



# User Guide Tiny Linux Firewall

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## *Company Information:*

### **WebPanel LLC**

*9191 Bolsa Ave, Ste 120*

*PMB 103. Westminster, CA 92683*

*Email: Info@webpanel.network*

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- **Introduction**

- **Multiple Operating Systems**

*Tiny Linux Firewall Runs On Multiple Operating Systems*

*Tiny Linux Firewall is a software running by commands of linux server (server-based) and a way to protect the machine from any unwanted traffic from outside.*

- **Three Firewalls to Prevent Cyber Attacks**

*Firewalls protect distributed denial of service (DDoS Attacks) and protection of application attacks by using system rules and custom rules.*

System Rules:

- myRules-Set-QV.sh
- myRules-ServerLevel.sh
- myRules-2Iptables.sh

Custom Rules:

- rules.sh

*The smartest firewall in the world with 3 unique firewall layouts in today society.*

- **Guide to Use Nano**

*Install Text Editor*

```
yum install nano
```

- **Running Nano**

**Example: Connect and edit your work**

*To open a file, just type in "nano" at the command prompt*

```
nano /path/to/filename
```

*Nano will follow the path and open that file if it exist. If it does not exist, it'll start a new blank with that filename in that directory.*

**Example: To save your work**

- Ctrl + o  
Enter

**Example: To exit your work**

- Ctrl + x  
Enter

*Hit Ctrl + G to bring up the Help documentation and scroll down to see a list of valid shortcuts.*

- **Guide to Use Firewall**

- **Install and Uninstall Firewall**

**Example: To install firewall**

*Choose tinylinuxfirewall version*

*Copy and Paste and Hit Enter*

## **Example: To uninstall firewall**

**Running Command:**

```
sh /tinylinuxfirewall/uninstall.sh
```

- **Running System Rules and Custom Rules**

### **Example: To open system rules**

```
nano /etc/tinylinuxfirewall/Firewall/myRules-Set-QV.sh
```

```
nano /etc/tinylinuxfirewall/Firewall/myRules-ServerLevel.sh
```

```
nano /etc/tinylinuxfirewall/Firewall/myRules-2Iptables.sh
```

- Save file: Ctrl +o

Enter

Exit: Ctrl + x

**Increase the numbers in system rules myRules-Set-QV.sh, myRules-ServerLevel.sh, myRules-2Iptables.sh for manage visitors direct connecting to your website.**

**Limit:**

```
iptables -A TLF-SYN-FLOOD -p tcp --syn -m state --state NEW -m limit --limit 80/second  
--limit-burst 160 -j RETURN
```

**Hitcount:**

```
iptables -A TLF-SYN-FLOOD -p tcp --syn -m state --state NEW -m recent --update --  
seconds 240 --hitcount 80 -j RETURN
```

**Connlimit:**

```
iptables -A TLF-SYN-FLOOD -p tcp --syn -m state --state NEW -m connlimit --connlimit-  
above 100 -j REJECT
```

#### **Example: To open custom rules**

```
nano /etc/tinylinuxfirewall/rules.sh
```

- Save file: Ctrl +o  
Enter  
Exit: Ctrl + x
- **Running Firewall Services**  
**Example: To apply new rules**

```
service tlfid
```

*Choose firewall 1, 2, 3 (option) and hit enter.*

- **Guide to Create a Web Hosting Account**

- **Running Command**  
**Example: To Create a Web Hosting Account**

```
*****  
*  
* WELCOME TO WEBPANEL  
* Instant account activation easy 1-click enter  
*  
* Apache HTTP Server  
*  
* Command: cd /root  
* Command: chmod 0755 httpd.sh  
* Command: sh httpd.sh domain.com  
*  
* Nginx Web Server  
*  
* Command: cd /root  
* Command: chmod 0755 nginx.sh  
* Command: sh nginx.sh domain.com  
*  
* You must install apache http server or nginx web server to use the features  
*  
* PLEASE ENTER COMMAND:  
*  
*****
```

## Step 1

sh /etc/tinylinuxfirewall/AccountPanel/createaccount.sh

Change domain.com to your domain like sshdbox.com

```
*****  
* CONTROL PANEL  
* High Performance - Reverse Proxy Server  
*  
* BACK END IP  
*  
* Command: cd /root  
* Command: chmod 0755 ip_reverse.sh  
* Command: sh ip_reverse.sh backend-serverip  
*  
* DOMAIN  
*  
* Command: cd /root  
* Command: chmod 0755 nginx_reverse.sh  
* Command: sh nginx_reverse.sh domain.com  
*  
* After that point the domain to reverse proxy server  
*  
* You must install nginx web server to use the features  
* PLEASE ENTER COMMAND:  
*  
*****
```

## Step 2

sh /etc/tinylinuxfirewall/ReverseProxyPanel/reverseproxyserver.sh

Change backend-serverip to your server ip

Change domain.com to your domain like sshdbox.com

The screenshot shows a terminal window with the title bar "root@mail:/etc/httpd/conf.d". The window contains the text of a configuration file named "sshdbox.com.conf". A yellow box highlights the line "<VirtualHost \*:80>" and the text "Step 3" is overlaid on this line. The file content includes server administration details and a virtual host definition for port 80. The bottom of the screen shows the nano editor's command-line interface with various keyboard shortcuts.

```
GNU nano 2.3.1          File: sshdbox.com.conf          Modified  
<VirtualHost *:80> Step 3  
ServerAdmin webmaster@sshdbox.com  
ServerName sshdbox.com  
ServerAlias www.sshdbox.com  
DocumentRoot /var/www/sshdbox.com/public_html  
</VirtualHost>  
  
^G Get Help  ^O WriteOut  ^R Read File  ^Y Prev Page  ^K Cut Text  ^C Cur Pos  
^X Exit      ^J Justify   ^W Where Is   ^V Next Page  ^U UnCut Text ^T To Spell
```

nano /etc/httpd/conf.d/changedomain.com.conf

Change port 80 to 81

Save file: Ctrl + o

Enter

root@mail:/etc/nginx/conf.d

GNU nano 2.3.1 File: sshdbox.com.conf

```
server {
    server_name www.sshdbox.com sshdbox.com;
    error_log /var/log/nginx/warn_error.log;
    root /var/www/sshdbox.com;

location / {
    error_page 405 = @backend;
    add_header X-Cache "HIT from Backend";
    proxy_connect_timeout      60;
    proxy_send_timeout         60;
    proxy_read_timeout         60;
    send_timeout               60;
    proxy_pass http://155.138.238.83:80;
    access_log /var/log/nginx/verified.log;
}
location @backend {
    internal;
    proxy_connect_timeout      60;
    proxy_send_timeout         60;
    proxy_read_timeout         60;
    send_timeout               60;
    proxy_pass http://155.138.238.83:80;
    access_log /var/log/nginx/verified.log;
}
location ~ \.(html|htm|php|jsp|cgi|pl|py|3gp|gif|jpg|jpeg|png|ico|${
proxy_connect_timeout      60;
proxy_send_timeout         60;
proxy_read_timeout         60;
send_timeout               60;
proxy_pass http://155.138.238.83:80;
access_log /var/log/nginx/verified.log;
}
location ~ /\.ht {
    deny all;
}
}

^G Get Help ^O WriteOut ^R Read File ^Y Prev Page ^K Cut Text ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text^T To Spell
```

## Step 4

nano /etc/nginx/conf.d/changedomain.com.conf

Change proxy\_pass <http://ip:80> to 81

Save file: Ctrl + o

Enter

**Restart two webservers**

service httpd restart & service nginx restart

- **Move Data to New Server**

- **Instruction**

1. Create a Hosting Account
2. Create Database, User and Password
3. Upload Backup Data to New Server
4. Restore Mysql Database

### Restore Database

Upload to root: mysqlbackup.sql.gz

Decompress: mysqlbackup.sql.gz

Run command: gunzip mysqlbackup.sql.gz

Now to restore a backup database change database\_user database\_name:

Run command:

mysql -u database\_user database\_name -p < mysqlbackup.sql

Enter: database\_password

### Change All Files and Folders Permissions 0644 / 0755

Command: cd /var/

Command: chmod -R 644 www

Command: chmod -R +X www