

NGinX Reverse Proxy Installation - Configuration - Notes and Links - Ubuntu Server 14.04

[Note] Many of the "Extra" Parameters found online were for older versions of NGinX and are now defaults and not needed. Keep it simple and only add parameters where needed, like to enable older weak protocols.

Installation on Ubuntu 14.04 Server

```
sudo apt-get install -y nginx
```

Restart Alias:

```
echo "alias nginxrestart='systemctl restart nginx ; nginx -t ; systemctl status nginx'" > ~/.bashrc
source ~/.bashrc
nginxrestart
```

Default Locations:

```
/etc/nginx/sites-{enabled,available}
## Create Sites in available, enable by symlinking to enabled and restart nginx
/etc/ssl/{certs,private}
#SSL Folders, Private has stricter Permissions
```

General Configs Examples

```
location / {
root /data/www;
}
```

##REDIRECT NON SSL

```
server {

    listen 80;
    server_name www.domain.com domain.com;

    return 301 https://$host$request_uri;

}
```

##HTTP WEBSITE SERVING STATIC FILES

```
server {

    listen 80;
    server_name www.domain.com domain.com;

    location / {
        root /path/www;
    }
}
```

##SSL HTTPS DOMAIN PROXY PASS

```

server {
listen          443 ssl;
server_name     www.domain.com domain.com;

ssl on;
ssl_certificate /etc/ssl/certs/ssl-bundle.crt;
ssl_certificate_key /etc/ssl/private/server.key;

location / {

proxy_pass      https://PrivateIP:443/;
include         /etc/nginx/proxy.conf;
## ONE OF MY FAVORITE FEATURES, LINK TO COMMON CONFIGS!

}
}

```

##/etc/nginx/proxy.conf

```

cat << 'EOF' >proxy.conf
proxy_redirect      off;
proxy_set_header    Host                $host;
proxy_set_header    X-Real-IP           $remote_addr;
proxy_set_header    X-Forwarded-For     $proxy_add_x_forwarded_for;
proxy_set_header    X-Forwarded-Host    $host:$server_port;
proxy_set_header    X-Forwarded-Server  $host:$server_port;
proxy_set_header    X-Forwarded-Proto   $scheme;
client_max_body_size 10m;
client_body_buffer_size 128k;
proxy_connect_timeout 90;
proxy_send_timeout    90;
proxy_read_timeout    90;
proxy_buffers         32 4k;
proxy_pass_request_headers on;
EOF

```

##/etc/nginx/websocket-proxy.conf

```

cat << 'EOL'>websocket-proxy.conf
proxy_http_version  1.1;
proxy_set_header    Upgrade              $http_upgrade;
proxy_set_header    Connection           "Upgrade";
proxy_set_header    Authorization        "";
proxy_read_timeout  86400;
proxy_set_header    Host                 $host;
proxy_set_header    X-Real-IP            $remote_addr;
proxy_set_header    X-Forwarded-Server   $host;
proxy_set_header    X-Forwarded-For     $proxy_add_x_forwarded_for;
proxy_redirect      off;
EOL

```

##Configure Auth via HTPASSWD

```

auth_basic "Restricted";
auth_basic_user_file /etc/nginx/.htpasswd;

##FOLLOW SYMLINKS
You can put these directives inside /etc/nginx/nginx.conf OR inside of individual location/server tags. [In
NGinx.Conf it would go inside the http { } portion]
disable_symlinks off;    ##Allow following Symlinks
autoindex      on;      ##Needed if Index.html doesn't point to files

```

Enable Apache (Some sites can't proxy port 80, causes redirects, but you can enable Apache default-ssl with invalid certs and just keep the "good" SSL Config on NGINX, the encryption will still be viewed as SSL Confirmed to end user)

```
sudo a2ensite default-ssl && sudo a2enmod ssl && sudo service apache2 restart
```

[Read more on HTPASSWD](#)

Usefull Reads:

<https://help.ubuntu.com/community/Nginx/ReverseProxy>

<https://support.comodo.com/index.php?/Default/Knowledgebase/Article/View/789/37/certificate-installation-nginx>

http://nginx.org/en/docs/http/nginx_http_upstream_module.html#variables

<https://www.digitalocean.com/community/tutorials/understanding-nginx-http-proxying-load-balancing-buffering-and-caching>

<http://nginx.org/en/docs/http/websocket.html>

<http://stackoverflow.com/questions/12102110/nginx-to-reverse-proxy-websockets-and-enable-ssl-wss>

<http://pankajmalhotra.com/Websockets-SSL-TLS-Termination-Using-NGINX-Proxy/>

<https://spin.atomicobject.com/2012/02/28/load-balancing-and-reverse-proxying-with-nginx/>

<https://www.nginx.com/resources/admin-guide/load-balancer/>