

ORG-MODE FILES AS EDITABLE WEB PAGES

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1 Introduction

With this, we can export the org-mode files as editable web pages where the user can edit the file and the changes will be saved to both the html file as well as the org file. This is very useful for the users who don't know how to use org mode in emacs or infact emacs also. The user can just edit the file in

graphical User-interface mode and the changes made to the file will be saved automatically to both the org file and the html web page.

2 Installation and configuration

For exporting Org mode files as editable web pages, you will need Emacs 24 or later and recent versions of elnode and Org-mode. Then you have to install org-ehhtml package.

2.1 Emacs 24 or later

2.1.1 Installation

First of all, download the source code of emacs24.1.tar.bz2 from the link here. Then you need to download some of the libraries to compile the configure file of Emacs24 or later versions. Just install the libraries by typing

```
sudo apt-get install libgtk2.0-dev libtiff4-dev libgif-dev libjpeg62-dev libpng12-dev
```

Then untar the emacs folder using the command. say i downloaded the .bz2 file of emacs24.1.

```
tar -xvfj emacs24.1.tar.bz2
```

Then run the following commands to successfully install the emacs24 or later version.

```
cd emacs-24.1
./configure
make
sudo make install
```

Note :: After running the ./configure command, just check the compilation commands and see, whether it successfully makes a Makefile without printing any error. If any error comes about library not found then you have to install that library and then again run the configure command.

2.2 Elnode

Elnode is an evented IO webserver in Emacs Lisp for handling HTTP server. Elnode will not run on anything less than Emacs24. Elnode requires Emacs24's lexical binding as it makes extensive use of closures. Elnode is a nice simple server with few dependencies and is used for prototyping webapps, browser testing and for asynchronous apps like chat apps.

2.2.1 Installation

Elnode is packaged in marmalade and can be downloaded from the link here. But the short version to download the packages in emacs is to add the following the code to the .emacs or the .emacs.d/init.el file.

```
(add-to-list 'package-archives'("marmalade" . "http://marmalade-repo.org/packages/"))
```

And then type

```
M-x list-packages OR M-x package-list-packages
```

find Elnode in the list and press i or ENTER to install it.

Yet one more way to install the Elnode package. Download the package locally from the repository github-elnode. and then type

```
M-x package-install-file [RET] elnode-0.9.9.tar [RET]
```

You also have to install the following packages for elnode to start working :: just type M-x list-packages find these packages and install.

web-0.1.4 or later A useful HTTP client

db-0.0.1 A database for EmacsLisp -lexical-binding.

kv-0.0.9 key/value data structure functions.

fakir-0.0.14 fakeing bits of Emacs

creole-0.8.14 A parser for the Creole Wiki language.

2.2.2 Working of elnode

The simplest thing that Elnode does is let you start a webserver on a directory.

```
M-x elnode-make-webserver [RET]
```

```
Serve files from: [enter directory] [RET]
```

```
TCP Port: [mention something over 8000] [RET]
```

and there will be a webserver started on the specified port serving files from whatever directory you specified. You can define a handler function

```
(defun my-test-handler (httpcon)
  "Demonstration function"
  (elnode-http-start httpcon 200 '("Content-type" . "text/html"))
  (elnode-http-return httpcon "<html><b>HELLO!</b></html>"))
```

- **starting the server**

And then start the server:

```
(elnode-start 'my-test-handler :port [port-number] :host "localhost")
```

You can also start the server interactively... with

```
M-x elnode start
```

it interactively asks for the handler function and a port.

- **Stopping the server** If you remember the port you started your server on, then you will be able to stop it like:

```
(elnode-stop [port-number])
```

You can also stop the server interactively:

```
M-x elnode-stop
```

NOTE :: You can learn more about the elnode from the link here.

2.3 Org mode

You should have the latest version of org-mode for this to run. By default Emacs 24 or later versions of Emacs have the built-in latest versions of Org-mode.

2.4 Org-ehhtml

2.4.1 Installation

Before installing org-ehhtml package you need to have two packages

elnode-0.9.9 we have download this package above.

org-plus-contrib-20120928 this package can be downloaded from the link orgmode.org/elpa/ It is Outline-based notes management and organizer.

You can now install the org-ehhtml package by listing the packages and press `i` or `ENTER`.

```
M-x list-packages
```

2.4.2 Testing

Run the tests to make sure everything is working.

```
(ert "org-ehhtml")
```

2.4.3 Serving Files

Set the root directory of Org-mode files. For now, first check the example files used in the tests, we can customise the variable.

```
(setq org-ehhtml-docroot test-org-ehhtml-example-dir)
```

You can change the directory by typing

```
(setq org-ehhtml-docroot [directory path])
```

2.4.4 starting elnode

Say i starts on port number 8888.

```
(elnode-start 'org-ehhtml-handler :port 8888)
```

Now you point your browser firefox or chromium browser to `http://localhost:8888/` or `http://127.0.0.1:8888/` This will point you to the directory path and the list of files present in the directory will appear. Now you can click on the file name and move your mouse over the page. Editable portions of the page will be highlighted, click on these to edit.

Warning :: Be sure you backup your files before you start editing them through this web interface as it could trash your files.

Note :: You can learn more about org-ehhtml by clicking on the link here.

2.4.5 User Authentication

To enable user authentication replace the 'org-ehhtml-handler elnode handler with the 'org-ehhtml-auth-handler from `src/org-ehhtml-auth.el`.

2.4.6 Integration with version control

org-ehhtml provides an `org-ehhtml-after-save-hook` which can be used to commit all changes to a local version control system.

```
(require 'vc)

(add-hook
 'org-ehhtml-after-save-hook
 (lambda ()
  (let ((file (buffer-file-name (current-buffer))))
   (vc-checkin (list file) (vc-backend file) nil "edit through org-ehhtml"))))
```

Note :: This could screw up your version control as well as your flat files.

Also you can learn more about org-ehhtml from the link <http://eschulte.me/org-ehhtml>.