rule is automatically set up by Emacspeak tools like websearch where a rewrite rule is known. Rewrite rules are useful in jumping directly to the printer friendly version of an article for example. Optional interactive prefix arg prompts for a rewrite rule even if one is already defined.

(fn &optional PROMPT)

### 12.203.1.27 emacspeak-we-xpath-filter-and-follow

**emacspeak-we-xpath-filter-and-follow (&optional *prompt*)**

[Command]

**C-e x e p**

**<fn> x e p**

Follow url and point, and filter the result by specified xpath. XPath can be set locally for a buffer, and overridden with an interactive prefix arg. If there is a known rewrite url rule, that is used as well.

(fn &optional PROMPT)

### 12.203.1.28 emacspeak-we-xpath-junk-and-follow

**emacspeak-we-xpath-junk-and-follow (&optional *prompt*)**

[Command]

**C-e x e C-p**

**<fn> x e C-p**

Follow url and point, and filter the result by junking



elements specified by xpath.

XPath can be set locally for a buffer, and overridden with an interactive prefix arg. If there is a known rewrite url rule, that is used as well.

(fn &optional PROMPT)

### 12.203.1.29 emacspeak-we-xsl-toggle

`emacspeak-we-xsl-toggle` [Command]

*C-e x e o*

*<fn> x e o*

Toggle application of XSL transformations.

### 12.203.1.30 emacspeak-we-xslt-apply

`emacspeak-we-xslt-apply (xsl)` [Command]

*C-e x e a*

*<fn> x e a*

Apply specified transformation to current Web page.

(fn XSL)

### 12.203.1.31 emacspeak-we-xslt-filter

`emacspeak-we-xslt-filter (path url &optional speak)` [Command]

*C-e x e f*

*<fn> x e f*

Extract elements matching specified XPath path locator from Web page – default is the current page being viewed.

(fn PATH URL &optional SPEAK)

### 12.203.1.32 emacspeak-we-xslt-junk

`emacspeak-we-xslt-junk (path url &optional speak)` [Command]

*C-e x e j*

*<fn> x e j*

Junk elements matching specified locator.

(fn PATH URL &optional SPEAK)

### 12.203.1.33 emacspeak-we-xslt-select

`emacspeak-we-xslt-select (xsl)` [Command]

*C-e x e s*

`<fn> x e s`

Select XSL transformation applied to Web pages before they are displayed .

(fn XSL)

## 12.203.2 emacspeak-we Options

User Option *emacspeak-we-filters-rename-buffer*

[Variable]

Set to T if you want the buffer name to contain the applied filter.

## 12.204 emacspeak-websearch

This module provides utility functions for searching the WWW

### 12.204.1 Emacspeak-Websearch Commands

#### 12.204.1.1 emacspeak-websearch-accessible-google

*emacspeak-websearch-accessible-google* (*query* &*optional options*)

[Command]

Use Google Lite (Experimental).

Optional prefix arg prompts for toolbelt options.

(fn QUERY &optional OPTIONS)

#### 12.204.1.2 emacspeak-websearch-amazon-search

*emacspeak-websearch-amazon-search*

[Command]

Amazon search.

#### 12.204.1.3 emacspeak-websearch-ask-jeeves

*emacspeak-websearch-ask-jeeves* (*query*)

[Command]

Ask Jeeves for the answer.

(fn QUERY)

#### 12.204.1.4 emacspeak-websearch-biblio-search

*emacspeak-websearch-biblio-search* (*query*)

[Command]

Search Computer Science Bibliographies.

(fn QUERY)

#### 12.204.1.5 emacspeak-websearch-citeseer-search

*emacspeak-websearch-citeseer-search* (*term*)

[Command]

Perform a CiteSeer search.

(fn TERM)

**12.204.1.6 emacspeak-websearch-dispatch****emacspeak-websearch-dispatch** [Command]*C-e ?**<fn> ?*

Press ‘?’ to list available search engines.

This interface attempts to speak the most relevant information on the result page.

**12.204.1.7 emacspeak-websearch-foldoc-search****emacspeak-websearch-foldoc-search** (*query*) [Command]

Perform a FolDoc search.

(fn QUERY)

**12.204.1.8 emacspeak-websearch-google****emacspeak-websearch-google** (*query* &**optional** *flag*) [Command]

Perform a Google search. First optional interactive prefix arg ‘flag’ prompts for additional search options. Second interactive prefix arg is equivalent to hitting the I’m Feeling Lucky button on Google.

(fn QUERY &amp;optional FLAG)

**12.204.1.9 emacspeak-websearch-google-feeling-lucky****emacspeak-websearch-google-feeling-lucky** (*query*) [Command]

Do a I’m Feeling Lucky Google search.

(fn QUERY)

**12.204.1.10 emacspeak-websearch-google-news****emacspeak-websearch-google-news** [Command]

Invoke Google News url template.

**12.204.1.11 emacspeak-websearch-google-search-in-date-range****emacspeak-websearch-google-search-in-date-range** [Command]

Use this from inside the calendar to do Google date-range searches.

**12.204.1.12 emacspeak-websearch-google-with-toolbelt****emacspeak-websearch-google-with-toolbelt** (*query*) [Command]*C-; /**C-x @ h /*

Launch Google search with toolbelt.

(fn QUERY)

**12.204.1.13 emacspeak-websearch-gutenberg**

**emacspeak-websearch-gutenberg** (*type query*) [Command]  
 Perform an Gutenberg search

(fn TYPE QUERY)

**12.204.1.14 emacspeak-websearch-help**

**emacspeak-websearch-help** [Command]  
 Displays key mapping used by Emacspeak Websearch.

**12.204.1.15 emacspeak-websearch-merriam-webster-search**

**emacspeak-websearch-merriam-webster-search** (*query*) [Command]  
 Search the Merriam Webster Dictionary.

(fn QUERY)

**12.204.1.16 emacspeak-websearch-wikipedia-search**

**emacspeak-websearch-wikipedia-search** (*query*) [Command]  
 Search Wikipedia using Google.

(fn QUERY)

**12.204.1.17 emacspeak-websearch-youtube-search**

**emacspeak-websearch-youtube-search** (*query*) [Command]  
 YouTube search.

(fn QUERY)

**12.205 emacspeak-webspace**

WEBSpace == Smart Web Gadgets For The Emacspeak Desktop

**12.205.1 Emacspeak-WebSpace Commands****12.205.1.1 emacspeak-webspace-feed-reader**

**emacspeak-webspace-feed-reader** (&*optional refresh*) [Command]

*C-. R*

*C-' R*

*C-x @ s R*

Display Feed Reader Feed list in a WebSpace buffer.  
 Optional interactive prefix arg forces a refresh.

(fn &optional REFRESH)

**12.205.1.2 emacspeak-webospace-filter****emacspeak-webospace-filter** [Command]

Open headline at point by following its link property and filter for content.

**12.205.1.3 emacspeak-webospace-headlines****emacspeak-webospace-headlines** [Command]

Startup Headlines ticker using RSS/Atom feeds.

**12.205.1.4 emacspeak-webospace-headlines-browse****emacspeak-webospace-headlines-browse** [Command]

Display buffer of browsable headlines.

**12.205.1.5 emacspeak-webospace-headlines-update****emacspeak-webospace-headlines-update** [Command]

Setup news updates.

Updated headlines found in emacspeak-webospace-headlines.

**12.205.1.6 emacspeak-webospace-mode****emacspeak-webospace-mode** [Command]

Major mode for Webspace interaction.

|     |         |
|-----|---------|
| key | binding |
| —   | ———     |

TAB forward-button

ESC Prefix Command

' emacspeak-speak-rest-of-buffer

. emacspeak-webospace-filter

/ search-forward

&lt; beginning-of-buffer

&gt; end-of-buffer

b backward-button

f forward-button

n forward-button

p backward-button

q bury-buffer

y emacspeak-webospace-yank-link

<backtab> backward-button

C-M-i backward-button

In addition to any hooks its parent mode 'special-mode' might have run, this mode runs the hook 'emacspeak-webospace-mode-hook', as the final or penultimate step during initialization.

**12.205.1.7 emacspeak-webspace-open****emacspeak-webspace-open** [Command]

Open headline at point by following its link property.

**12.205.1.8 emacspeak-webspace-yank-link****emacspeak-webspace-yank-link** [Command]

Yank link under point into kill ring.

**12.205.2 emacspeak-webspace Options****User Option** *emacspeak-webspace-feeds* [Variable]

Feeds to use in Headline Ticker.

**12.206 emacspeak-widget**

This module implements the necessary extensions to provide talking widgets.

**12.206.1 Emacspeak-Widget Commands****12.206.1.1 emacspeak-widget-browse-widget-interactively****emacspeak-widget-browse-widget-interactively** [Command]

Allows you to browse a widget

**12.206.1.2 emacspeak-widget-help****emacspeak-widget-help** [Command]

Speak help for widget under point.

**12.206.1.3 emacspeak-widget-summarize-parent****emacspeak-widget-summarize-parent** [Command]

Summarize parent of widget at point.

**12.206.1.4 emacspeak-widget-summarize-widget-under-point****emacspeak-widget-summarize-widget-under-point (&optional level)** [Command]

Summarize a widget if any under point.

Optional interactive prefix specifies how many levels to go up from current widget before summarizing.

(fn &amp;optional LEVEL)

**12.206.1.5 emacspeak-widget-update-from-minibuffer****emacspeak-widget-update-from-minibuffer (pos)** [Command]

Sets widget at 'pos' by invoking its prompter.

(fn POS)

## 12.207 emacspeak-windmove

Package windmove (bundled with Emacs 21) provides commands for navigating to windows based on relative position.

## 12.208 emacspeak-wining

window configurations in emacs are very useful you can display the same file in different windows, and have different portions of the file displayed. winring allows you to manage window configurations, and this module speech-enables it.

## 12.209 emacspeak-wizards

Contains various wizards for the Emacspeak desktop.

### 12.209.1 Emacspeak-Wizards Commands

#### 12.209.1.1 emacspeak-copy-current-file

emacspeak-copy-current-file [Command]

*C-e M-c*

*<fn> M-c*

Copy file visited in current buffer to new location.  
Prompts for the new location and preserves modification time when copying. If location is a directory, the file is copied to that directory under its current name ; if location names a file in an existing directory, the specified name is used. Asks for confirmation if the copy will result in an existing file being overwritten.

#### 12.209.1.2 emacspeak-customize

emacspeak-customize [Command]

*C-e C*

*<fn> C*

Customize Emacspeak.

#### 12.209.1.3 emacspeak-describe-emacspeak

emacspeak-describe-emacspeak [Command]

*C-h C-e*

*<f1> C-e*

*<help> C-e*

Give a brief overview of emacspeak.

**12.209.1.4 emacspeak-kill-buffer-quietly****emacspeak-kill-buffer-quietly** [Command]*C-e C-t Q**<fn> C-t Q*

Kill current buffer without confirmation.

**12.209.1.5 emacspeak-learn-emacs-mode****emacspeak-learn-emacs-mode** [Command]*C-e <f1>**C-h C-l**<fn> <f1>**<f1> C-l**<help> C-l*

Helps you learn the keys. You can press keys and hear what they do.

To leave, press C-g.

**12.209.1.6 emacspeak-link-current-file****emacspeak-link-current-file** [Command]*C-e M-l**<fn> M-l*

Link (hard link) file visited in current buffer to new location.

Prompts for the new location and preserves modification time

when linking. If location is a directory, the file is copied

to that directory under its current name ; if location names

a file in an existing directory, the specified name is

used. Signals an error if target already exists.

**12.209.1.7 emacspeak-next-frame-or-buffer****emacspeak-next-frame-or-buffer (&optional *frame*)** [Command]*C-<right>*

Move to next buffer.

With optional interactive prefix arg 'frame', move to next frame instead.

(fn &amp;optional FRAME)

**12.209.1.8 emacspeak-previous-frame-or-buffer****emacspeak-previous-frame-or-buffer (&optional *frame*)** [Command]*C-<left>*

Move to previous buffer.

With optional interactive prefix arg 'frame', move to previous frame instead.

(fn &amp;optional FRAME)



**12.209.1.9 emacspeak-select-this-buffer-next-display****emacspeak-select-this-buffer-next-display** [Command]*C-e C-<right>**<fn> C-<right>*

Select this buffer as displayed in a ‘next’ frame.

See documentation for command

‘emacspeak-select-this-buffer-other-window-display’ for the meaning of ‘next’.

**12.209.1.10 emacspeak-select-this-buffer-other-window-display****emacspeak-select-this-buffer-other-window-display** [Command]**(&optional arg)**

Switch to this buffer as displayed in a different frame.

Emacs allows you to display the same buffer in multiple windows or frames. These different windows can display different portions of the buffer. This is equivalent to leaving a book open at multiple places at once.

(fn &amp;optional ARG)

**12.209.1.11 emacspeak-select-this-buffer-previous-display****emacspeak-select-this-buffer-previous-display** [Command]*C-e C-<left>**<fn> C-<left>*

Select this buffer as displayed in a ‘previous’ window.

See documentation for command

‘emacspeak-select-this-buffer-other-window-display’ for the meaning of ‘previous’.

**12.209.1.12 emacspeak-show-property-at-point****emacspeak-show-property-at-point (&optional property)** [Command]*C-e M-p**<fn> M-p*

Show value of PROPERTY at point.

If optional arg property is not supplied, read it interactively.

(fn &amp;optional PROPERTY)

**12.209.1.13 emacspeak-show-style-at-point****emacspeak-show-style-at-point** [Command]*C-e M-v**<fn> M-v*

Show value of property personality (and possibly face) at point.

**12.209.1.14 emacspeak-skip-blank-lines-backward****emacspeak-skip-blank-lines-backward** [Command]*S-**<up>***

Move backward across blank lines, then speak line.

**12.209.1.15 emacspeak-skip-blank-lines-forward****emacspeak-skip-blank-lines-forward** [Command]*S-**<down>***

Move forward across blank lines, then speak line.

**12.209.1.16 emacspeak-speak-hostname****emacspeak-speak-hostname** [Command]*C-e M-h**<fn> M-h*

Speak host name.

**12.209.1.17 emacspeak-speak-popup-messages****emacspeak-speak-popup-messages** [Command]*C-h M**<f1> M**<help> M*

Pop up Messages and switch to it.

**12.209.1.18 emacspeak-speak-show-active-network-interfaces****emacspeak-speak-show-active-network-interfaces (&optional  
address)** [Command]*C-e I**<fn> I*

Shows all active network interfaces in the echo area.

With interactive prefix argument ADDRESS it prompts for a specific interface and shows its address. The address is also copied to the kill ring for convenient yanking.

(fn &amp;optional ADDRESS)

**12.209.1.19 emacspeak-speak-telephone-directory****emacspeak-speak-telephone-directory** (&**optional** *edit*) [Command]*C-e x t*<*fn*> *x t*

Lookup and display a phone number.

With prefix arg, opens the phone book for editing.

(fn &amp;optional EDIT)

**12.209.1.20 emacspeak-speak-this-buffer-next-display****emacspeak-speak-this-buffer-next-display** [Command]*C-e <right>*<*fn*> <*right*>

Speak this buffer as displayed in a ‘previous’ window.

See documentation for command

‘emacspeak-speak-this-buffer-other-window-display’ for the meaning of ‘next’.

**12.209.1.21 emacspeak-speak-this-buffer-other-window-display****emacspeak-speak-this-buffer-other-window-display** (*window*) [Command]*C-e /*<*fn*> /

Speak this buffer as displayed in a different frame or window. Emacs allows you to display the same buffer in multiple windows or frames. These different windows can display different portions of the buffer. This is equivalent to leaving a book open at places at once. This command allows you to listen to the places where you have left the book open.

(fn WINDOW)

**12.209.1.22 emacspeak-speak-this-buffer-previous-display****emacspeak-speak-this-buffer-previous-display** [Command]*C-e <left>*<*fn*> <*left*>

Speak this buffer as displayed in a ‘previous’ window.

See documentation for command

‘emacspeak-speak-this-buffer-other-window-display’ for the meaning of ‘previous’.

**12.209.1.23 emacspeak-symlink-current-file****emacspeak-symlink-current-file**

[Command]

*C-e M-s**<fn> M-s*

Link (symbolic link) file visited in current buffer to new location. Prompts for the new location and preserves modification time when linking. If location is a directory, the file is copied to that directory under its current name ; if location names a file in an existing directory, the specified name is used. Signals an error if target already exists.

**12.209.1.24 emacspeak-view-emacspeak-news****emacspeak-view-emacspeak-news**

[Command]

*C-e N**<fn> N*

Display emacspeak News for a given version.

**12.209.1.25 emacspeak-view-emacspeak-tips****emacspeak-view-emacspeak-tips**

[Command]

*C-e T**<fn> T*

Browse Emacspeak productivity tips.

**12.209.1.26 emacspeak-wizards-alpha-vantage-quotes****emacspeak-wizards-alpha-vantage-quotes** (*ticker &optional custom*)

[Command]

*C-e x a**<fn> x a*

Retrieve stock quote data from Alpha Vantage. Prompts for ‘ticker’ — a stock symbol. Optional interactive prefix arg ‘custom’ provides access to the various functions provided by alpha-vantage.

(fn TICKER &optional CUSTOM)

**12.209.1.27 emacspeak-wizards-cleanup-shell-path****emacspeak-wizards-cleanup-shell-path**

[Command]

Cleans up duplicates in shell path env variable.

**12.209.1.28 emacspeak-wizards-color-at-point**

**emacspeak-wizards-color-at-point** [Command]

*C-h* ,

*<f1>* ,

*<help>* ,

Echo foreground/background color at point.

**12.209.1.29 emacspeak-wizards-color-diff-at-point**

**emacspeak-wizards-color-diff-at-point** (&optional *set*) [Command]

*C-h \*

*<f1> \*

*<help> \*

Speak difference between background and foreground color at point.

With interactive prefix arg, set foreground and background color first.

(fn &optional SET)

**12.209.1.30 emacspeak-wizards-color-wheel**

**emacspeak-wizards-color-wheel** (*start*) [Command]

*C-e x c*

*<fn> x c*

Manipulate a simple color wheel and display the name and shade of the resulting color. Prompts for a color from which to start exploration.

Keyboard Commands During Interaction:

Up/Down: Increase/Decrement along current axis using specified step-size.

=: Set value on current axis to number read from minibuffer.

Left/Right: Switch color axis along which to move.

b/f: Quit wheel after setting background/foreground color to current value.

n: Read color name from minibuffer.

c: Complement current color.

s: Set stepsize to number read from minibuffer.

q: Quit color wheel, after copying current hex value to kill-ring.

(fn START)

**12.209.1.31 emacspeak-wizards-colors**

**emacspeak-wizards-colors** [Command]

*C-e x C*

`<fn> x C`

Display list of colors and setup a callback to activate color under point as either the foreground or background color.

### 12.209.1.32 emacspeak-wizards-comma-at-end-of-word

`emacspeak-wizards-comma-at-end-of-word` [Command]

Move to the end of current word and add a comma.

### 12.209.1.33 emacspeak-wizards-count-slides-in-region

`emacspeak-wizards-count-slides-in-region` (*start end*) [Command]

Count slides starting from point.

(fn START END)

### 12.209.1.34 emacspeak-wizards-customize-saved

`emacspeak-wizards-customize-saved` (*pattern*) [Command]

`C-h C-s`

`<f1> C-s`

`<help> C-s`

Customize saved options matching ‘pattern’. This command enables updating custom settings for a specific package or group of packages.

(fn PATTERN)

### 12.209.1.35 emacspeak-wizards-cycle-to-next-buffer

`emacspeak-wizards-cycle-to-next-buffer` [Command]

`C-z n`

`C-; n`

`C-; C-.`

`C-x @ h n`

`C-x @ h C-.`

Cycles to next buffer having same mode.

### 12.209.1.36 emacspeak-wizards-cycle-to-previous-buffer

`emacspeak-wizards-cycle-to-previous-buffer` [Command]

`C-z p`

`C-; p`

`C-; C-,`

`C-x @ h p`

`C-x @ h C-,`

Cycles to previous buffer having same mode.

**12.209.1.37 emacspeak-wizards-describe-voice****emacspeak-wizards-describe-voice** (*personality*) [Command]*C-h C-v**<f1> C-v**<help> C-v*

Describe voice — analogous to C-h /.

When called interactively, ‘personality’ defaults to first personality at point.

(fn PERSONALITY)

**12.209.1.38 emacspeak-wizards-end-of-word****emacspeak-wizards-end-of-word** (*arg*) [Command]

move to end of word

(fn ARG)

**12.209.1.39 emacspeak-wizards-enumerate-matching-commands****emacspeak-wizards-enumerate-matching-commands** (*pattern*) [Command]

Return list of commands whose names match pattern.

(fn PATTERN)

**12.209.1.40 emacspeak-wizards-enumerate-matching-faces****emacspeak-wizards-enumerate-matching-faces** (*pattern*) [Command]

Enumerate faces matching pattern.

(fn PATTERN)

**12.209.1.41 emacspeak-wizards-enumerate-obsolete-faces****emacspeak-wizards-enumerate-obsolete-faces** [Command]

utility function to enumerate old, obsolete maps that we have still mapped to voices.

**12.209.1.42 emacspeak-wizards-enumerate-uncovered-commands****emacspeak-wizards-enumerate-uncovered-commands** (*pattern* **&optional** *bound-only*) [Command]

Enumerate unadvised commands matching pattern.

Optional interactive prefix arg ‘bound-only’

filters out commands that dont have an active key-binding.

(fn PATTERN &amp;optional BOUND-ONLY)

**12.209.1.43 emacspeak-wizards-enumerate-unmapped-faces**

`emacspeak-wizards-enumerate-unmapped-faces` (*&optional pattern*) [Command]

Enumerate unmapped faces matching pattern.

(fn *&optional* PATTERN)

**12.209.1.44 emacspeak-wizards-espeak-line**

`emacspeak-wizards-espeak-line` [Command]

Speak line using espeak polyglot wizard.

**12.209.1.45 emacspeak-wizards-espeak-region**

`emacspeak-wizards-espeak-region` (*start end*) [Command]

Speak region using ESpeak polyglot wizard.

(fn START END)

**12.209.1.46 emacspeak-wizards-espeak-string**

`emacspeak-wizards-espeak-string` (*string*) [Command]

Speak string in lang via ESpeak.

Lang is obtained from property ‘lang’ on string, or via an interactive prompt.

(fn STRING)

**12.209.1.47 emacspeak-wizards-eww-buffer-list**

`emacspeak-wizards-eww-buffer-list` [Command]

*C-z e*

Display list of EWW buffers.

**12.209.1.48 emacspeak-wizards-exec-path-from-shell**

`emacspeak-wizards-exec-path-from-shell` [Command]

Update exec-path from shell path.

**12.209.1.49 emacspeak-wizards-execute-asynchronously**

`emacspeak-wizards-execute-asynchronously` (*key*) [Command]

*C-. a*

*C-' a*

*C-x @ s a*

Read key-sequence, then execute its command on a new thread.

(fn KEY)



**12.209.1.50 emacspeak-wizards-find-file-as-root****emacspeak-wizards-find-file-as-root** (*file*) [Command]*C-; r**C-x @ h r*

Automatically edit file with root-privileges (using tramp/sudo), if the file is not writable by user.

(fn FILE)

**12.209.1.51 emacspeak-wizards-find-longest-line-in-region****emacspeak-wizards-find-longest-line-in-region** (*start end*) [Command]*C-e x =*<*fn*> *x =*

Find longest line in region and move to it.

(fn START END)

**12.209.1.52 emacspeak-wizards-find-longest-paragraph-in-region****emacspeak-wizards-find-longest-paragraph-in-region** (*start end*) [Command]

Find longest paragraph in region, and move to it.

(fn START END)

**12.209.1.53 emacspeak-wizards-find-shortest-line-in-region****emacspeak-wizards-find-shortest-line-in-region** (*start end*) [Command]

Find shortest line in region.

Moves to the shortest line when called interactively.

(fn START END)

**12.209.1.54 emacspeak-wizards-finder-find****emacspeak-wizards-finder-find** (*directory*) [Command]

Run find-dired on specified switches after prompting for the directory to where find is to be launched.

(fn DIRECTORY)

**12.209.1.55 emacspeak-wizards-finder-mode****emacspeak-wizards-finder-mode** [Command]

Emacspeak Finder

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘emacspeak-wizards-finder-mode-hook’, as the final or penultimate step during initialization.

|     |         |
|-----|---------|
| key | binding |
| —   | —       |

### 12.209.1.56 emacspeak-wizards-frame-colors

**emacspeak-wizards-frame-colors** [Command]  
Display frame’s foreground/background color setting.

### 12.209.1.57 emacspeak-wizards-free-geo-ip

**emacspeak-wizards-free-geo-ip** (&optional *reverse-geocode*) [Command]  
Return list consisting of city and region\_name.  
Optional interactive prefix arg reverse-geocodes using Google Maps.  
  
(fn &optional REVERSE-GEOCODE)

### 12.209.1.58 emacspeak-wizards-gen-fn-decl

**emacspeak-wizards-gen-fn-decl** (*f* &optional *ext*) [Command]  
Generate declare-function call for function ‘f’.  
Optional interactive prefix arg *ext* says this comes from an external package.  
  
(fn F &optional EXT)

### 12.209.1.59 emacspeak-wizards-generate-finder

**emacspeak-wizards-generate-finder** [Command]  
Generate a widget-enabled finder wizard.

### 12.209.1.60 emacspeak-wizards-google-headlines

**emacspeak-wizards-google-headlines** [Command]  
*C-. C-n*  
*C-' C-n*  
*C-x @ s C-n*  
Display just the headlines from Google News.

### 12.209.1.61 emacspeak-wizards-google-news

**emacspeak-wizards-google-news** [Command]  
*C-. n*

*C- ' n*

*C-x @ s n*

Clean up news.google.com.

### 12.209.1.62 emacspeak-wizards-how-many-matches

**emacspeak-wizards-how-many-matches** (*start end &optional prefix*) [Command]

*C-e x h*

*<fn> x h*

If you define a file local variable called ‘emacspeak-occur-pattern’ that holds a regular expression that matches lines of interest, you can use this command to run ‘how-many’ to count matching header lines.

With interactive prefix arg, prompts for and remembers the file local pattern.

(fn START END &optional PREFIX)

### 12.209.1.63 emacspeak-wizards-iex-show-financials

**emacspeak-wizards-iex-show-financials** (*symbol &optional refresh*) [Command]

Show financials for specified ticker.

Checks cache, then makes API call if needed.

Optional interactive prefix arg refreshes cache.

(fn SYMBOL &optional REFRESH)

### 12.209.1.64 emacspeak-wizards-iex-show-metadata

**emacspeak-wizards-iex-show-metadata** [Command]  
Account metadata.

### 12.209.1.65 emacspeak-wizards-iex-show-news

**emacspeak-wizards-iex-show-news** (*symbol &optional refresh*) [Command]

Show news for specified ticker.

Checks cache, then makes API call if needed.

Optional interactive prefix arg refreshes cache.

(fn SYMBOL &optional REFRESH)

### 12.209.1.66 emacspeak-wizards-iex-show-price

**emacspeak-wizards-iex-show-price** (*symbol*) [Command]

*C-, q*

*C-x @ a q*

Quick Quote: Just stock price from IEXCloud.

(fn SYMBOL)

### 12.209.1.67 emacspeak-wizards-iex-show-quote

**emacspeak-wizards-iex-show-quote** (&optional *refresh*) [Command]

*C-. q*

*C-' q*

*C-x @ s q*

Show portfolio data from cache.

Optional interactive prefix arg forces cache refresh.

The quotes view uses emacspeak's table mode.

In addition, the following keys are available :

F: Show financials for current stock.

N: Show news for current stock.

P: Show live price for current stock.

(fn &optional REFRESH)

### 12.209.1.68 emacspeak-wizards-iex-show-tops

**emacspeak-wizards-iex-show-tops** [Command]

Uses tops/last end-point to show brief portfolio quotes.

### 12.209.1.69 emacspeak-wizards-iex-this-financials

**emacspeak-wizards-iex-this-financials** [Command]

Show financials for symbol in current row

### 12.209.1.70 emacspeak-wizards-iex-this-news

**emacspeak-wizards-iex-this-news** [Command]

Show news for symbol in current row

### 12.209.1.71 emacspeak-wizards-iex-this-price

**emacspeak-wizards-iex-this-price** [Command]

Show price for symbol in current row

### 12.209.1.72 emacspeak-wizards-lacheck-buffer-file

**emacspeak-wizards-lacheck-buffer-file** [Command]

Run Lacheck on current buffer.

**12.209.1.73 emacspeak-wizards-mlb-standings****emacspeak-wizards-mlb-standings** (&optional *raw*) [Command]

Display MLB standings as of today.

Optional interactive prefix arg shows unprocessed results.

(fn &amp;optional RAW)

**12.209.1.74 emacspeak-wizards-move-and-speak****emacspeak-wizards-move-and-speak** (*command count*) [Command]

Speaks a chunk of text bounded by point and a target position.

Target position is specified using a navigation command and a count that specifies how many times to execute that command first. Point is left at the target position. Interactively, command is specified by pressing the key that invokes the command.

(fn COMMAND COUNT)

**12.209.1.75 emacspeak-wizards-nba-standings****emacspeak-wizards-nba-standings** (&optional *raw*) [Command]

Display NBA standings as of today.

Optional interactive prefix arg shows unprocessed results.

(fn &amp;optional RAW)

**12.209.1.76 emacspeak-wizards-next-bullet****emacspeak-wizards-next-bullet** [Command]

Navigate to and speak next ‘bullet’.

**12.209.1.77 emacspeak-wizards-next-interactive-defun****emacspeak-wizards-next-interactive-defun** [Command]

Move point to the next interactive defun

**12.209.1.78 emacspeak-wizards-noaa-weather****emacspeak-wizards-noaa-weather** (&optional *ask*) [Command]*C-; w**C-e x w*<fn> *x w**C-x @ h w*

Display weather using NOAA Weather API.

Data is retrieved only once, subsequent calls switch to previously

displayed results. Kill that buffer or use an interactive prefix arg (C-u) to get new data. Optional second interactive prefix arg (C-u C-u) asks for location address; Default is to display weather for ‘gmaps-my-address’.

(fn &optional ASK)

### 12.209.1.79 emacspeak-wizards-occur-header-lines

**emacspeak-wizards-occur-header-lines** (&optional *prefix*) [Command]

*C-e x o*

*<fn> x o*

If you define a file local variable called ‘emacspeak-occur-pattern’ that holds a regular expression that matches header lines, you can use this command to run ‘occur’ to find matching header lines. With prefix arg, prompts for and sets value of the file local pattern.

(fn &optional PREFIX)

### 12.209.1.80 emacspeak-wizards-pdf-open

**emacspeak-wizards-pdf-open** (*filename* &optional *ask-pwd*) [Command]

*C-, p*

*C-x @ a p*

Open pdf file as text.

Optional interactive prefix arg ask-pwd prompts for password.

(fn FILENAME &optional ASK-PWD)

### 12.209.1.81 emacspeak-wizards-previous-bullet

**emacspeak-wizards-previous-bullet** [Command]

Navigate to and speak previous ‘bullet’.

### 12.209.1.82 emacspeak-wizards-quote

**emacspeak-wizards-quote** (&optional *refresh*) [Command]

*C-e x q*

*<fn> x q*

Top-level dispatch for Stock Market information.

Key : Action

f : Financials

m : Account metadata

n : News

p : Price  
 q : Quotes  
 t : tops/last

(fn &optional REFRESH)

### 12.209.1.83 emacspeak-wizards-remote-frame

**emacspeak-wizards-remote-frame** [Command]

*C-e x f*

*<fn> x f*

Open a frame on a remote Emacs.

Remote workstation is ‘emacspeak-wizards-remote-workstation’.

### 12.209.1.84 emacspeak-wizards-scratch

**emacspeak-wizards-scratch** [Command]

*C-. SPC*

*C-' SPC*

*C-x @ s SPC*

Switch to \*scratch\* buffer, creating it if necessary.

### 12.209.1.85 emacspeak-wizards-set-colors

**emacspeak-wizards-set-colors** [Command]

Prompt for foreground and background colors.

### 12.209.1.86 emacspeak-wizards-shell

**emacspeak-wizards-shell (&optional prefix)** [Command]

Run Emacs ‘shell’ command when not in a shell buffer, or when called with a prefix argument. When called from a shell buffer, switches to ‘next’ shell buffer. When called from outside a shell buffer, find the most ‘appropriate shell’ and switch to it. Once switched, set default directory in that target shell to the directory of the source buffer.

(fn &optional PREFIX)

### 12.209.1.87 emacspeak-wizards-shell-by-key

**emacspeak-wizards-shell-by-key (&optional prefix)** [Command]

*C-e x 9*

*C-e x 8*

*C-e x 7*

*C-e x 6*

```

C-e x 5
C-e x 4
C-e x 3
C-e x 2
C-e x 1
C-e x 0
<fn> x 9
<fn> x 8
<fn> x 7
<fn> x 6
<fn> x 5
<fn> x 4
<fn> x 3
<fn> x 2
<fn> x 1
<fn> x 0

```

Switch to shell buffer by key. This provides a predictable means for switching to a specific shell buffer. When invoked from a non-shell-mode buffer that is a dired-buffer or is visiting a file, invokes ‘cd ’ in the shell to change to the value of ‘default-directory’ — if called with a prefix-arg. When already in a shell buffer, interactive prefix arg ‘prefix’ causes this shell to be re-keyed if appropriate — see M-x emacspeak-wizards-shell-re-key for an explanation of how re-keying works.

(fn &optional PREFIX)

### 12.209.1.88 emacspeak-wizards-shell-command-on-current-file

emacspeak-wizards-shell-command-on-current-file [Command]  
 (command)

```

C-e &
<fn> &

```

Prompts for and runs shell command on current file.

(fn COMMAND)



**12.209.1.89 emacspeak-wizards-shell-directory-reset****emacspeak-wizards-shell-directory-reset** [Command]*C-. .**C-' .**C-e x .**<fn> x .**C-x @ s .*

Set current directory to this shell's initial directory if one was defined.

**12.209.1.90 emacspeak-wizards-shell-directory-set****emacspeak-wizards-shell-directory-set** [Command]

Define current directory as this shell's project directory.

**12.209.1.91 emacspeak-wizards-shell-toggle****emacspeak-wizards-shell-toggle** [Command]*C-e <f11>**C-; C-j**C-. ,**C-' ,**<fn> <f11>**C-e x ,**<fn> x ,**C-x @ h C-j**C-x @ s ,*Switch to `shell` and `cd` to  
directory of the previously current buffer.**12.209.1.92 emacspeak-wizards-show-eval-result****emacspeak-wizards-show-eval-result** (*form*) [Command]*M-ESC :*

Pretty-print and view Lisp evaluation results.

(fn FORM)

**12.209.1.93 emacspeak-wizards-show-face****emacspeak-wizards-show-face** (*face*) [Command]Show properties of `face`.

(fn FACE)

**12.209.1.94 emacspeak-wizards-show-memory-used**

`emacspeak-wizards-show-memory-used` [Command]

Convenience command to view state of memory used in this session so far.

**12.209.1.95 emacspeak-wizards-speak-iso-datetime**

`emacspeak-wizards-speak-iso-datetime` (*iso*) [Command]

Speak ISO date-time.

(fn ISO)

**12.209.1.96 emacspeak-wizards-squeeze-blanks**

`emacspeak-wizards-squeeze-blanks` (*start end*) [Command]

`C-e x |`

`<fn> x |`

Squeeze multiple blank lines.

(fn START END)

**12.209.1.97 emacspeak-wizards-swap-fg-and-bg**

`emacspeak-wizards-swap-fg-and-bg` [Command]

`C-h =`

`<f1> =`

`<help> =`

Swap foreground and background.

**12.209.1.98 emacspeak-wizards-term**

`emacspeak-wizards-term` (*create*) [Command]

`C-; C-a`

`C-x @ h C-a`

Switch to an ansi-term buffer or create one.

With prefix arg, always creates a new terminal.

Otherwise cycles through existing terminals, creating the first term if needed.

(fn CREATE)

**12.209.1.99 emacspeak-wizards-tex-tie-current-word**

`emacspeak-wizards-tex-tie-current-word` (*n*) [Command]

Tie the next *n* words.

(fn N)

**12.209.1.100 emacspeak-wizards-toggle-mm-dd-yyyy-date-pronouncer**

`emacspeak-wizards-toggle-mm-dd-yyyy-date-pronouncer` [Command]  
 Toggle pronunciation of mm-dd-yyyy dates.

**12.209.1.101 emacspeak-wizards-toggle-yyyymmdd-date-pronouncer**

`emacspeak-wizards-toggle-yyyymmdd-date-pronouncer` [Command]  
 Toggle pronunciation of yyyymmdd dates.

**12.209.1.102 emacspeak-wizards-tune-in-radio-browse**

`emacspeak-wizards-tune-in-radio-browse` (*&optional category*) [Command]  
`C-, t`  
`C-x @ a t`  
 Browse Tune-In Radio.  
 Optional interactive prefix arg ‘category’ prompts for a category.  
 (fn *&optional CATEGORY*)

**12.209.1.103 emacspeak-wizards-tune-in-radio-search**

`emacspeak-wizards-tune-in-radio-search` [Command]  
`C-, s`  
`C-x @ a s`  
 Search Tune-In Radio.

**12.209.1.104 emacspeak-wizards-units**

`emacspeak-wizards-units` [Command]  
`C-e x u`  
`<fn> x u`  
 Run units.

**12.209.1.105 emacspeak-wizards-vc-n**

`emacspeak-wizards-vc-n` [Command]  
 Accelerator for VC viewer.

**12.209.1.106 emacspeak-wizards-vc-view-mode**

`emacspeak-wizards-vc-view-mode` [Command]  
 Major mode for interactively viewing virtual console contents.

|     |         |
|-----|---------|
| key | binding |
| —   | ———     |

C-l emacspeak-wizards-vc-viewer-refresh

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘emacspeak-wizards-vc-view-mode-hook’, as the final or penultimate step during initialization.

### 12.209.1.107 emacspeak-wizards-vc-viewer

emacspeak-wizards-vc-viewer (*console*) [Command]

C-e x v

<fn> x v

View contents of virtual console.

(fn CONSOLE)

### 12.209.1.108 emacspeak-wizards-vc-viewer-refresh

emacspeak-wizards-vc-viewer-refresh [Command]

Refresh view of VC we’re viewing.

### 12.209.1.109 emacspeak-wizards-view-buffers-filtered-by-m-player-mode

emacspeak-wizards-view-buffers-filtered-by-m-player-mode [Command]

C-; :

C-x @ h :

Buffer menu filtered by m-player mode.

### 12.209.1.110 emacspeak-wizards-view-buffers-filtered-by-this-mode

emacspeak-wizards-view-buffers-filtered-by-this-mode [Command]

C-z b

C-. m

C-' m

C-, c

C-x @ a c

C-x @ s m

Buffer menu filtered by mode of current-buffer.

## 12.209.2 emacspeak-wizards Options

User Option *emacspeak-iex-api-key* [Variable]

Web API key for IEX Finance access. See IEX Login Console at <https://iexcloud.io/cloud-login/> for how to get an API key.

**User Option** *emacspeak-speak-telephone-directory* [Variable]  
 File holding telephone directory. This is just a text file, and we use grep to search it.

**User Option** *emacspeak-wizards-alpha-vantage-api-key* [Variable]  
 API Key used to retrieve stock data from alpha-vantage. Visit  
<https://www.alphavantage.co/support/#api-key> to get your key.

**User Option** *emacspeak-wizards-find-switches-widget* [Variable]  
 Widget to get find switch.

**User Option** *emacspeak-wizards-pdf-to-text-options* [Variable]  
 options to Command for running pdftotext.

**User Option** *emacspeak-wizards-personal-portfolio* [Variable]  
 Set this to the stock tickers you want to check. Default is GAFA. Tickers are separated  
 by white-space and are automatically sorted in lexical order with duplicates removed  
 when saving.

**User Option** *emacspeak-wizards-project-shells* [Variable]  
 List of shell-name/initial-directory pairs.

**User Option** *emacspeak-wizards-remote-workstation* [Variable]  
 Name of remote workstation.

## 12.210 emacspeak-woman

WOMAN == Man pages implemented in Emacs Lisp

## 12.211 emacspeak-xkcd

XKCD == XKCD In Emacs View XKCD comics in Emacs. Speech enables package xkcd  
 Augments it by displaying the alt text and the transcript.

### 12.211.1 Emacspeak-Xkcd Commands

#### 12.211.1.1 emacspeak-xkcd-open-explanation-browser

**emacspeak-xkcd-open-explanation-browser** [Command]  
 Open explanation of current xkcd in default browser

## 12.212 emacspeak-xref

XREF == Cross-references in source code. This is part of Emacs 25. This module speech-  
 enables xref

## 12.213 emacspeak-xslt

libxml and libxsl are XML libraries for GNOME. xsltproc is a xslt processor using libxsl  
 this module defines routines for applying xsl transformations using xsltproc

### 12.213.1 Emacspeak-Xslt Commands

**12.213.1.1 emacspeak-xslt-view**

**emacspeak-xslt-view** (*style url*) [Command]  
 Browse URL with specified XSL style.

(fn STYLE URL)

**12.213.1.2 emacspeak-xslt-view-file**

**emacspeak-xslt-view-file** (*style file*) [Command]  
 Transform ‘file’ using ‘style’ and preview via browse-url.

(fn STYLE FILE)

**12.213.1.3 emacspeak-xslt-view-region**

**emacspeak-xslt-view-region** (*style start end &optional  
unescape-charent*) [Command]  
 Browse XML region with specified XSL style.

(fn STYLE START END &optional UNESCAPE-CHARENT)

**12.213.1.4 emacspeak-xslt-view-xml**

**emacspeak-xslt-view-xml** (*style url &optional unescape-charent*) [Command]  
 Browse XML URL with specified XSL style.

(fn STYLE URL &optional UNESCAPE-CHARENT)

**12.214 emacspeak-yaml**

YAML == Yet Another Markup Language This module speech-enables yaml-mode.

**12.215 emacspeak-yasnippet**

YASNIPPET == Template based editing using snippets.

**12.216 espeak-voices**

This module defines the various voices used in voice-lock mode by the ESpeak TTS engine.

**12.216.1 Espeak-Voices Commands****12.216.1.1 espeak**

**espeak** [Command]

*C-e d C-e*

*<fn> d C-e*

Start ESpeak.

## 12.216.2 espeak-voices Options

User Option *espeak-default-speech-rate* [Variable]  
 Default speech rate for eSpeak.

## 12.217 extra-muggles

MUGGLES == Emacspeak spells for power-users. These are extra hydras that I dont use very often, And are being moved here from emacspeak-muggles to save time at startup.

This module implements no new functionality — contrast with emacspeak-wizards. Instead, it uses package hydra to provide convenience key-bindings that access existing Emacspeak functionality.

### 12.217.1 Extra-Muggles Commands

#### 12.217.1.1 emacspeak-muggles-emacspeak-m-player-mode-map-cmd

emacspeak-muggles-emacspeak-m-player-mode-map-cmd [Command]  
*s-m*  
 Temporarily use keymap emacspeak-m-player-mode-map

#### 12.217.1.2 emacspeak-muggles-info-summary/body

emacspeak-muggles-info-summary/body [Command]  
 Call the body in the "emacspeak-muggles-info-summary" hydra.

The heads for the associated hydra are:

```
"j": 'Info-forward-node',
"[": 'Info-backward-node',
"n": 'Info-next',
"p": 'Info-prev',
"s": 'Info-search',
"S": 'Info-search-case-sensitively',
"l": 'Info-history-back',
"r": 'Info-history-forward',
"H": 'Info-history',
"t": 'Info-top-node',
"<": 'Info-top-node',
">": 'Info-final-node',
"u": 'Info-up',
"^": 'Info-up',
"m": 'Info-menu',
"g": 'Info-goto-node',
"b": 'beginning-of-buffer',
"e": 'end-of-buffer',
"f": 'Info-follow-reference',
```

```

"i": 'Info-index',
",": 'Info-index-next',
"I": 'Info-virtual-index',
"T": 'Info-toc',
"d": 'Info-directory',
"c": 'Info-copy-current-node-name',
"C": 'clone-buffer',
"a": 'info-apropos',
"1": 'Info-nth-menu-item',
"2": 'Info-nth-menu-item',
"3": 'Info-nth-menu-item',
"4": 'Info-nth-menu-item',
"5": 'Info-nth-menu-item',
"6": 'Info-nth-menu-item',
"7": 'Info-nth-menu-item',
"8": 'Info-nth-menu-item',
"9": 'Info-nth-menu-item',
"?": 'Info-summary',
"h": 'Info-help',
"q": 'quit-window',
"C-g": 'nil'

```

The body can be accessed via 'emacspeak-muggles-info-summary/body'.

### 12.217.1.3 emacspeak-muggles-m-player/body

emacspeak-muggles-m-player/body

[Command]

*s-*;

Call the body in the "emacspeak-muggles-m-player" hydra.

The heads for the associated hydra are:

```

";": 'emacspeak-m-player',
"+": 'emacspeak-m-player-volume-up',
",": 'emacspeak-m-player-backward-10s',
"%": 'emacspeak-m-player-display-percent',
"-": 'emacspeak-m-player-volume-down',
".": 'emacspeak-m-player-forward-10s',
"<": 'emacspeak-m-player-backward-1min',
"<down>": 'emacspeak-m-player-forward-1min',
"<end>": 'emacspeak-m-player-end-of-track',
"<home>": 'emacspeak-m-player-beginning-of-track',
"<left>": 'emacspeak-m-player-backward-10s',
"<next>": 'emacspeak-m-player-forward-10min',
"<prior>": 'emacspeak-m-player-backward-10min',
"<right>": 'emacspeak-m-player-forward-10s',
"<up>": 'emacspeak-m-player-backward-1min',

```



```

"=: 'emacspeak-m-player-volume-up',
">": 'emacspeak-m-player-forward-1min',
"?": 'emacspeak-m-player-display-position',
"C": 'emacspeak-m-player-clear-filters',
"C-m": 'emacspeak-m-player-load',
"DEL": 'emacspeak-m-player-reset-speed',
"M-l": 'emacspeak-m-player-load-playlist',
"O": 'emacspeak-m-player-reset-options',
"P": 'emacspeak-m-player-apply-reverb-preset',
"Q": 'emacspeak-m-player-quit',
"R": 'emacspeak-m-player-edit-reverb',
"S": 'emacspeak-amark-save',
"SPC": 'emacspeak-m-player-pause',
"[": 'emacspeak-m-player-slower',
"]": 'emacspeak-m-player-faster',
"a": 'emacspeak-m-player-amark-add',
"b": 'emacspeak-m-player-balance',
"c": 'emacspeak-m-player-slave-command',
"d": 'emacspeak-m-player-delete-filter',
"e": 'emacspeak-m-player-add-equalizer',
"f": 'emacspeak-m-player-add-filter',
"g": 'emacspeak-m-player-seek-absolute',
"j": 'emacspeak-m-player-amark-jump',
"l": 'emacspeak-m-player-get-length',
"m": 'emacspeak-m-player-mode-line',
"n": 'emacspeak-m-player-next-track',
"o": 'emacspeak-m-player-customize-options',
"p": 'emacspeak-m-player-previous-track',
"q": 'bury-buffer',
"r": 'emacspeak-m-player-seek-relative',
"s": 'emacspeak-m-player-scale-speed',
"t": 'emacspeak-m-player-play-tracks-jump',
"u": 'emacspeak-m-player-url',
"v": 'emacspeak-m-player-volume-change',
"(": 'emacspeak-m-player-left-channel',
")": 'emacspeak-m-player-right-channel',
"{": 'emacspeak-m-player-half-speed',
"}": 'emacspeak-m-player-double-speed'

```

The body can be accessed via 'emacspeak-muggles-m-player/body'.

#### 12.217.1.4 emacspeak-muggles-outliner/body

emacspeak-muggles-outliner/body

[Command]

C-. o

C-' o

**C-x @ s o**

Call the body in the "emacspeak-muggles-outliner" hydra.

The heads for the associated hydra are:

```
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-outliner")',
"q": 'outline-hide-sublevels',
"t": 'outline-hide-body',
"o": 'outline-hide-other',
"c": 'outline-hide-entry',
"l": 'outline-hide-leaves',
"d": 'outline-hide-subtree',
"a": 'outline-show-all',
"e": 'outline-show-entry',
"i": 'outline-show-children',
"k": 'outline-show-branches',
"s": 'outline-show-subtree',
"u": 'outline-up-heading',
"n": 'outline-next-visible-heading',
"p": 'outline-previous-visible-heading',
"f": 'outline-forward-same-level',
"b": 'outline-backward-same-level',
"z": 'nil'
```

The body can be accessed via 'emacspeak-muggles-outliner/body'.

### 12.217.1.5 emacspeak-muggles-pianobar-key-map-cmd

**emacspeak-muggles-pianobar-key-map-cmd**

[Command]

**s-'**

Temporarily use keymap pianobar-key-map

### 12.217.1.6 emacspeak-muggles-smartparens/body

**emacspeak-muggles-smartparens/body**

[Command]

**C-c ,**

Call the body in the "emacspeak-muggles-smartparens" hydra.

The heads for the associated hydra are:

```
"'": '(lambda (-) (interactive "P") (sp-wrap-with-pair "''))',
"(": '(lambda (-) (interactive "P") (sp-wrap-with-pair "("))',
"<down>": 'sp-splice-sexp-killing-forward',
"<left>": 'sp-forward-barf-sexp',
"<right>": 'sp-forward-slush-sexp',
"<up>": 'sp-splice-sexp-killing-backward',
"?": '(emacspeak-hydra-self-help "emacspeak-muggles-smartparens")',
```

```

"C-<left>": 'sp-backward-barf-sexp',
"C-<right>": 'sp-backward-slurp-sexp',
"R": 'sp-splice-sexp',
""": '(lambda (-) (interactive "P") (sp-wrap-with-pair "\""))',
"a": 'beginning-of-defun',
"b": 'sp-backward-sexp',
"c": 'sp-convolute-sexp',
"d": 'sp-down-sexp',
"e": 'end-of-defun',
"f": 'sp-forward-sexp',
"i": 'sp-indent-defun',
"j": 'sp-join-sexp',
"k": 'sp-kill-sexp',
"n": 'sp-next-sexp',
"p": 'sp-previous-sexp',
"r": 'sp-splice-sexp-killing-around',
"s": 'sp-split-sexp',
"t": 'sp-transpose-sexp',
"u": 'sp-backward-up-sexp',
"w": 'sp-copy-sexp',
"{": '(lambda (-) (interactive "P") (sp-wrap-with-pair "{"))'

```

The body can be accessed via 'emacspeak-muggles-smartparens/body'.

### 12.217.1.7 emacspeak-muggles-view/body

emacspeak-muggles-view/body

[Command]

*C-. v*

*C-' v*

*C-x @ s v*

Call the body in the "emacspeak-muggles-view" hydra.

The heads for the associated hydra are:

```

"?": '(emacspeak-hydra-self-help "emacspeak-muggles-view")',
"$": 'set-selective-display',
"%": 'View-goto-percent',
"": 'register-to-point',
"(": 'backward-sexp',
)": 'forward-sexp',
".": 'set-mark-command',
"/": 'View-search-regexp-forward',
"<": 'beginning-of-buffer',
"<return>": 'nil',
"=": 'what-line',
">": 'end-of-buffer',

```

```

"@":  'View-back-to-mark',
"A":  'beginning-of-defun',
"DEL": 'View-scroll-page-backward',
"E":  'end-of-defun',
"J":  '(emacspeak-hide-or-expose-block 'all)',
"SPC": 'View-scroll-page-forward',
"[":  'backward-page',
"\":  'View-search-regexp-backward',
"]":  'forward-page',
"a":  'move-beginning-of-line',
"b":  'backward-word',
"c":  'emacspeak-speak-char',
"d":  'View-scroll-half-page-forward',
"e":  'move-end-of-line',
"f":  'forward-word',
"g":  'goto-line',
"h":  'backward-char',
"i":  'emacspeak-speak-mode-line',
"j":  'next-line',
"k":  'previous-line',
"l":  'forward-char',
"m":  'point-to-register',
"n":  'View-search-last-regexp-forward',
"p":  'View-search-last-regexp-backward',
"q":  'nil',
"r":  'copy-to-register',
"s":  'emacspeak-hydra-toggle-talkative',
"t":  '(recenter 0)',
"u":  'View-scroll-half-page-backward',
"w":  'emacspeak-speak-word',
"x":  'exchange-point-and-mark',
"y":  'kill-ring-save',
"{":  'backward-paragraph',
"}":  'forward-paragraph'

```

The body can be accessed via 'emacspeak-muggles-view/body'.

### 12.217.1.8 emacspeak-origami/body

emacspeak-origami/body

[Command]

C-, /

C-x @ a /

Call the body in the "emacspeak-origami" hydra.

The heads for the associated hydra are:

```

"o": 'origami-open-node',
"c": 'origami-close-node',
"n": 'origami-next-fold',
"p": 'origami-previous-fold',
"f": 'origami-forward-toggle-node',
"a": 'origami-toggle-all-nodes'

```

The body can be accessed via 'emacspeak-origami/body'.

## 12.218 g-utils

Common Code e.g. helper functions. Used by modules like gphoto, gblogger etc.

### 12.218.1 g-utils Options

User Option *g-atom-view-xsl* [Variable]  
XSLT transform to convert Atom feed to HTML.

User Option *g-cookie-jar* [Variable]  
Cookie jar used for Google services. Customize this to live on your local disk.

User Option *g-curl-common-options* [Variable]  
Common options to pass to all Curl invocations.

User Option *g-curl-debug* [Variable]  
Set to T to see Curl stderr output.

User Option *g-xslt-program* [Variable]  
XSLT Processor.

## 12.219 gm-nnir

Makes search GMail more convenient. IMap search operators, GMail search extensions.

### 12.219.1 Gm-Nnir Commands

#### 12.219.1.1 gm-nnir-group-make-gmail-group

*gm-nnir-group-make-gmail-group* (*query*) [Command]  
Use GMail search syntax exclusively.  
See <https://support.google.com/mail/answer/7190?hl=en> for syntax.  
note: nnimap-address etc are available as local vars if needed in these functions.

(fn QUERY)

## 12.220 gmaps

Implements the Google Maps API

### 12.220.1 Gmaps Commands

### 12.220.1.1 gmaps

**gmaps** [Command]

*C-; e*

*C-x @ h e*

Google Maps Interaction.

This function has :around advice: ‘ad-Advice-gmaps’.

(fn)

### 12.220.1.2 gmaps-bicycling-directions

**gmaps-bicycling-directions** (*origin destination*) [Command]

Biking directions from Google Maps.

This function has :around advice: ‘ad-Advice-gmaps-bicycling-directions’.

(fn ORIGIN DESTINATION)

### 12.220.1.3 gmaps-directions

**gmaps-directions** (*origin destination mode*) [Command]

Display directions obtained from Google Maps.

(fn ORIGIN DESTINATION MODE)

### 12.220.1.4 gmaps-driving-directions

**gmaps-driving-directions** (*origin destination*) [Command]

Driving directions from Google Maps.

This function has :around advice: ‘ad-Advice-gmaps-driving-directions’.

(fn ORIGIN DESTINATION)

### 12.220.1.5 gmaps-locations-load

**gmaps-locations-load** [Command]

Load saved GMaps locations.

### 12.220.1.6 gmaps-locations-save

**gmaps-locations-save** [Command]

Save GMaps Locations.

**12.220.1.7 gmaps-mode****gmaps-mode**

[Command]

A Google Maps front-end for the Emacspeak desktop.

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘gmaps-mode-hook’, as the final or penultimate step during initialization.

| key | binding |
|-----|---------|
| —   | ———     |

|   |                            |
|---|----------------------------|
|   | TAB forward-button         |
|   | ESC Prefix Command         |
|   | SPC gmaps-place-details    |
| [ | backward-page              |
| ] | forward-page               |
| b | gmaps-bicycling-directions |
| c | gmaps-set-current-location |
| d | gmaps-driving-directions   |
| f | gmaps-set-current-filter   |
| n | gmaps-places-nearby        |
| r | gmaps-set-current-radius   |
| s | gmaps-places-search        |
| t | gmaps-transit-directions   |
| w | gmaps-walking-directions   |

M-i backward-button

**12.220.1.8 gmaps-place-details****gmaps-place-details**

[Command]

Display details for place at point.  
 Insert reviews if already displaying details.

This function has :around advice: ‘ad-Advice-gmaps-place-details’.

(fn)

**12.220.1.9 gmaps-place-reviews****gmaps-place-reviews**

[Command]

Display reviews for place at point.  
 Place details need to have been expanded first.

**12.220.1.10 gmaps-places-nearby****gmaps-places-nearby** (**&optional** *clear-filter*) [Command]

Find places near current location.

Uses default radius. optional interactive prefix arg clears any active filters.

This function has :around advice: ‘ad-Advice-gmaps-places-nearby’.

(fn &amp;optional CLEAR-FILTER)

**12.220.1.11 gmaps-places-search****gmaps-places-search** (*query* **&optional** *clear-filter*) [Command]

Perform a places search.

Use this only if you dont know the locality of the place you’re looking for.

Optional prefix arg clears any active filters.

This function has :around advice: ‘ad-Advice-gmaps-places-search’.

(fn QUERY &amp;optional CLEAR-FILTER)

**12.220.1.12 gmaps-set-current-filter****gmaps-set-current-filter** (**&optional** *all*) [Command]

Set up filter in current buffer.

Optional interactive prefix arg prompts for all filter fields.

(fn &amp;optional ALL)

**12.220.1.13 gmaps-set-current-location****gmaps-set-current-location** (*address*) [Command]

Set current location.

This function has :around advice: ‘ad-Advice-gmaps-set-current-location’.

(fn ADDRESS)

**12.220.1.14 gmaps-set-current-radius****gmaps-set-current-radius** (*radius*) [Command]

Set current radius

This function has :around advice: ‘ad-Advice-gmaps-set-current-radius’.

(fn RADIUS)



**12.220.1.15 gmaps-transit-directions**

**gmaps-transit-directions** (*origin destination*) [Command]  
 Transit directions from Google Maps.

This function has :around advice: ‘ad-Advice-gmaps-transit-directions’.

(fn ORIGIN DESTINATION)

**12.220.1.16 gmaps-walking-directions**

**gmaps-walking-directions** (*origin destination*) [Command]  
 Walking directions from Google Maps.

This function has :around advice: ‘ad-Advice-gmaps-walking-directions’.

(fn ORIGIN DESTINATION)

**12.220.2 gmaps Options**

**User Option** *gmaps-api-key* [Variable]  
 Maps API key — goto <https://code.google.com/apis/console> to get one.

**User Option** *gmaps-my-address* [Variable]  
 Location address. Setting this updates gmaps-my-location coordinates via geocoding.

**12.221 ladspa**

This module uses tools from the Ladspa SDK to expose Ladspa plugins in a consistent way to elisp. The goal is to make it easy to inspect Ladspa Plugins, And invoke them easily from Ladspa host applications such as MPlayer. See <http://emacspeak.blogspot.com/2015/12/a-ladspa-work-bench-for-emacspeak.html>

**12.221.1 Ladspa Commands****12.221.1.1 ladspa**

**ladspa** (&**optional** *refresh*) [Command]  
 Ladspa workbench.

(fn &optional REFRESH)

**12.221.1.2 ladspa-analyse-plugin-at-point**

**ladspa-analyse-plugin-at-point** [Command]  
 Analyse plugin at point.

**12.221.1.3 ladspa-edit-control**

**ladspa-edit-control** [Command]  
 Edit Ladspa control at point by prompting for control values.

**12.221.1.4 ladspa-instantiate****ladspa-instantiate** [Command]

Instantiate plugin at point by prompting for control values.

**12.221.1.5 ladspa-mode****ladspa-mode** [Command]

A Ladspa workbench for the Emacspeak desktop.

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘ladspa-mode-hook’, as the final or penultimate step during initialization.

| key | binding                          |
|-----|----------------------------------|
| RET | ladspa-instantiate               |
| SPC | ladspa-analyse-plugin-at-point   |
| a   | emacspeak-m-player-add-ladspa    |
| d   | emacspeak-m-player-delete-ladspa |
| e   | ladspa-edit-control              |
| n   | next-line                        |
| p   | previous-line                    |

**12.222 mac-voices**

This module defines the various voices used in voice-lock mode by Mac TTS.

**12.222.1 mac-voices Options****User Option** *mac-default-speech-rate* [Variable]

Default speech rate for mac.

**12.223 outloud-voices**

Interface to outloud server. This module is IBM ViaVoice Outloud specific.

**12.223.1 Outloud-Voices Commands****12.223.1.1 outloud****outloud** (&optional *device*) [Command]

*C-e d C-o*

*<fn> d C-o*

Start Outloud.

(fn &optional DEVICE)

### 12.223.2 outloud-voices Options

User Option *outloud-default-speech-rate* [Variable]  
 Default speech rate.

### 12.224 plain-voices

This module defines the various voices used in voice-lock mode. This module is Plain i.e. suitable for a device for which you haven't yet implemented appropriate voice-locking controls

### 12.225 soundscape

Soundscapes <https://en.wikipedia.org/wiki/Soundscape> define an acoustic environment. Boodler at <http://boodler.org> is a Python-based SoundScape generator. To use this module, first install boodler. Then install the soundscape packages (\*.boop) files available at <http://boodler.org/lib>. Make sure boodler works and produces audio in your environment. finally install the Boodler packages from emacspeak/scapes from the Emacspeak GitHub repository by running `cd emacspeak/scapes; make`

When boodler is set up and all packages installed, copy file `emacspeak/scapes/soundscapes` to `~/.boodler/Collection`. The above file lists all installed SoundScapes. Directory `emacspeak/scapes` also contains additional Boodler Agents and SoundScapes that I have created for use with Emacspeak.

Module `soundscape.el` defines Emacs conveniences for running

#### 12.225.1 Soundscape Commands

##### 12.225.1.1 soundscape

`soundscape` (*scape*) [Command]

`C-. s`

`C-' s`

`C-x @ s s`

Play soundscape.

(fn SCAPE)

##### 12.225.1.2 soundscape-kill

`soundscape-kill` [Command]

Stop all running soundscapes.

##### 12.225.1.3 soundscape-listener

`soundscape-listener` (&optional *restart*) [Command]

Start a Soundscape listener.

Listener is loaded with all Soundscapes defined in 'soundscape-default-theme'.

Optional interactive prefix arg restarts the listener.

(fn &optional RESTART)

#### 12.225.1.4 soundscape-listener-shutdown

**soundscape-listener-shutdown** [Command]  
Shutdown listener.

#### 12.225.1.5 soundscape-remote

**soundscape-remote** (*names*) [Command]  
Activate scapes named ‘names’ — a list of strings.

(fn NAMES)

#### 12.225.1.6 soundscape-restart

**soundscape-restart** (&optional *prompt*) [Command]

*C-. r*

*C-' r*

*C-x @ s r*

Restart Soundscape environment.

With prefix arg ‘prompt’, prompt for a alsa/ladspa device and volume.

The *is* then saved to soundscape-device for future use.

(fn &optional PROMPT)

#### 12.225.1.7 soundscape-stop

**soundscape-stop** (*scape*) [Command]  
Stop running Soundscape.

(fn SCAPE)

#### 12.225.1.8 soundscape-theme

**soundscape-theme** [Command]  
Shows default theme in a special buffer.

#### 12.225.1.9 soundscape-toggle

**soundscape-toggle** [Command]

*C-. t*

*C-' t*

*C-x @ s t*

Toggle automatic SoundScapes.

Run command M-x soundscape-theme to see the default mode->mood mapping.

**12.225.1.10 soundscape-update-mood****soundscape-update-mood** (&optional *prompt-mode*) [Command]*C-. u**C-' u**C-x @ s u*Update mood/scape mapping for current *mode*.

The updated mapping is not persisted.

Optional interactive prefix arg ‘prompt-mode’ prompts for the mode.

(fn &amp;optional PROMPT-MODE)

**12.225.2 soundscape Options****User Option** *soundscape-data* [Variable]  
Soundscape data directory.**User Option** *soundscape-device* [Variable]  
Alsa sound device to use for soundscapes.**User Option** *soundscape-idle-delay* [Variable]  
Number of seconds of idle time before soundscapes are synchronized with current mode.**User Option** *soundscape-manager-options* [Variable]  
User customizable options list passed to boodler. Defaults specify alsa as the output and set master volume**12.226 sox**

This module defines a convenient speech-enabled interface for editing mp3 and wav files using SoX.

Launching M-x sox creates a special interaction buffer that provides single keystroke commands for editing and applying effects to a selected sound file. For adding mp3 support to sox, do

sudo apt-get libsox-fmt-mp3 install

This module provides support for ladspa effects using module ladspa.el. To use ladspa effects with SoX, you need a relatively new build of Sox; The stock SoX that is package for Debian/Ubuntu does not always work. This module can be used independent of Emacspeak.

**12.226.1 Sox Commands****12.226.1.1 sox-add-effect****sox-add-effect** (*name*) [Command]Adds *effect* at the end of the effect list

(fn NAME)

**12.226.1.2 sox-delete-effect-at-point**

**sox-delete-effect-at-point** [Command]  
Delete effect at point.

This function has :around advice: ‘ad-Advice-sox-delete-effect-at-point’.

(fn)

**12.226.1.3 sox-edit-effect-at-point**

**sox-edit-effect-at-point** [Command]  
Edit effect at point.

**12.226.1.4 sox-mode**

**sox-mode** [Command]  
An audio workbench for the Emacspeak desktop.

In addition to any hooks its parent mode ‘special-mode’ might have run, this mode runs the hook ‘sox-mode-hook’, as the final or penultimate step during initialization.

|     |         |
|-----|---------|
| key | binding |
| —   | —       |

**12.226.1.5 sox-open-file**

**sox-open-file** (*snd-file*) [Command]  
Open specified snd-file on the Audio Workbench.

This function has :around advice: ‘ad-Advice-sox-open-file’.

(fn SND-FILE)

**12.226.1.6 sox-play**

**sox-play** [Command]  
Play sound .

**12.226.1.7 sox-refresh**

**sox-refresh** [Command]  
Redraw Audio Workbench.

This function has :around advice: ‘ad-Advice-sox-refresh’.

(fn)

**12.226.1.8 sox-save****sox-save** (*save-file*) [Command]Save context to *file* after prompting.

(fn SAVE-FILE)

**12.226.1.9 sox-set-effect****sox-set-effect** (*name*) [Command]

Set effect.

(fn NAME)

**12.226.1.10 sox-show-timestamp****sox-show-timestamp** [Command]Show timestamp *in* stream.**12.226.1.11 sox-stop****sox-stop** [Command]Stop currently playing *sound* from current context.**12.227 sox-gen**

Provides binaural audio along with pre-defined themes. This module can be used independent of Emacspeak.

**12.227.1 Binaural Beats Using SoX**

A binaural beat is an auditory illusion perceived when two different pure-tone sine waves, both with frequencies lower than 1500 Hz, with less than a 40 Hz difference between them, are presented to a listener dichotically (one through each ear). For example, if a 530 Hz pure tone is presented to a subject's right ear, while a 520 Hz pure tone is presented to the subject's left ear, the listener will perceive the auditory illusion of a third tone, in addition to the two pure-tones presented to each ear. The third sound is called a binaural beat, and in this example would have a perceived pitch correlating to a frequency of 10 Hz, that being the difference between the 530 Hz and 520 Hz pure tones presented to each ear. For more details, see [https://en.wikipedia.org/wiki/Binaural\\_beats](https://en.wikipedia.org/wiki/Binaural_beats).

This module implements a set of user-facing commands for generating binaural beats. The commands are organized from high-level commands that play predefined binaural beats to lower-level commands that can be used to create new effect sequences.

All binaural beat sequences are played with a relatively low gain — they are designed to be heard in the background and when effective blend fully into the background. You can increase the overall volume of all binaural beat sequences by customizing

**User Option** *sox-binaural-gain-offset* to a positive value [Variable]

— default is 0.

### 12.227.1.1 High-Level Commands For Pre-Defined Binaural Beats

These commands can be called directly to play one of the predefined binaural beats.

- **sox-rev-up**: A set of binaural beats designed for use at the start of the day. Transitions from *Dream* -> *Think* -> *Act* -> *Focus*.
- **sox-wind-down**: A set of binaural beats for winding down at the end of the day. This can be thought of as the reverse of **sox-rev-up** and the sequence transitions from *Act* -> *Think* -> *Dream* -> *Sleep*.
- **sox-turn-down**: Designed for falling asleep. This sequence starts with a short period of *Dream* before moving to *Sleep*.
- **sox-relax**: A variant of the previous sequence, **sox-relax** spends equal time in *Dream* and *Sleep*.
- **sox-binaural**: Provide a completion-based front-end to playing any one of the predefined binaural effects (*Delta*, *Theta*, *Alpha*, *Beta*, or *Gamma*). The previously defined sequences are built up using these effects.
- **sox-beats-binaural**: Plays a collection of binaural beats, prompting for carrier and beat frequencies for each tone. The predefined sequences listed earlier were created after first generating experimental beat-sequences using this command.
- **sox-slide-binaural**: Prompts for two binaural effects (see above) and generates a binaural beat that *slides* from the first effect to the second over a specified duration.
- **sox-chakras**: Pick amongst one of a predefined set of sequences designed for *Chakra* meditation.
- **sox-tone-binaural**: Generate a simple binaural beat with a single carrier frequency.
- **sox-tone-slide-binaural**: Generate a tone that slides from one binaural beat to another.

## 12.227.2 Sox-Gen Commands

### 12.227.2.1 sox-beats-binaural

**sox-beats-binaural** (*length beat-spec-list gain*) [Command]

Play binaural audio with beat-spec specifying the various tones.

Param ‘beat-spec-list’ is a list of ‘(carrier beat) tuples.

(fn LENGTH BEAT-SPEC-LIST GAIN)

### 12.227.2.2 sox-binaural

**sox-binaural** (*name duration*) [Command]

*C-*, *b*

*C-x @ a b*

Play specified binaural effect.

(fn NAME DURATION)



**12.227.2.3 sox-chakras****sox-chakras** (*theme duration*) [Command]

Play each chakra for specified duration.

Parameter ‘theme’ specifies variant.

(fn THEME DURATION)

**12.227.2.4 sox-relax****sox-relax** (*length*) [Command]

Play relax set of binaural beats for ‘length’ seconds.

(fn LENGTH)

**12.227.2.5 sox-rev-up****sox-rev-up** (*length*) [Command]

Play rev-up set of binaural beats for ‘length’ seconds.

(fn LENGTH)

**12.227.2.6 sox-slide-binaural****sox-slide-binaural** (*name-1 name-2 duration*) [Command]

Play specified binaural slide from ‘name-1’ to ‘name-2’.

(fn NAME-1 NAME-2 DURATION)

**12.227.2.7 sox-tone-binaural****sox-tone-binaural** (*length freq beat gain*) [Command]

Play binaural audio with carrier frequency ‘freq’, beat ‘beat’, and gain ‘gain’.

(fn LENGTH FREQ BEAT GAIN)

**12.227.2.8 sox-tone-slide-binaural****sox-tone-slide-binaural** (*length freq beat-start beat-end gain*) [Command]

Play binaural audio with carrier frequency ‘freq’, beat ‘beat-start’ -&gt; ‘beat-end’, and gain ‘gain’.

(fn LENGTH FREQ BEAT-START BEAT-END GAIN)

**12.227.2.9 sox-turn-down****sox-turn-down** (*length*) [Command]

Play turn-down set of binaural beats for ‘length’ seconds.

(fn LENGTH)

### 12.227.2.10 sox-wind-down

**sox-wind-down** (*length*) [Command]

Play wind-down set of binaural beats for ‘length’ seconds.

(fn LENGTH)

### 12.227.3 sox-gen Options

**User Option** *sox-binaural-gain-offset* [Variable]

User specified offset that is added to default gain when generating tones using SoX, e.g., for binaural beats.

**User Option** *sox-binaural-slider-scale* [Variable]

Scale factor used to compute slide duration when moving from one binaural beat to another.

## 12.228 tetris

### 12.229 toy-braille

This is a bit of toy code to write in braille. To try this, load this file (‘M-x load-file path/to/toy-braille.el’), then do:

M-: (get-toy-braille-string "just a test")

That’s just a toy, meant as an excuse and maybe a tool to learn a bit of braille, nothing more.

Unicode fonts are needed.

You can try:

M-: (set-default-font "-\*-unifont-\*-\*-\*-\*-\*-\*-\*-\*")

or

M-: (set-default-font "-\*-clearlyu-\*-\*-\*-\*-\*-\*-\*-\*iso10646-\*")

(it will only work if the relative font is installed and properly configured).

References:

<http://www.nbp.org/ic/nbp/braille/index.html>

<http://www.unicode.org/Public/4.0-Update1/UnicodeData-4.0.1.txt>

### 12.230 voice-defs

Contains just the voice definitions. Voices are defined using the macro **defvoice** from module voice-setup.

#### 12.230.1 An Overview Of Voice Design

Aural CSS defines 4 primary device-independent dimensions. Average-Pitch, Pitch-Range, Stress, and Richness. There are ten possible values along each dimension (0..9), giving a total of 10,000 possible settings.

Engine-specific modules such as `dectalk-voices` and `outloud-voices` map these dimensions to device-specific parameters and are responsible for generating the final device-specific codes.

### 12.230.2 Creating Distinct Voices Via Aural CSS

Along each dimension, a setting of 5 is mapped to the default setting for the voice as implemented by a given engine. Values on either side of 5 produce opposing effects. This module defines the following effects, which can be conceptualized as pairs.

- A. `bolden` , `lighten`
- B. `animate`, `monotone`
- C. `brighten`, `smoothen`

In addition, we define `bolden-and-animate` as an auditory analog of `bold-italic`. The two additional voices `indent` and `annotate` predate the above and are retained as two *softer* voices. Finally, there are 4 *overlay* voices, corresponding to the 4 dimensions; these each set one of the dimensions to 8. Thus, we have a total of 25 unique voices defined in this module.

### 12.230.3 Things to note

- These voices are designed to be distinctive when used in a given utterance.
- Non-goal — to be able to identify each distinct voice in isolation.
- Audio-formatting is designed to set apart different types of content so that when used in context, one can easily pick-out distinct parts of the utterance.

### 12.230.4 voice-defs Options

|  |            |
|--|------------|
| User Option <i>voice-animate-extra-settings</i>      | [Variable] |
| Settings for <code>voice-animate-extra</code>        |            |
| User Option <i>voice-animate-medium-settings</i>     | [Variable] |
| Settings for <code>voice-animate-medium</code>       |            |
| User Option <i>voice-animate-settings</i>            | [Variable] |
| Settings for <code>voice-animate</code>              |            |
| User Option <i>voice-annotate-settings</i>           | [Variable] |
| Settings for <code>voice-annotate</code>             |            |
| User Option <i>voice-bolden-and-animate-settings</i> | [Variable] |
| Settings for <code>voice-bolden-and-animate</code>   |            |
| User Option <i>voice-bolden-extra-settings</i>       | [Variable] |
| Settings for <code>voice-bolden-extra</code>         |            |
| User Option <i>voice-bolden-medium-settings</i>      | [Variable] |
| Settings for <code>voice-bolden-medium</code>        |            |
| User Option <i>voice-bolden-settings</i>             | [Variable] |
| Settings for <code>voice-bolden</code>               |            |

|  |            |
|--|------------|
| <b>User Option</b> <i>voice-brighten-extra-settings</i>  | [Variable] |
| Settings for voice-brighten-extra                        |            |
| <b>User Option</b> <i>voice-brighten-medium-settings</i> | [Variable] |
| Settings for voice-brighten-medium                       |            |
| <b>User Option</b> <i>voice-brighten-settings</i>        | [Variable] |
| Settings for voice-brighten                              |            |
| <b>User Option</b> <i>voice-indent-settings</i>          | [Variable] |
| Settings for voice-indent                                |            |
| <b>User Option</b> <i>voice-lighten-extra-settings</i>   | [Variable] |
| Settings for voice-lighten-extra                         |            |
| <b>User Option</b> <i>voice-lighten-medium-settings</i>  | [Variable] |
| Settings for voice-lighten-medium                        |            |
| <b>User Option</b> <i>voice-lighten-settings</i>         | [Variable] |
| Settings for voice-lighten                               |            |
| <b>User Option</b> <i>voice-monotone-extra-settings</i>  | [Variable] |
| Settings for voice-monotone-extra                        |            |
| <b>User Option</b> <i>voice-monotone-medium-settings</i> | [Variable] |
| Settings for voice-monotone-medium                       |            |
| <b>User Option</b> <i>voice-monotone-settings</i>        | [Variable] |
| Settings for voice-monotone                              |            |
| <b>User Option</b> <i>voice-overlay-0-settings</i>       | [Variable] |
| Settings for voice-overlay-0                             |            |
| <b>User Option</b> <i>voice-overlay-1-settings</i>       | [Variable] |
| Settings for voice-overlay-1                             |            |
| <b>User Option</b> <i>voice-overlay-2-settings</i>       | [Variable] |
| Settings for voice-overlay-2                             |            |
| <b>User Option</b> <i>voice-overlay-3-settings</i>       | [Variable] |
| Settings for voice-overlay-3                             |            |
| <b>User Option</b> <i>voice-smoothen-extra-settings</i>  | [Variable] |
| Settings for voice-smoothen-extra                        |            |
| <b>User Option</b> <i>voice-smoothen-medium-settings</i> | [Variable] |
| Settings for voice-smoothen-medium                       |            |
| <b>User Option</b> <i>voice-smoothen-settings</i>        | [Variable] |
| Settings for voice-smoothen                              |            |

## 12.231 voice-setup

A voice is to audio as a font is to a visual display. A personality is to audio as a face is to a visual display.

Voice-lock-mode is a minor mode that causes your comments to be spoken in one personality, strings in another, reserved words in another, documentation strings in another, and so on.

Comments will be spoken in ‘voice-comment-personality’. Strings will be spoken in ‘voice-string-personality’. Function (in their defining forms) will be spoken in ‘voice-function-name-personality’. Reserved words will be spoken in ‘voice-keyword-personality’.

To audio-format text , use M-x voice-lock-mode. When this minor mode is on, the voices of the current line are updated with every insertion or deletion.

### 12.231.1 Voice-Lock And Aural CSS

The CSS Speech Style Sheet specification defines a number of abstract device independent voice properties. A setting conforming to the CSS speech specification can be represented in elisp as a structure.

We will refer to this structure as a "speech style". This structure needs to be mapped to device dependent codes to produce the desired effect. This module forms a bridge between emacs packages that wish to implement audio formatting and Emacspeak's TTS module. Emacspeak produces voice change effects by examining the value of text-property 'personality', as well as the face/font at point.

Think of a buffer of formatted text along with the text-property 'personality' appropriately set as a "aural display list". Module voice-setup.el help applications like EWW produce audio-formatted output by calling function voice-acss-from-speech-style with a "speech-style" –a structure as defined in this module and get back a symbol that they assign to the value of property 'personality'. Emacspeak's rendering engine then does the needful at the time speech is produced. Function voice-acss-from-speech-style does the following: Takes as input a "speech style" (1) Computes a symbol that will be used to refer to this specific speech style. (2) Examines emacspeak's internal voice table to see if this speech style has a voice already defined. If so it returns immediately. Otherwise, it does the additional work of defining a -voice for future use. See its use in this module to see how voices are defined independent of a given TTS engine. How faces map to voices: TTS engine specific modules e.g., dectalk-voices.el and outloud-voices.el map ACSS dimensions to engine-specific codes. Emacspeak modules use voice-setup-add-map when defining face->personality mappings. For use from other modules.

### 12.231.2 Voice-Setup Commands

#### 12.231.2.1 voice-lock-mode

voice-lock-mode (&optional *arg*) [Command]

*C-e d v*

*<fn> d v*

Toggle voice lock mode.

This is a minor mode. If called interactively, toggle the ‘Voice-Lock mode’ mode. If the prefix argument is positive, enable the mode, and if it is zero or negative, disable the mode.

If called from Lisp, toggle the mode if ARG is ‘toggle’. Enable the mode if ARG is nil, omitted, or is a positive number. Disable the mode if ARG is a negative number.

To check whether the minor mode is enabled in the current buffer, evaluate ‘voice-lock-mode’.

The mode’s hook is called both when the mode is enabled and when it is disabled.

(fn &optional ARG)

### 12.231.2.2 voice-lock-mode--turn-on

`voice-lock-mode--turn-on` [Command]  
Turn on Voice Lock mode .

### 12.231.2.3 voice-setup-toggle-silence-personality

`voice-setup-toggle-silence-personality` [Command]  
*C-e M-q*  
*<fn> M-q*  
Toggle audibility of personality under point .

### 12.231.3 voice-setup Options

User Option *voice-lock-mode-hook* [Variable]  
Hook run after entering or leaving ‘voice-lock-mode’. No problems result if this variable is not bound. ‘add-hook’ automatically binds it. (This is true for all hook variables.)

## 12.232 xbacklight

Provide an emacs front-end to xbacklight. This is a tool that controls the brightness on laptops. To install xbacklight, `sudo apt-get install xbacklight`

### 12.232.1 Xbacklight Commands

#### 12.232.1.1 xbacklight-black

`xbacklight-black` [Command]  
Black screen.

**12.232.1.2 xbacklight-decrement**

**xbacklight-decrement** [Command]  
Decrease brightness.

**12.232.1.3 xbacklight-get**

**xbacklight-get** [Command]  
Get brightness level.

**12.232.1.4 xbacklight-increment**

**xbacklight-increment** [Command]  
Increase brightness.

**12.232.1.5 xbacklight-set**

**xbacklight-set** (*brightness*) [Command]  
Set brightness.  
  
(fn BRIGHTNESS)

**12.232.1.6 xbacklight-white**

**xbacklight-white** [Command]  
White screen.

**12.233 URL Templates**

This section documents a total of 73 URL Templates.

All of these URL templates can be invoked via command *M-x emacspeak-url-template-fetch* normally bound to *C-e u <fn> u*. This command prompts for the name of the template, and completion is available via Emacs' minibuffer completion. Each URL template carries out the following steps:

- Prompt for the relevant information.
- Fetch the resulting URL using an appropriate fetcher.
- Set up the resulting resource with appropriate customizations.

**1. AQI From Wunderground**

Air quality from Wunderground

**2. Air Traffic Control**

Find live streams for Air Traffic Control.

**3. Airport conditions**

Display airport conditions from the FAA.

**4. Amazon Product Details By ASIN**

Retrieve product details from Amazon by either ISBN or ASIN.

**5. Anonymize Google Search**

Logout from Google to do an anonymous search.

6. **ArchWiki Search**  
Search Linux ArchWiki
7. **BBC Podcast Directory**  
BBC PodCast Directory
8. **BBC World News Summary**  
BBC World News Summary
9. **Baseball Box Scores**  
Display baseball Play By Play.
10. **Baseball Game Details**  
Display baseball Play By Play.
11. **Baseball Game Index**  
Display baseball Play By Play.
12. **Baseball Highlights**  
Display baseball Video Highlights.
13. **Baseball scores**  
Display baseball scores.
14. **Bing News**  
Bing News results as RSS feed.
15. **Bing Search**  
Bing results as RSS feed.
16. **Bloomberg Stock Lookup**  
Lookup Stock Quote information on Bloomberg. Ticker is of the form goog:us
17. **CIA World Fact Book**  
Open CIA World Fact Book For Specified Country.
18. **CNN Content**  
Filter down to CNN content area.
19. **CNN Headlines**  
News Headlines From CNN
20. **CNN Market Data**  
Market data filtered from CNN Money
21. **Cricinfo Print**  
Printer friendly link on Cricinfo
22. **Dictionary Lookup**  
Dictionary Lookup
23. **Finance Google**  
Lookup ticker on Google Finance.
24. **Finance Summary From Google**  
Display top stocks from Google Finance.



25. **FreeSound**  
Search FreeSound.
26. **GitHub Search**  
Perform a GitHub Search.
27. **GoLang Browse**  
Browse GoLang package documentation.
28. **GoLang Lookup**  
Lookup GoLang package documentation.
29. **GoLang Search**  
Search GoLang package documentation.
30. **Google Basic**  
Light-weight Google search.
31. **Google News Search**  
Search Google news.
32. **Google Scholar**  
Google Scholar Search
33. **Google Trends**  
Google Trends
34. **Google Weather**  
Light-weight Google search.
35. **Guardian RSS Feeds Directory**  
Guardian Feeds Directory
36. **Hacker News Frontpage**  
Display Hacker News Front Page
37. **Hacker News Search**  
Display Hacker News Front Page
38. **Hoogle Haskell API Search**  
Haskell API Search against a local server.
39. **MLB Scorecard**  
Show MLB Scorecard.
40. **MLB standings**  
Display MLB standings.
41. **Money Headlines From CNN**  
Money Headlines From CNN
42. **NBA standings**  
Display NBA standings.
43. **NLS Bard Bookshelf**  
NLS Bard Catalog: Most Popular. Login once before using this template.

- 44. **NLS Bard Popular**  
NLS Bard Catalog: Most Popular. Login once before using this template.
- 45. **NLS Bard Recent**  
NLS Bard Catalog: Recently Added. Login once before using this template.
- 46. **NLS Bard Search**  
Search NLS Bard Catalog. Login once before using this template.
- 47. **NY Times Mobile**  
NYTimes Mobile Site
- 48. **Old Time Radio**  
This months Old Time Radio Programming
- 49. **OpenLibrary**  
Open Library Search
- 50. **Patent Search From Google**  
Perform patent search via Google
- 51. **RadioTime Browser**  
RadioTime Entry point.
- 52. **RadioTime Categories**  
RadioTime Categories .
- 53. **RadioTime Search**  
RadioTime Search.
- 54. **Reddit At Point.**  
Open RSS Feed for Reddit URL under point.
- 55. **Reddit By Topic.**  
Open RSS Feed for Reddit Topic.
- 56. **Reddit Front Page.**  
Open Feed for Reddit Front Page.
- 57. **Reddit Search.**  
Reddit Search Results Feed.
- 58. **Seeking Alpha Stock Search**  
Seeking Alpha search.
- 59. **Sign in to Google**  
Login to Google.
- 60. **StreamWorld Radio**  
Play radio stream. Example: kcbsFM. Format is stationid+AM/FM.
- 61. **Tech News From CNet**  
Display tech news from CNET
- 62. **TuneIn Radio**  
Translate StreamId to playable stream.

- 63. **Washington Post**  
Washington Post Contents
- 64. **Wiki Data Search**  
Search WikiData.
- 65. **WordNet Search**  
Look up term in WordNet.
- 66. **Yahoo RSSNews**  
News From Yahoo As RSS.
- 67. **html Google News Search**  
Search Google news.
- 68. **sourceforge Download**  
Download specified file.
- 69. **sourceforge browse mirrors**  
Retrieve download page at Sourceforge for specified project.
- 70. **sourceforge project**  
Open specified project page at SourceForge.
- 71. **w3c IRC Logs**  
Use this to pull up the archived logs from the W3C IRC. You need to know the exact name of the channel.
- 72. **w3c Lists**  
Use this to pull up the archived mail from the W3C list. You need to know the exact name of the list.
- 73. **world CNN Content**  
Filter down to CNN content area.

## 13 Emacspeak Keyboard Commands.

This chapter gives an overview of all the keymaps used by Emacspeak. For a complete reference, see See Section 12.6 [emacspeak], page 54. For basic usage, see See Chapter 6 [Basic Usage], page 9.

Emacspeak uses the following keymaps, each of which are invoked by a specific prefix key.

|                      |  |
|----------------------|--|
| <code>C-e</code>     | The main Emacspeak keymap.             |
| <code>C-e d</code>   | The text-to-speech keymap.             |
| <code>C-;</code>     | The Emacspeak hyper keymap.            |
| <code>C-'</code>     | The emacspeak super keymap.            |
| <code>C-,</code>     | The Emacspeak alt keymap.              |
| <code>C-.</code>     | The Emacspeak super keymap.            |
| <code>C-e x</code>   | The emacspeak <code>x</code> keymap.   |
| <code>C-e C-x</code> | The Emacspeak <code>C-x</code> keymap. |

Primary Emacspeak commands start with `C-e`. Following `C-e` with `d` invokes commands that control the text-to-speech engine. Note that silencing speech is an exception to this rule — Speech silence commands are placed directly on the primary emacspeak-keymap (`C-e s` and `C-e .`).

In addition, Emacspeak introduces five additional keymaps for binding its extensive set of facilities to convenient keystrokes.

When running under a windowing system, Emacs automatically receives keys `C-;`, `C-'`, `C-,`, and `C-.`. When running on the Linux console, these keys become available after loading the custom Linux keymap found in `emacspeak/tvr/console-keymaps` after checking out the emacspeak repository from <https://github.com/tvraman/emacspeak>.

Emacspeak defines personal keymaps accessible via `C-e x` and `C-e C-x`. For now, emacspeak does not bind any commands in keymap `C-e C-x` — this keymap is left for end-user personalization.

Note that the information presented in the following subsections can also be viewed via Emacs' built-in Help system; e.g., Press `C-;` `C-h` to get a `*Help*` buffer that displays all keys bound in `emacspeak-hyper-keymap`.

## 14 TTS Servers

Emacspeak produces spoken output by communicating with one of many speech servers. This section documents the communication protocol between the client application i.e. Emacspeak, and the TTS (Text to Speech) server. This section is primarily intended for developers wishing to:

- Create new speech servers that comply with this communication protocol
- Developers of other client applications who wish to use the various Emacspeak speech servers.

For additional notes on how to log and view TTS server commands when developing a speech server, see <http://emacspeak.blogspot.com/2015/04/howto-log-speech-server-output-to-aid.html>.

### 14.1 High-level Overview

The TTS server reads commands from standard input, and script *speech-server* can be used to cause a TTS server to communicate via a TCP socket. Speech server commands are used by the client application to make specific requests of the server; the server listens for these requests in a non-blocking read loop and executes requests as they become available. Requests can be classified as follows:

- Commands that send text to be spoken.
- Commands that set *state* of the TTS server.

All commands are of the form

```
commandWord {arguments}
```

The braces are optional if the command argument contains no white space. The speech server maintains a *current state* that determines various characteristics of spoken output such as speech rate, punctuations mode etc. (see set of commands that manipulate speech state for complete list). The client application *queues* The text and non-speech audio output to be produced before asking the server to *dispatch* the set of queued requests, i.e. start producing output.

Once the server has been asked to produce output, it removes items from the front of the queue, sends the requisite commands to the underlying TTS engine, and waits for the engine to acknowledge that the request has been completely processed. This is a non-blocking operation, i.e., if the client application generates additional requests, these are processed *immediately*.

The above design allows the Emacspeak TTS server to be *highly* responsive; Client applications can queue large amounts of text (typically queued a clause at a time to achieve the best prosody), ask the TTS server to start speaking, and interrupt the spoken output at any time.

#### 14.1.1 Commands That Queue Output.

This section documents commands that either produce spoken output, or queue output to be produced on demand. Commands that place the request on the queue are clearly marked.

```
version
```

Speaks the *version* of the TTS engine. Produces output immediately.

**tts\_say text**

Speaks the specified *text* immediately. The text is not pre-processed in any way, contrast this with the primary way of speaking text which is to queue text before asking the server to process the queue.

Note that this command needs to handle the special syntax for morpheme boundaries ‘[\*]’. The ‘[\*]’ syntax is specific to the Dectalk family of synthesizers; servers for other TTS engines need to map this pattern to the engine-specific code for each engine. As an example, see **servers/outloud**. A morpheme boundary results in synthesizing compound words such as *left bracket* with the right intonation; using a space would result in that phrase being synthesized as two separate words.

**l c**

Speak *c* a single character, as a letter. The character is spoken immediately. This command uses the TTS engine’s capability to speak a single character with the ability to flush speech *immediately*. Client applications wishing to produce character-at-a-time output, e.g., when providing character echo during keyboard input should use this command.

**d**

This command is used to *dispatch* all queued requests. It was renamed to a single character command (like many of the commonly used TTS server commands) to work more effectively over slow (9600) dialup lines. The effect of calling this command is for the TTS server to start processing items that have been queued via earlier requests.

**s**

Stop speech *immediately*. Spoken output is interrupted, and all pending requests are flushed from the queue.

**q text**

Queues text to be spoken. No spoken output is produced until a *dispatch* request is received via execution of command *d*.

**c codes**

Queues synthesis codes to be sent to the TTS engine. Codes are sent to the engine with no further transformation or processing. The codes are inserted into the output queue and will be dispatched to the TTS engine at the appropriate point in the output stream.

**a filename**

Cues the audio file identified by filename for playing.

**t freq length**

Queues a tone to be played at the specified frequency and having the specified length. Frequency is specified in hertz and length is specified in milliseconds.

**sh duration**

Queues the specified duration of silence. Silence is specified in milliseconds.

### 14.1.2 Commands That Set State

`tts_reset`

Reset TTS engine to default settings.

`tts_set_punctuations mode`

Sets TTS engine to the specified punctuation mode. Typically, TTS servers provide at least three modes:

- None: Do not speak punctuation characters.
- Some: Speak some punctuation characters. Used for English prose.
- All: Speak out *all* punctuation characters; useful in programming modes.

`tts_set_speech_rate rate`

Sets speech rate. The interpretation of this value is typically engine specific.

`tts_set_character_scale factor`

Scale factor applied to speech rate when speaking individual characters. Thus, setting speech rate to 500 and character scale to 1.2 will cause command *l* to use a speech rate of  $500 * 1.2 = 600$ .

`tts_split_caps flag`

Set state of *split caps* processing. Turn this on to speak mixed-case (AKA Camel Case) identifiers.

## 15 Emacspeak At Twenty.

This article was originally published to mark the 20th anniversary of Emacspeak. It has been incorporated as the final chapter of the Emacspeak manual for easy reference. The original article is available on the Web and in its original source form as an `*org*` file in the emacspeak distribution.

### 15.1 Turning Twenty

One afternoon in the third week of September 1994, I started writing myself a small Emacs extension using Lisp Advice to make Emacs speak to me so I could use a Linux laptop. As Emacspeak turns twenty, this article is both a quick look back over the twenty years of lessons learned, as well as a glimpse into what might be possible as we evolve to a world of connected, ubiquitous computing. This article draws on Learning To Program In 10 Years (<http://norvig.com/21-days.html>) by Peter Norvig for some of its inspiration.

### 15.2 Using UNIX With Speech Output — 1994

As a graduate student at Cornell (<http://www.cs.cornell.edu/info/people/raman/raman.html>), I accessed my Unix workstation (SunOS) from an Intel 486 PC running IBM Screen-Reader. There was no means of directly using a UNIX box at the time; after graduating, I continued doing the same for about six months at Digital Research in Cambridge — the only difference being that my desktop workstation was now a DEC-Alpha. Throughout this time, Emacs was my environment of choice for everything from software development and Internet access to writing documents.

In fall of 1994, I wanted to start using a laptop running Linux; a colleague (Dave Wecker) was retiring his 386mhz laptop that already had Linux on it and I decided to inherit it. But there was only one problem — until then I had always accessed a UNIX machine from a secondary PC running a screen-reader — something that would clearly make no sense with a laptop!

Another colleague, Win Treese, had pointed out the interesting possibilities presented by package `advice` in Emacs 19.23 — a few weeks earlier, he had sent around a small snippet of code that magically modified Emacs' version-control primitive to first create an *RCS* directory if none existed before adding a file to version control. When I speculated about using the Linux laptop, Dave remarked — you live in Emacs anyway — why dont you just make it talk!

Connecting the dots, I decided to write myself a tool that augmented Emacs' default behavior to *speak* — within about 4 hours, version 0.01 of Emacspeak was up and running.

### 15.3 Key Enabler — Emacs And Lisp Advice

It took me a couple of weeks to fully recognize the potential of what I had built with Emacs Lisp Advice. Until then, I had used screen-readers to listen to the contents of the visual display — but Lisp Advice let me do a lot more — it enabled Emacspeak to generate highly context-specific spoken feedback, augmented by a set of auditory icons. I later formalized this design under the name speech-enabled applications (<http://en.wikipedia.org/wiki/Self-voicing>). For a detailed overview of the architecture of



Emacspeak, see the chapter on Emacspeak (<http://emacspeak.sourceforge.net/raman/publications/bc-emacspeak/publish-emacspeak-bc.html>) in the book Beautiful Code (<http://emacspeak.blogspot.com/2007/07/emacspeak-and-beautiful-code.html>) from O'Reilly.

## 15.4 Key Component — Text To Speech (TTS)

Emacspeak is a speech-subsystem for Emacs; it depends on an external Text-To-Speech (TTS) engine to produce speech. In 1994, Digital Equipment released what would turn out to be the last in the line of hardware DECTalk synthesizers, the DECTalk Express. This was essentially an Intel 386 with 1mb of flash memory that ran a version of the DECTalk TTS software — to date, it still remains my favorite Text-To-Speech engine. At the time, I also had a software version of the same engine running on my DEC-Alpha workstation; the desire to use either a software or hardware solution to produce speech output defined the Emacspeak speech-server architecture.

I went to IBM Research in 1999; this coincided with IBM releasing a version of the Eloquence TTS engine on Linux under the name *ViaVoice Outloud*. My colleague Jeffrey Sorenson implemented an early version of the Emacspeak speech-server for this engine using the OSS API; I later updated it to use the ALSA library while on a flight back to SFO from Boston in 2001. That is still the TTS engine that is speaking as I type this article on my laptop.

20 years on, TTS continues to be the weakest link on Linux; the best available solution in terms of quality continues to be the Linux port of Eloquence TTS available from Voxin in Europe for a small price. Looking back across 20 years, the state of TTS on Linux in particular and across all platforms in general continues to be a disappointment; most of today's newer TTS engines are geared toward mainstream use-cases where *naturalness* of the voice tends to supersede intelligibility at higher speech-rates. Ironically, modern TTS engines also give applications far less control over the generated output — as a case in point, I implemented Audio System For Technical Readings (AsTeR) (<http://www.cs.cornell.edu/home/raman/aster/demo.html>) in 1994 using the DECTalk; 20 years later, we implemented MathML support (<http://allthingsd.com/20130604/t-v-ramans-audio-deja-vu-from-google-a-math-reading-system-for-the-web/>) in ChromeVox (<http://www.chromevox.com/>) using Google TTS. In 2013, it turned out to be difficult or impossible to implement the type of audio renderings that were possible with the admittedly less-natural sounding DECTalk!

## 15.5 Emacspeak And Software Development

Version 0.01 of Emacspeak was written using IBM Screen-Reader on a PC with a terminal emulator accessing a UNIX workstation. But in about 2 weeks, Emacspeak was already a better environment for developing Emacspeak in particular and software development in general. Here are a few highlights in 1994 that made Emacspeak a good software development environment, present-day users of Emacspeak will see that that was just scratching the surface.

- Audio formatting using voice-lock to provide aural syntax highlighting.
- Succinct auditory icons to provide efficient feedback.
- Emacs' ability to navigate code structurally —

as opposed to moving around by plain-text units such as characters, lines and words. S-Expressions are a major win!

- Emacs' ability to specialize behavior based on major and minor modes.
- Ability to browse program code using tags, and getting fluent spoken feedback.
- Completion **everywhere**.
- Everything is searchable — this is a huge win when you cannot see the screen.
- Interactive spell-checking using ISpell with continuous spoken feedback augmented by aural highlights.
- Running code compilation and being able to jump to errors with spoken feedback.
- Ability to move through diff chunks when working with source code and source control systems; refined diffs as provided by the **ediff** package when speech-enabled is a major productivity win.
- Ability to easily move between email, document authoring and programming — though this may appear trivial, it continues to be one of Emacs' biggest wins.

Long-term Emacs users will recognize all of the above as being among the reasons why they do most things inside Emacs — there is little that is Emacspeak specific in the above list — except that Emacspeak was able to provide fluent, well-integrated contextual feedback for all of these tasks. And that was a game-changer given what I had had before Emacspeak. As a case in point, I did not dare program in Python before I speech-enabled Emacs' Python-Mode; the fact that white space is significant in Python made it difficult to program using a plain screen-reader that was unaware of the semantics of the underlying content being accessed.

### 15.5.1 Programming Defensively

As an aside, note that all of Emacspeak has been developed over the last 20 years with Emacspeak being the only adaptive technology on my system. This has led to some interesting design consequences, primary among them being a strong education in **programming defensively**. Here are some other key features of the Emacspeak code-base:

1. The code-base is extremely **bushy** rather than deeply hierarchical — this means that when a module breaks, it does not affect the rest of the system.
2. Separation of concerns with respect to the various layers, a tightly knit core speech library interfaces with any one of many speech servers running as an external process.
3. Audio formatting is abstracted by using the formalism defined in Aural CSS.
4. Emacspeak integrates with Emacs' user interface conventions by taking over a single prefix key **C-e** with *all* Emacspeak commands accessed through that single keymap. This helps embedding Emacspeak functionality into a large variety of third party modules without any loss of functionality.

## 15.6 Emacspeak And Authoring Documents

In 1994, my preferred environment for authoring **all** documents was **L<sup>A</sup>T<sub>E</sub>X** using the Auctex package. Later I started writing either L<sup>A</sup>T<sub>E</sub>X or HTML using the appropriate support modes; today I use **org-mode** to do most of my content authoring. Personally, I have never been a fan of What You See Is What You Get (WYSIWYG) authoring tools — in my

experience that places an undue burden on the author by drawing attention away from the content to focus on the final appearance. An added benefit of creating content in Emacs in the form of light-weight markup is that the content is long-lived — I can still usefully process and re-use things I have written 25 years ago.

Emacs, with Emacspeak providing audio formatting and context-specific feedback remains my environment of choice for writing all forms of content ranging from simple email messages to polished documents for print publishing. And it is worth repeating that I **never** need to focus on what the content is going to look like — that job is best left to the computer.

As an example of producing high-fidelity visual content, see this write-up on Polyhedral Geometry (<http://emacspeak.sourceforge.net/raman/publications/polyhedra/>) that I published in 2002; all of the content, including the drawings were created by me using Emacs.

## 15.7 Emacspeak And The Early Days Of The Web

Right around the time that I was writing version 0.01 of emacspeak, a far more significant software movement was under way — the World Wide Web was moving from the realms of academia to the mainstream world with the launch of NCSA Mosaic — and in late 1994 by the first commercial Web browser in Netscape Navigator. Emacs had always enabled integrated access to FTP archives via package *ange-ftp*; in late 1993, William Perry released Emacs-W3, a Web browser for Emacs written entirely in Emacs Lisp. W3 was one of the first large packages to be speech-enabled by Emacspeak — later it was the browser on which I implemented the first draft of the Aural CSS specification (<http://www.w3.org/TR/CSS2/aural.html>). Emacs-W3 enabled many early innovations in the context of providing non-visual access to Web content, including audio formatting and structured content navigation; in summer of 1995, Dave Raggett and I outlined a few extensions to HTML Forms, including the **label** element as a means of associating metadata with interactive form controls in HTML, and many of these ideas were prototyped in Emacs-W3 at the time. Over the years, Emacs-W3 fell behind the times — especially as the Web moved away from cleanly structured HTML to a massive soup of unmatched tags. This made parsing and error-correcting badly-formed HTML markup expensive to do in Emacs-Lisp — and performance suffered. To add to this, mainstream users moved away because Emacs' rendering engine at the time was not rich enough to provide the type of visual renderings that users had come to expect. The advent of DHTML, and JavaScript based Web Applications finally killed off Emacs-W3 as far as most Emacs users were concerned.

But Emacs-W3 went through a revival on the emacspeak audio desktop in late 1999 with the arrival of XSLT, and Daniel Veillard's excellent implementation via the **libxml2** and **libxslt** packages. With these in hand, Emacspeak was able to hand-off the bulk of HTML error correction to the **xsltproc** tool. The lack of visual fidelity didn't matter much for an eyes-free environment; so Emacs-W3 continued to be a useful tool for consuming large amounts of Web content that did not require JavaScript support.

During the last 24 months, **libxml2** has been built into Emacs; this means that you can now parse arbitrary HTML as found in the wild without incurring a performance hit. This functionality was leveraged first by package **shr** (Simple HTML Renderer) within the **gnus** package for rendering HTML email. Later, the author of **gnus** and **shr** created a new light-

weight HTML viewer called **eww** that is now part of Emacs 24. With improved support for variable pitch fonts and image embedding, Emacs is once again able to provide visual renderings for a large proportion of text-heavy Web content where it becomes useful for mainstream Emacs users to view at least some Web content within Emacs; during the last year, I have added support within emacspeak to extend package **eww** (<http://emacspeak.blogspot.com/2014/05/emacspeak-eww-updates-for-complete.html>) with support for DOM filtering and quick content navigation.

## 15.8 Audio Formatting — Generalizing Aural CSS

A key idea in Audio System For Technical Readings (AsTeR) (<http://www.cs.cornell.edu/home/raman/aster/aster-toplevel.html>) was the use of various voice properties in combination with non-speech auditory icons to create rich aural renderings. When I implemented Emacspeak, I brought over the notion of audio formatting to all buffers in Emacs by creating a **voice-lock** module that paralleled Emacs' **font-lock** module. The visual medium is far richer in terms of available fonts and colors as compared to voice parameters available on TTS engines — consequently, it did not make sense to directly map Emacs' **face** properties to voice parameters. To aid in projecting visual formatting onto auditory space, I created property **personality** analogous to Emacs' **face** property that could be applied to content displayed in Emacs; module **voice-lock** applied that property appropriately, and the Emacspeak core handled the details of mapping personality values to the underlying TTS engine.

The values used in property **personality** were abstract, i.e., they were independent of any given speech engine. Later in the fall of 1995, I re-expressed these set of abstract voice properties in terms of Aural CSS; the work was published as a first draft toward the end of 1995, and implemented in Emacs-W3 in early 1996. Aural CSS was an appendix in the CSS-1.0 specification; later, it graduated to being its own module within CSS-2.0.

Later in 1996, all of Emacs' **voice-lock** functionality was re-implemented in terms of Aural CSS; the implementation has stood the test of time in that as I added support for more TTS engines, I was able to implement engine-specific mappings of Aural-CSS values. This meant that the rest of Emacspeak could define various types of voices for use in specific contexts without having to worry about individual TTS engines. Conceptually, property **personality** can be thought of as holding an **aural display list** — various parts of the system can annotate pieces of text with relevant properties that finally get rendered in the aggregate. This model also works well with the notion of Emacs overlays where a moving overlay is used to temporarily highlight text that has other context-specific properties applied to it.

Audio formatting as implemented in Emacspeak is extremely effective when working with all types of content ranging from richly structured mark-up documents (L<sup>A</sup>T<sub>E</sub>X, org-mode) and formatted Web pages to program source code. Perceptually, switching to audio formatted output feels like switching from a black-and-white monitor to a rich color display. Today, Emacspeak's audio formatted output is the only way I can correctly write **else if** vs **elsif** in various programming languages!

## 15.9 Conversational Gestures For The Audio Desktop

By 1996, Emacspeak was the only piece of adaptive technology I used; in fall of 1995, I had moved to Adobe Systems from DEC Research to focus on enhancing the Portable

Document Format (PDF) to make PDF content repurposable. Between 1996 and 1998, I was primarily focused on electronic document formats — I took this opportunity to step back and evaluate what I had built as an auditory interface within Emacspeak. This retrospect proved extremely useful in gaining a sense of perspective and led to formalizing the high-level concept of *Conversational Gestures* and structured browsing/searching as a means of thinking about user interfaces.

By now, Emacspeak was a complete environment — I formalized what it provided under the moniker *Complete Audio Desktop*. The fully integrated user experience allowed me to move forward with respect to defining interaction models that were highly optimized to eyes-free interaction — as an example, see how Emacspeak interfaces with modes like **dire**d (Directory Editor) for browsing and manipulating the filesystem, or **proce**d (Process Editor) for browsing and manipulating running processes. Emacs' integration with **ispell** for spell checking, as well as its various completion facilities ranging from minibuffer completion to other forms of dynamic completion while typing text provided more opportunities for creating innovative forms of eyes-free interaction. With respect to what had gone before (and is still par for the course as far as traditional screen-readers are concerned), these types of highly dynamic interfaces present a challenge. For example, consider handling a completion interface using a screen-reader that is speaking the visual display. There is a significant challenge in deciding *what to speak* e.g., when presented with a list of completions, the currently typed text, and the default completion, which of these should you speak, and in what order? The problem gets harder when you consider that the underlying semantics of these items is generally not available from examining the visual presentation in a consistent manner. By having direct access to the underlying information being presented, Emacspeak had a leg up with respect to addressing the higher-level question — when you do have access to this information, how do you present it effectively in an eyes-free environment? For this and many other cases of dynamic interaction, a combination of audio formatting, auditory icons, and the ability to synthesize succinct messages from a combination of information items — rather than having to forcibly speak each item as it is rendered visually provided for highly efficient eyes-free interaction.

This was also when I stepped back to build out Emacspeak's table browsing facilities — see the online Emacspeak documentation for details on Emacspeak's table browsing functionality which continues to remain one of the richest collection of end-user affordances for working with two-dimensional data.

### 15.9.1 Speech-Enabling Interactive Games

So in 1997, I went the next step in asking — given access to the underlying information, is it possible to build effective eyes-free interaction to highly interactive tasks? I picked **Tetris** as a means of exploring this space, the result was an Emacspeak extension to speech-enable module **tetris.el**. The details of what was learned were published as a paper in Assets 98, and expanded as a chapter on Conversational Gestures in my book on Auditory Interfaces; that book was in a sense a culmination of stepping back and gaining a sense of perspective of what I had build during this period. The work on Conversational Gestures also helped in formalizing the abstract user interface layer that formed part of the XForms (<http://www.w3.org/MarkUp/Forms/>) work at the W3C.

Speech-enabling games for effective eyes-free interaction has proven highly educational. Interactive games are typically built to challenge the user, and if the eyes-free interface is

inefficient, you just won't play the game — contrast this with a task that you **must** perform, where you're likely to make do with a sub-optimal interface. Over the years, Emacspeak has come to include eyes-free interfaces to several games including Tetris (<http://en.wikipedia.org/wiki/Tetris>), Sudoku ([http://en.wikipedia.org/wiki/2048\\_\(video\\_game\)](http://en.wikipedia.org/wiki/2048_(video_game))), and of late the popular 2048 game ([http://en.wikipedia.org/wiki/2048\\_\(video\\_game\)](http://en.wikipedia.org/wiki/2048_(video_game))). Each of these have in turn contributed to enhancing the interaction model in Emacspeak, and those innovations typically make their way to the rest of the environment.

## 15.10 Accessing Media Streams

Streaming real-time audio on the Internet became a reality with the advent of RealAudio in 1995; soon there were a large number of media streams available on the Internet ranging from music streams to live radio stations. But there was an interesting twist — for the most part, all of these media streams expected one to look at the screen, even though the primary content was purely audio (streaming video hadn't arrived yet!). Starting in 1996, Emacspeak started including a variety of eyes-free front-ends for accessing media streams. Initially, this was achieved by building a wrapper around **trplayer** — a headless version of RealPlayer; later I built Emacspeak module **emacspeak-m-player** for interfacing with package **mplayer**. A key aspect of streaming media integration in emacspeak is that one can launch and control streams without ever switching away from one's primary task; thus, you can continue to type email or edit code while seamlessly launching and controlling media streams. Over the years, Emacspeak has come to integrate with Emacs packages like **emms** as well as providing wrappers for **mplayer** and **alsaplayer** — collectively, these let you efficiently launch all types of media streams, including streaming video, without having to explicitly switch context.

In the mid-90's, Emacspeak started including a directory of media links to some of the more popular radio stations — primarily as a means of helping users getting started — Emacs' ability to rapidly complete directory and file-names turned out to be the most effective means of quickly launching everything from streaming radio stations to audio books. And even better — as the Emacs community develops better and smarter ways of navigating the filesystem using completions, e.g., package **ido**, these types of actions become even more efficient!

## 15.11 EBooks — Ubiquitous Access To Books

AsTeR — was motivated by the increasing availability of technical material as online electronic documents. While AsTeR processed the T<sub>E</sub>X family of markup languages, more general ebooks came in a wide range of formats, ranging from plain text generated from various underlying file formats to structured EBooks, with Project Gutenberg (<http://www.gutenberg.org/>) leading the way. During the mid-90's, I had access to a wide range of electronic materials from sources such as O'Reilly Publishing and various electronic journals — The Perl Journal (TPJ) is one that I still remember fondly.

Emacspeak provided fairly light-weight but efficient access to all of the electronic books I had on my local disk — Emacs' strengths with respect to browsing textual documents meant that I needed to build little that was specific to Emacspeak. The late 90's saw the arrival of Daisy as an XML-based format for accessible electronic books. The last decade

has seen the rapid convergence to **epub** as a distribution format of choice for electronic books. Emacspeak provides interaction modes that make organizing, searching and reading these materials on the Emacspeak Audio Desktop a pleasant experience. Emacspeak also provides an OCR-Mode — this enables one to call out to an external OCR program and read the content efficiently.

The somewhat informal process used by publishers like O'Reilly to make technical material available to users with print impairments was later formalized by BookShare (<https://www.bookshare.org/>) — today, qualified users can obtain a large number of books and periodicals initially as Daisy-3 and increasingly as **EPub**. BookShare provides a RESTful API for searching and downloading books; Emacspeak module **emacspeak-bookshare** implements this API to create a client for browsing the BookShare library, downloading and organizing books locally, and an integrated ebook reading mode to round off the experience.

A useful complement to this suite of tools is the Calibre package for organizing ones ebook collection; Emacspeak now implements an **EPub Interaction** mode that leverages Calibre (actually sqlite3) to search and browse books, along with an integrated **EPub mode** for reading books.

## 15.12 Leveraging Computational Tools — From SQL And R To IPython Notebooks

The ability to invoke external processes and interface with them via a simple read-eval-loop (REPL) is perhaps one of Emacs' strongest extension points. This means that a wide variety of computational tools become immediately available for embedding within the Emacs environment — a facility that has been widely exploited by the Emacs community. Over the years, Emacspeak has leveraged many of these facilities to provide a well-integrated auditory interface.

Starting from a tight code, eval, test form of iterative programming as encouraged by Lisp. Applied to languages like Python and Ruby to exploratory computational tools such as R for data analysis and SQL for database interaction, the Emacspeak Audio Desktop has come to encompass a collection of rich computational tools that provide an efficient eyes-free experience.

In this context, module **ein** — Emacs IPython Notebooks — provides another excellent example of an Emacs tool that helps interface seamlessly with others in the technical domain. IPython Notebooks provide an easy means of reaching a large audience when publishing technical material with interactive computational content; module **ein** brings the power and convenience of Emacs' editing facilities when developing the content. Speech-enabling package **ein** is a major win since editing program source code in an eyes-free environment is far smoother in Emacs than in a browser-based editor.

## 15.13 Social Web — EMail, Instant Messaging, Blogging And Tweeting Using Open Protocols

The ability to process large amounts of email and electronic news has always been a feature of Emacs. I started using package **vm** for email in 1990, along with **gnus** for Usenet access many years before developing Emacspeak. So these were the first major packages that Emacspeak speech-enabled. Being able to access the underlying data structures used to visually render email messages and Usenet articles enabled Emacspeak to produce rich,

succinct auditory output — this vastly increased my ability to consume and organize large amounts of information. Toward the turn of the century, instant messaging arrived in the mainstream — package **tnt** provided an Emacs implementation of a chat client that could communicate with users on the then popular AOL Instant Messenger platform. At the time, I worked at IBM Research, and inspired by package **tnt**, I created an Emacs client called **ChatterBox** using the Lotus Sametime API — this enabled me to communicate with colleagues at work from the comfort of Emacs. Packages like **vm**, **gnus**, **tnt** and **ChatterBox** provide an interesting example of how availability of a clean underlying API to a specific service or content stream can encourage the creation of efficient (and different) user interfaces. The touchstone of such successful implementations is a simple test — can the user of a specific interface tell if the person whom he is communicating with is also using the same interface? In each of the examples enumerated above, a user at one end of the communication chain cannot tell, and in fact shouldn't be able to tell what client the user at the other end is using. Contrast this with closed services that have an inherent *lock-in* model e.g., proprietary word processors that use undocumented serialization formats — for a fun read, see this write-up on Universe Of Fancy Colored Paper (<http://emacspeak.sourceforge.net/publications/colored-paper.html>).

Today, my personal choice for instant messaging is the open Jabber platform. I connect to Jabber via Emacs package **emacs-jabber** and with Emacspeak providing a light-weight wrapper for generating the eyes-free interface, I can communicate seamlessly with colleagues and friends around the world.

As the Web evolved to encompass ever-increasing swathes of communication functionality that had already been available on the Internet, we saw the world move from Usenet groups to **Blogs** — I remember initially dismissing the blogging phenomenon as just a re-invention of Usenet in the early days. However, mainstream users flocked to Blogging, and I later realized that blogging as a publishing platform brought along interesting features that made communicating and publishing information **much** easier. In 2005, I joined Google; during the winter holidays that year, I implemented a light-weight client for Blogger that became the start of Emacs package **g-client** — this package provides Emacs wrappers for Google services that provide a RESTful API.

## 15.14 The RESTful Web — Web Wizards And URL Templates For Faster Access

Today, the Web, based on URLs and HTTP-style protocols is widely recognized as a platform in its own right. This platform emerged over time — to me, Web APIs arrived in the late 90's when I observed the following with respect to my own behavior on many popular sites:

1. I opened a Web page that took a while to load (remember, I was still using Emacs-W3),
2. I then searched through the page to find a form-field that I filled out, e.g., start and end destinations on Yahoo Maps,
3. I hit **submit**, and once again waited for a heavy-weight HTML page to load,
4. And finally, I hunted through the rendered content to find what I was looking for.

This pattern repeated across a wide-range of interactive Web sites ranging from AltaVista for search (this was pre-Google), Yahoo Maps for directions, and Amazon for product



searches to name but a few. So I decided to automate away the pain by creating Emacspeak module **emacspeak-websearch** that did the following:

1. Prompt via the minibuffer for the requisite fields,
2. Consed up an HTTP GET URL,
3. Retrieved this URL,
4. And filtered out the specific portion of the HTML DOM that held the generated response.

Notice that the above implementation hard-wires the CGI parameter names used by a given Web application into the code implemented in module **emacspeak-websearch**. REST as a design pattern had not yet been recognized, leave alone formalized, and module **emacspeak-websearch** was initially criticized as being fragile.

However, over time, the CGI parameter names remained fixed — the only things that have required updating in the Emacspeak code-base are the content filtering rules that extract the response — for popular services, this has averaged about one to two times a year.

I later codified these filtering rules in terms of XPath, and also integrated XSLT-based pre-processing of incoming HTML content before it got handed off to Emacs-W3 — and yes, Emacs/Advice once again came in handy with respect to injecting XSLT pre-processing into Emacs-W3!

Later, in early 2000, I created companion module **emacspeak-url-templates** — partially inspired by Emacs' **webjump** module. URL templates in Emacspeak leveraged the recognized REST interaction pattern to provide a large collection of Web widgets that could be quickly invoked to provide rapid access to the right pieces of information on the Web.

The final icing on the cake was the arrival of RSS and Atom feeds and the consequent deep-linking into content-rich sites — this meant that Emacspeak could provide audio renderings of useful content without having to deal with complex visual navigation! While Google Reader existed, Emacspeak provided a light-weight **greader** client for managing ones feed subscriptions; with the demise of Google Reader, I implemented module **emacspeak-feeds** for organizing feeds on the Emacspeak desktop. A companion package **emacspeak-webospace** implements additional goodies including a continuously updating ticker of headlines taken from the user's collection of subscribed feeds.

## 15.15 Mashing It Up — Leveraging Evolving Web APIs

The next step in this evolution came with the arrival of richer Web APIs — especially ones that defined a clean client/server separation. In this respect, the world of Web APIs is a somewhat mixed bag in that many Web sites equate a Web API with a JS-based API that can be exclusively invoked from within a Web-Browser run-time. The issue with that type of API binding is that the only runtime that is supported is a full-blown Web browser; but the arrival of native mobile apps has actually proven a net positive in encouraging sites to create a cleaner separation. Emacspeak has leveraged these APIs to create Emacspeak front-ends to many useful services, here are a few:

1. Minibuffer completion for Google Search using Google Suggest to provide completions.
2. Librivox for browsing and playing free audio books.

3. NPR for browsing and playing NPR archived programs.
4. BBC for playing a wide variety of streaming content available from the BBC.
5. A Google Maps front-end that provides instantaneous access to directions and Places search.
6. Access to Twitter via package **twittering-mode**.

And a lot more than will fit this margin! This is an example of generalizing the concept of a mashup as seen on the Web with respect to creating hybrid applications by bringing together a collection of different Web APIs. Another way to think of such separation is to view an application as a **head** and a **body** — where the **head** is a specific user interface, with the **body** implementing the application logic. A cleanly defined separation between the **head** and **body** allows one to attach *different* user interfaces i.e., **heads** to the given **body** without any loss of functionality, or the need to re-implement the entire application. Modern platforms like Android enable such separation via an Intent (<http://developer.android.com/reference/android/content/Intent.html>) mechanism. The Web platform as originally defined around URLs is actually well-suited to this type of separation — though the full potential of this design pattern remains to be fully realized given today’s tight association of the Web to the Web Browser.

## 15.16 Conclusion — Turning Twenty

In 1996, I wrote an article entitled User Interface — A Means To An End (<http://www.drdoobs.com/user-interface-a-means-to-an-end/184410453>) pointing out that the size and shape of computers were determined by the keyboard and display. This is even more true in today’s world of tablets, phablets and large-sized phones — with the only difference that the keyboard has been replaced by a touch screen. The next generation in the evolution of **personal** devices is that they will become truly personal by being wearables — this once again forces a separation of the user interface peripherals from the underlying compute engine. Imagine a variety of wearables that collectively connect to one’s cell phone, which itself connects to the cloud for all its computational and information needs. Such an environment is rich in possibilities for creating a wide variety of user experiences to a single underlying body of information; Eyes-Free interfaces as pioneered by systems like Emacspeak will come to play an increasingly vital role alongside visual interaction when this comes to pass.

–T.V. Raman, San Jose, CA, September 12, 2014

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## 16 Acknowledgments

Thanks.

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