



Simplifying Lighttpd Config

- Summary:

With the use of `mod_simple_vhost`, I was able to simplify the configuration of my lighttpd web server to a more manageable file size.

This also lets me streamline the addition of virtual hosts, allowing me to create new ones without restarting or reloading lighttpd or even editing the configuration file.



Lighttpd Overview

- Fast, lightweight web server
 - Supports vhosts
- Modular, allows extension of features
 - `mod_proxy` – proxy to another server
 - `mod_rewrite`, `mod_magnet` – SEO or clean URLs
 - `mod_simple_vhost` – simplify vhost configuration
- Low use of system resources
- Open source, free, etc



The Problem

- Each vhost takes at least 3-4 lines of configuration
 - 13 vhosts X 4 lines = 52 lines!
- Organizing configuration file can be a hassle, hard to find individual vhosts
- Adding a new vhost requires reloading or restarting the web server and sudo/root access



Old Configuration

```
josh@arctos: /etc/lighttpd
File Edit View Search Terminal Help
www.noobbox.com
$HTTP["host"] =~ "(^|\.)noobbox.com" {
    server.document-root = "/vhosts/noobbox.com/www.noobbox.com/public_html"
    server.error-handler-404 = "/index.php"
}

# sora.noobbox.com
$HTTP["host"] =~ "(^|\.)sora.noobbox.com" {
    server.document-root = "/vhosts/noobbox.com/sora.noobbox.com/public_html"
    "
}

# oxy.noobbox.com
$HTTP["host"] =~ "(^|\.)oxy.noobbox.com" {
    server.document-root = "/vhosts/noobbox.com/oxy.noobbox.com/public_html"
}

# waim.noobbox.com
$HTTP["host"] =~ "(^|\.)waim.noobbox.com" {
    server.document-root = "/vhosts/noobbox.com/waim.noobbox.com/public_html"
    "
}
163,1 70%
```



Solution - mod_simple_vhost

- Assume all vhosts use same document-root structure, example:
 - `/var/vhosts/HOST.NAME/public_html`
`/var/vhosts/HOST.NAME/logs`
`/var/vhosts/HOST.NAME/private`
- Fills in `HOST.NAME` with requested hostname (the requested domain name in the browser)
- Falls back to a default host if the directory structure for a requested host doesn't exist



Why is this ideal?

- I already had same document-root structure
- Allows me to add vhosts without editing configuration files or restarting/reloading lighttpd – simply create the directories
 - Don't necessarily need sudo or root access
- Also option to use conditionals (original config setup) if I need custom configurations for a vhost



Installing/enabling

- Debian/Ubuntu
 - `sudo aptitude install lighttpd`
 - `sudo lighty-enable-mod simple-vhost`
 - `sudo vim /etc/lighttpd/conf-available/10-simple-vhost.conf` to match your directory structure
 - `sudo service lighttpd restart`
- Similar procedure for other distros or compiling from source
- Can also manually enable module in `/etc/lighttpd/lighttpd.conf`



mod_simple_vhost config file

```
josh@arctos: /etc/lighttpd/conf-available
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server.modules += ( "mod_simple_vhost" )

$HTTP["host"] !~ "^(www\..*)$" {
    simple-vhost.server-root      = "/var/vhosts/"
    simple-vhost.document-root   = "/public_html/"
    simple-vhost.default-host    = "arctos.noobbox.com"
}
# www.*
$HTTP["host"] =~ "^(www\..*)" { url.redirect = ( "^/(.*)" => "http://%1/$1" ) }
```




SSH Example

- ...here's where I SSH and show you in the browser



Drawbacks

- One log file for all sites
- Must use the same directory structure and file handlers as other vhosts
- Can't customize configuration for an individual vhost (easily)
 - Must use nested conditionals
- Can't easily share document roots with multiple vhosts
 - `jpgknight.com` and `www.jpgknight.com` are treated as two separate vhosts by default



Future Considerations

- More easily customize configuration for individual vhosts
 - Clean URLs on Drupal sites
- Look into separating log files
- Possibly build web interface to add vhosts



Resources

- redmine.lighttpd.net/wiki/lighttpd/Docs:ModSimpleVhost
- Google
- Ubuntu Forums