

UbuntuCon ASIA  
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# Web Hosting Server using Ubuntu and Cyberpanel





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# What is CyberPanel?

Cyberpanel is a control panel of OpenLiteSpeed where you can manage your websites, install WordPress, and much more. In fact, you do not need CyberPanel in order to Install WordPress on an OpenLiteSpeed web server (but with Cyberpanel you can install WordPress in a single click) With CyberPanel you can manage SSL, create more websites, change PHP version up to 8.0, access files via builtin File manager, and much more, so I recommend CyberPanel.



# What is OpenLiteSpeed?

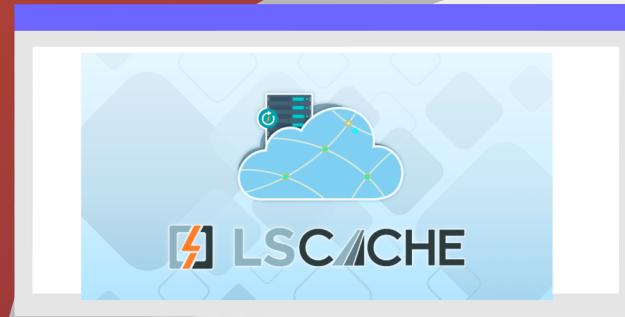
One of the fastest webserver solutions out there is LiteSpeed. You shouldn't be confused between OpenLiteSpeed and LiteSpeed; both are the same and share the same functionalities and features. The term open stands for open-source and free. You can install OpenLiteSpeed on any VPS server running on fresh Ubuntu 20.04 or CentOS 8.x. VPS will be now managed by Cyberpanel, a web interface to control OpenLiteSpeed.



OpenLiteSpeed

# What is LSCache

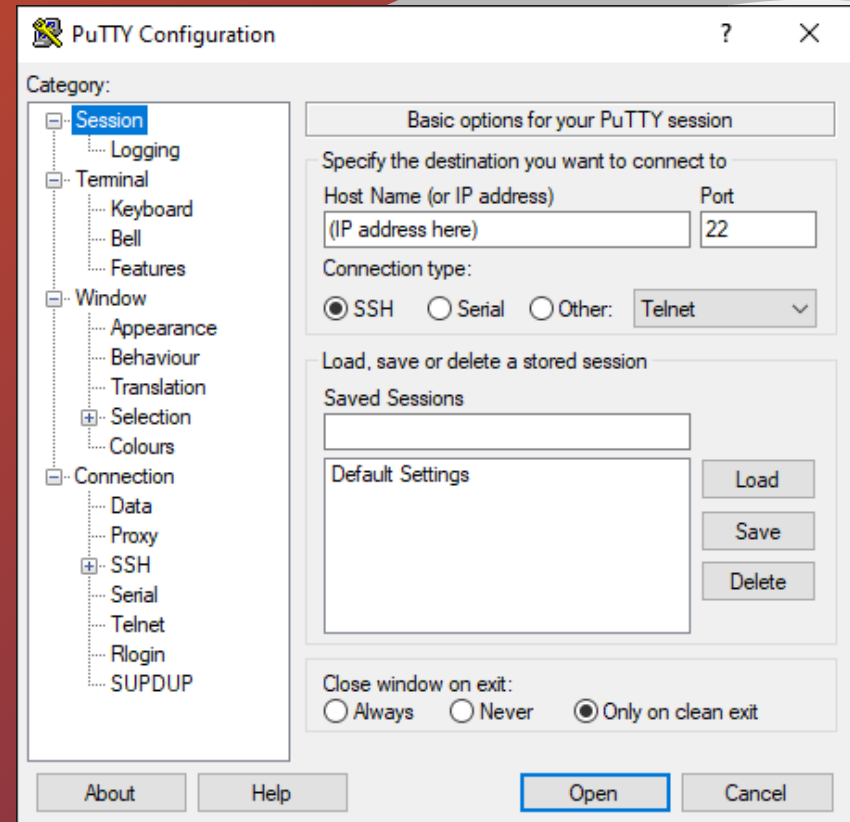
**LSCache** is a built-in Openlitespeed cache solution. The plugin also works with Apache, Nginx server but there are features that only work on OpenLiteSpeed server.



## 2. Install CyberPanel

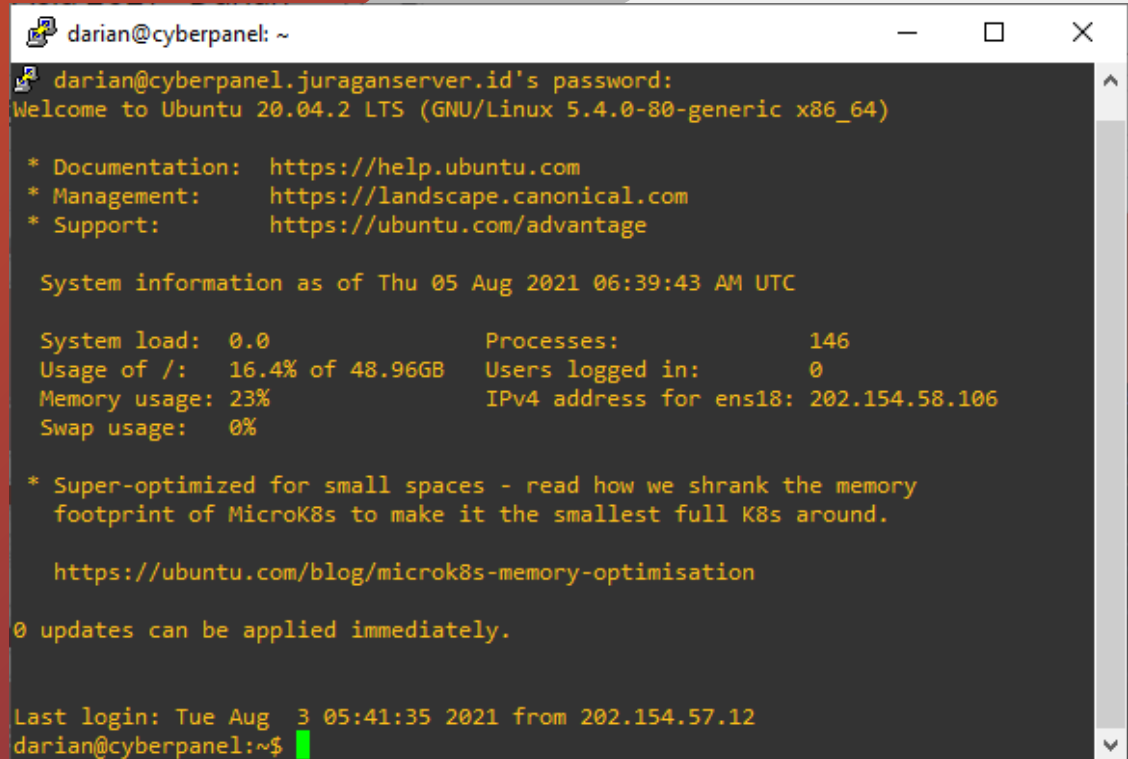
Open an SSH connection using **PUTTY** or similar software and run. Type the **IP address** and select **port 22**. Now click on open. If you don't want to use any software, open Command Prompt in Windows and type `ssh root@serverIP` the interface is identical in both CMD and Putty.

Tip: you can use Windows's Command Prompt to access your server, **use `ssh root@IP_Address`**



## 2. Install CyberPanel

The terminal will show you important links and a few other things you might need.



```
darian@cyberpanel: ~  
darian@cyberpanel.juraganserver.id's password:  
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.4.0-80-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
  
System information as of Thu 05 Aug 2021 06:39:43 AM UTC  
  
System load:  0.0                Processes:            146  
Usage of /:   16.4% of 48.96GB    Users logged in:     0  
Memory usage: 23%                IPv4 address for ens18: 202.154.58.106  
Swap usage:   0%  
  
* Super-optimized for small spaces - read how we shrank the memory  
  footprint of MicroK8s to make it the smallest full K8s around.  
  
  https://ubuntu.com/blog/microk8s-memory-optimisation  
  
0 updates can be applied immediately.  
  
Last login: Tue Aug 3 05:41:35 2021 from 202.154.57.12  
darian@cyberpanel:~$
```

## 2. Install CyberPanel

Since we have installed CyberPanel, the page will display the version information and command which you can use to show the CyberPanel password. But if you installed plain Ubuntu you can follow the given instruction.

Type the following command to install CyberPanel.

```
sh <(curl https://cyberpanel.net/install.sh || wget -O -  
https://cyberpanel.net/install.sh)
```





## 2. Install CyberPanel

Now just follow the on-screen options. Just to cut out steps, use the following to install CyberPanel. The new version may have slightly different options.

Select these options 1 > 1 > r > y – y – Yes | remote database: N

The process took 6 minutes to complete. Once done, the end result will have login details in this format, copy this with **CTRL+C**. If you plan to leave the SSH screen, go with the default password (1234567) option. Of course, you're going to change it later.

Visit: [https://\(YOUR\\_SERVER\\_IP\):8090](https://(YOUR_SERVER_IP):8090)

Panel username: example

Panel password: example

Mysql username: example

Mysql password: example



## ***OPTIONAL 2.1. Update CyberPanel and OpenLiteSpeed***

Very Important: It will install the latest Cyberpanel 2.x with stable OpenLiteSpeed version 1.6.x, you can upgrade both with following commands, **which is optional**.



## ***OPTIONAL 2.1. Update CyberPanel and OpenLiteSpeed***

### **Update CyberPanel**

Open an SSH connection and type. Use PUTTY to open SSH connection.

```
sh <(curl  
https://raw.githubusercontent.com/usmannasir/cyberpanel/stable/preU  
pgrade.sh || wget -O -  
https://raw.githubusercontent.com/usmannasir/cyberpanel/stable/preU  
pgrade.sh)
```

## OPTIONAL 2.1. Update CyberPanel and OpenLiteSpeed

Update

OpenLiteSpeed

Update OpenLiteSpeed, open an SSH connection and type.

```
apt-get update && apt-get -y upgrade
```

It will update OpenLiteSpeed to the latest stable version.

OPTIONAL However, if you're willing to test out the cutting-edge OLS version here you go.

```
wget https://openlitespeed.org/packages/openlitespeed-1.6.21.tgz
tar -zxvf openlitespeed-1.6.21.tgz
cd openlitespeed
./install.sh
```

This step is optional to install the latest version of OpenLiteSpeed, remember there is a difference between latest and stable

### ***3. Access CyberPanel & Create a Website***

Before you install WordPress make sure to set up your DNS records. Point your Domain A and CNAME records to DigitalOcean or another server's IP address.

For this, you have to create a website by logging in with CyberPanel. You have to follow the given steps.

1. Access CyberPanel by typing your IP address followed by :8090 in the browser. it'll give a certificate error, click on Advanced and click proceed.

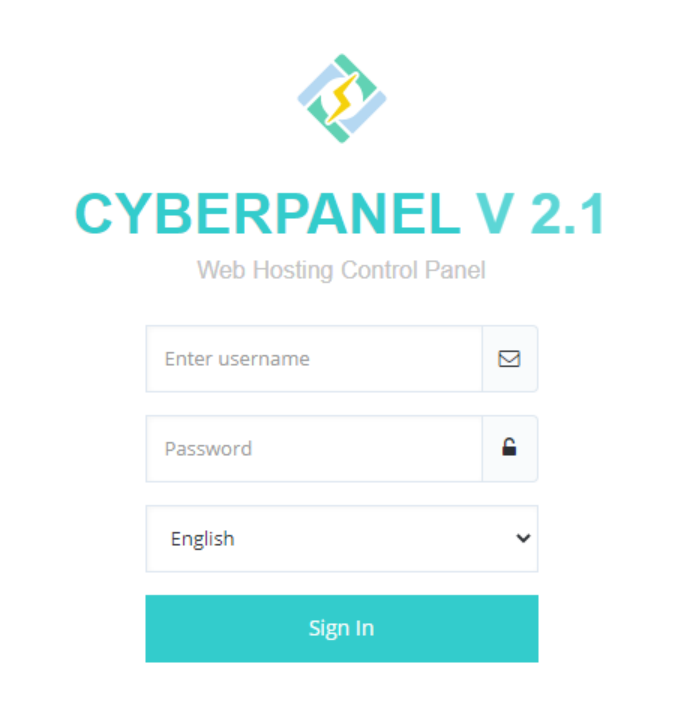
`http://(IP address):8090`

### 3. Access CyberPanel & Create a Website

2. Enter the username (usually admin) and password which you got earlier.

You can type the following command to get the password to access CyberPanel. (Open SSH connection and type this command)

```
sudo cat .litespeed_password
```

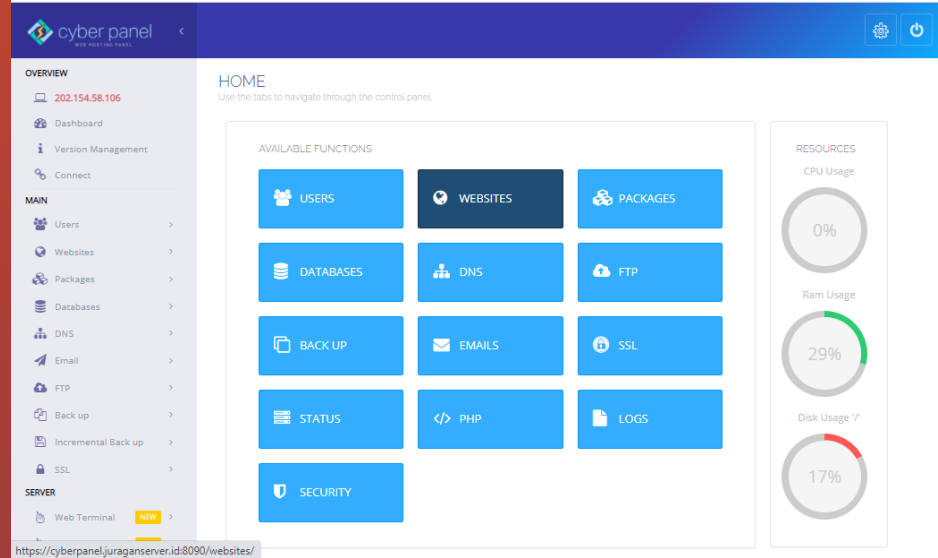


The image shows the login page for CyberPanel V 2.1. At the top is a logo consisting of a green diamond with a yellow lightning bolt. Below the logo, the text "CYBERPANEL V 2.1" is displayed in a large, teal font, followed by "Web Hosting Control Panel" in a smaller, grey font. The login form contains three input fields: "Enter username" with an envelope icon, "Password" with a lock icon, and a language dropdown menu currently set to "English". A teal "Sign In" button is positioned at the bottom of the form.

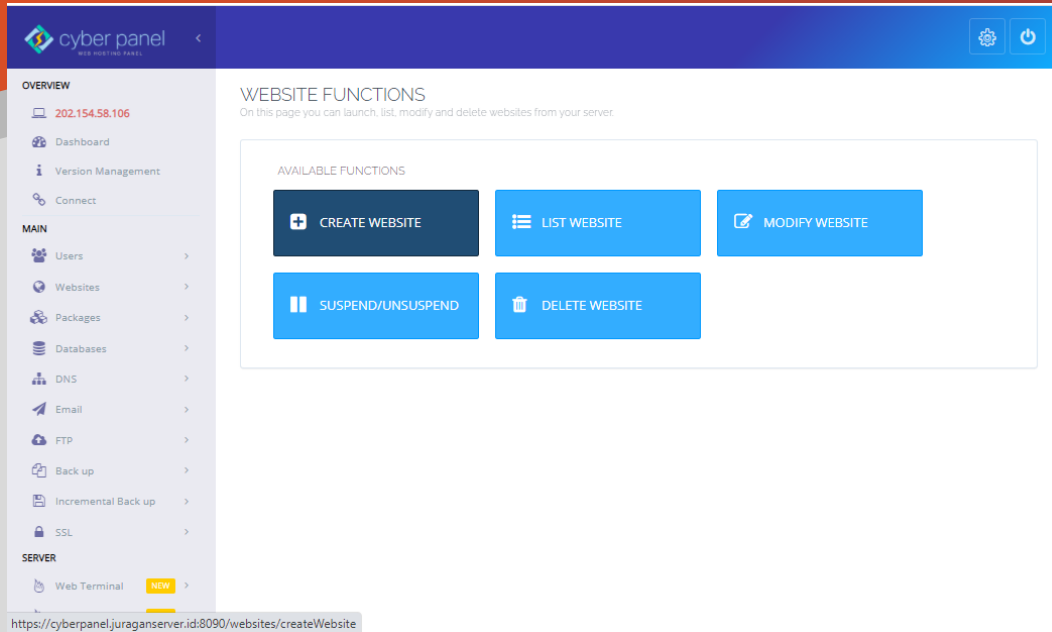
### 3. Access CyberPanel & Create a Website

#### 3. Go to website

In order to install a blog, first, we are going to create a Website entry in Cyberpanel. This is not a WordPress installation, the WordPress installation will take place after website entry. Login yo CyberPanel and click on the Website button.



### 3. Access CyberPanel & Create a Website



Click Website, go to  
Create Website.



### 3. Access CyberPanel & Create a Website

Select **Default** package and make sure to modify the package to let your WordPress site use maximum resources.

Enter the details like your domain name, email, and PHP version. You need to enter the following details.

Select owner: Admin

Domain name: example.com

Email: Your email address will go here

Php: PHP 8.0

/\* Additional features

SSL: If you plan to enable let's encrypt the free SSL tick option, we can always apply SSL anytime later.

DKIM: Helpful in email security.

### 3. Access CyberPanel & Create a Website

**CREATE WEBSITE**  
On this page you can launch, list, modify and delete websites from your server.

WEBSITE DETAILS

Select Package Default ▼

Select Owner admin ▼

Domain Name

Email

Select PHP PHP 8.0 ▼

Additional Features

- ☒ SSL
- ☒ DKIM Support
- ☐ open\_basedir Protection
- ☐ Create Mail Domain

[Create Website](#)

When you're ready to go,  
click Create Website.

## 4. Install WordPress with LSCache on PHP8

The motive here is installing WordPress which is not really hard to do since we have one-click installer here (which automates the user and database creation on MySQL).

**CyberPanel > List Website > Example.com > Manage > Application Installer > WP + LSCache**



## 4. Install WordPress with LSCache on PHP8

APPLICATION INSTALLER



WP

+ LSCache



Joomla

git

Git

## 4. *Install WordPress with LSCache on PHP8*

The WordPress installer also can be accessed from this link. Make sure to fill your IP Address and domain name, (Domain name should be the same which you entered earlier during Website creation)

:8090/websites/exmaple.com/wordpressInstall

Fill the details.

Blog Title:

Login User:

Login Password:

Email:

Path: Leave it empty or your choice

#### 4. Install WordPress with LSCache on PHP8

As soon as you hit the “**Install now**”, WordPress will be accessible to that domain. It’s an instant process so you should not be waiting for anything now.

You access the blog with `domain.com/wp-login.php`

### INSTALL WORDPRESS

Install WordPress with LSCache.

cyberpanel.juraganserver.id - Installation Details - Stress Test

Blog Title	<input type="text" value="Juragan Server"/>
Login User	<input type="text" value="admin"/>
Login Password	<input type="password" value="....."/>
Email	<input type="text" value="cyberpanel@juraganserver.id"/>
Path	<input type="text" value="Leave empty to install in website home directory. (Without pr"/>

Install Now

## 5. Enabling LetsEncrypt SSL for Domain and CyberPanel

Point your Domain to the Server IP address. Ensure DNS is correctly configured using this dns checker <https://dnschecker.org/>

- Login to the CyberPanel dashboard, and from the side panel go to following direction.

Go to SSL → Manage SSL → Select website from dropdown → Click on Issus SSL

`https://example.com:8090`

## 6. *Best LSCache Plugin Settings*

The LSCache plugin is already installed, you're ready to customize it further.

First, go to LSCache settings.

Enable Advanced Settings, and enabled the following settings.

- [5 Optimize] CSS/JS minify – combine – http/2 PUSH = ON
- [6 Tuning] Remove Query Strings, Remove WordPress Emoji
- [CDN 8] : Load JQuery Remotely > Google / CDNJS
- A wonderful article covering entire settings.



## 7. *Restore old WordPress from old host*

This section is not beginner-friendly as it requires advanced knowledge of SFTP software, archiving and extracting WordPress uploads directory from old to a new server.

If you plan to move to CyberPanel from an older WordPress installation, simply create Posts backup from Tools > Backup. Make a zip file of your uploads via SFTP or something. Move that ZIP file to CyberPanel and extract. Now restore the old WordPress backup.

The default restore file upload limit is 2MB, but you can change that from Cyberpanel dashboard.

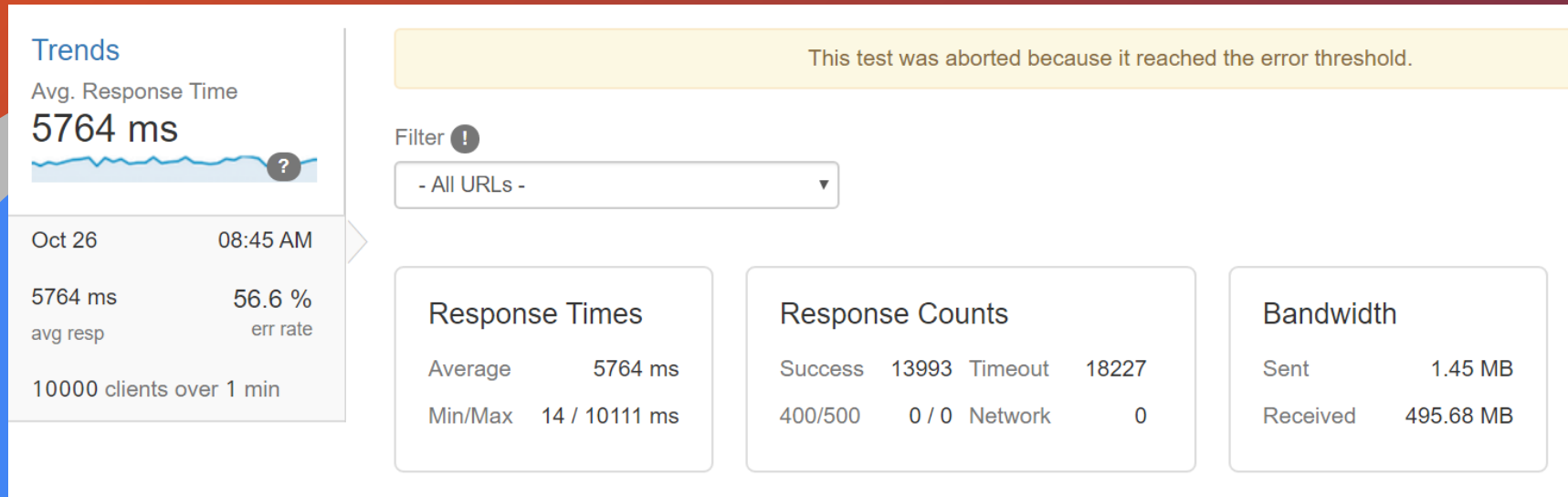
Mange PHP → BASIC → 8.0 → post\_max\_size = 10 MB to upload backup files.

## 8. Benchmark CyberPanel

Test #1. 10,000 Client per second on the homepage

The avg time was 100ms.

Success: 13,9993 It was able to sustain 20,000 Client/second for the first 10 seconds.



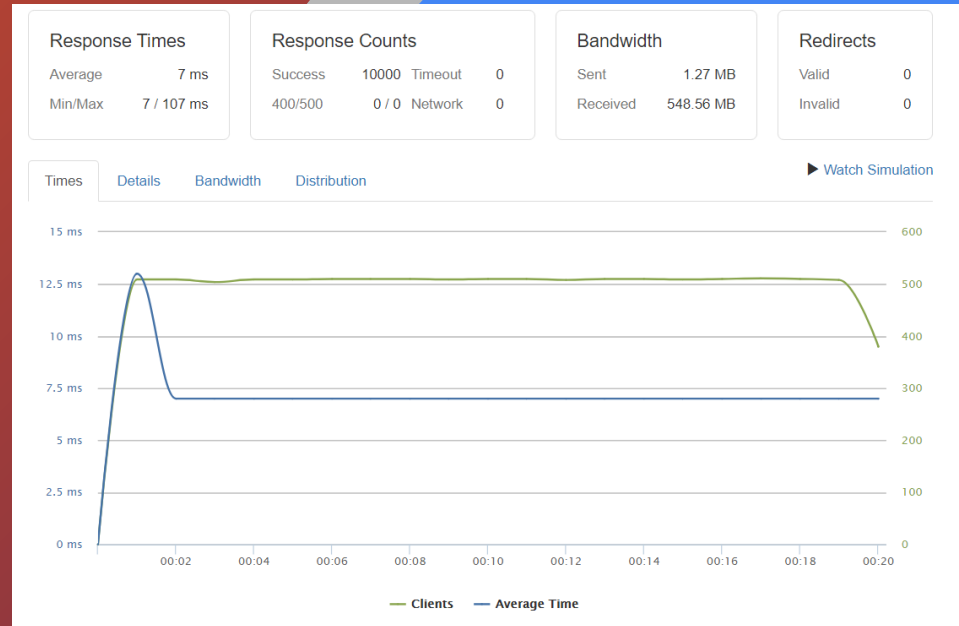
## 8. Benchmark CyberPanel

Test #2. 10,000 Total Client on Post page

The Success rate was 100% with no timeout, I ran the test for 20 seconds.

The avg time was 13 ms for the initial seconds and later goes to 7 ms!

So, unless you're getting more than 10000 hits per second on your WordPress site, the \$5 Droplet with CyberPanel will take care of that.



# THANK YOU!

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