

Linux Administration

This book describes detailed instructions for solving common issues with this OS.

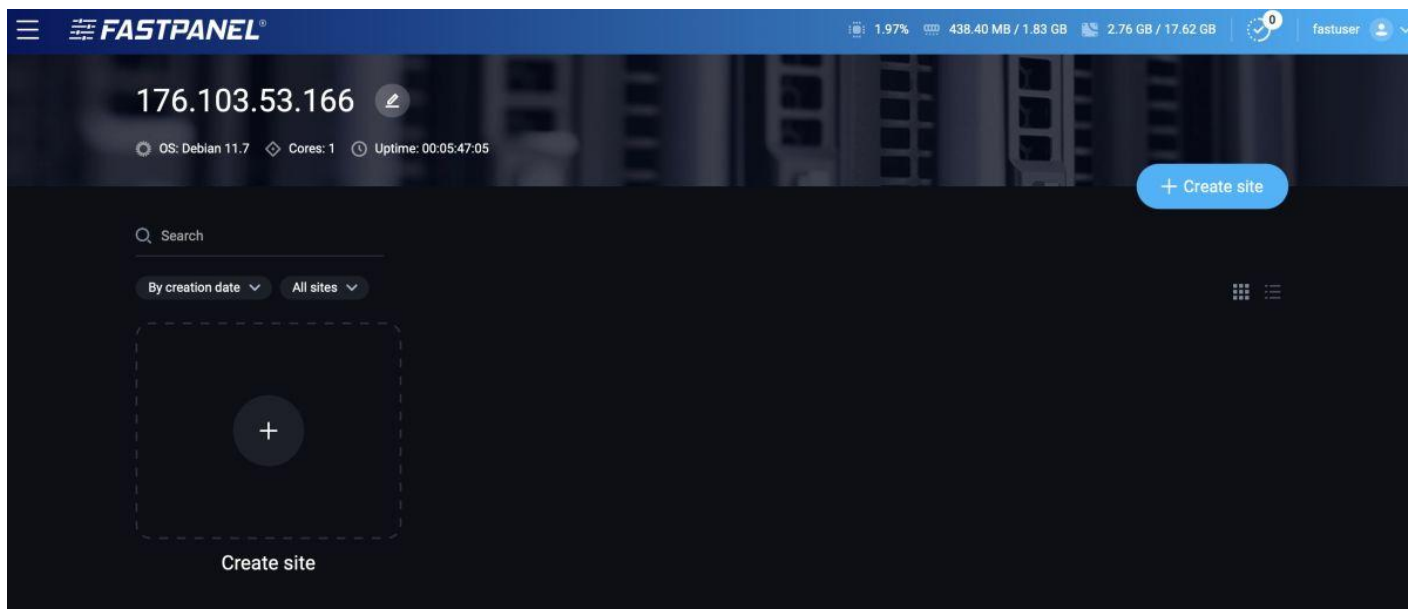
- Control Panels
 - FastPanel
 - HestiaCP
- VPN-server
- Disk partitioning
- Root password

Control Panels

This chapter will contain information about control panels that we install automatically.

FastPanel

FASTPANEL is a simple and powerful server management panel.



In order to enter the FastPanel control panel, you need to enter the address from which the panel will be available in the address bar of your browser, and then enter the login and password in the appropriate fields. All these data will be sent to you by e-mail after installing the operating system and control panel (for this, check the "FastPanel" checkbox on the OS selection page). Access data comes in this form (example):

“ Credentials to access FastPanel:

URL: <https://192.168.0.10:8888/>

Username: fastuser

Password: WiNUH28A

FASTPANEL is comfortable, functional and modern. Managing a server has never been easier!

- POWERFUL CAPABILITIES - everything you need to manage the server in one web application
- ACCESS RIGHTS SETTINGS - assigning access rights for specific users to specific sites
- EASE OF USE - it's easy to understand thanks to prompts and notifications

Create sites in a few clicks, manage mail, databases, backups, plan tasks and analyze traffic. Set and configure access rights as you like - each site can be assigned to a single user. To improve the security of your account, connect two-factor authentication.

Dynamic notifications allow you to be aware of the status of the server and sites. In addition, FASTPANEL includes a Web SSH client, site preview and a favicon editor.

Features

In order to make your work with FASTPANEL the most comfortable and effective we have added a variety of tools to work with the server

- BACKUP SYSTEM - place backups on your own servers or on Dropbox cloud storage.
- FILE MANAGER - manage files directly from the browser with the ability to upload files up to 1 GB.
- SSL CERTIFICATES - install free Let's Encrypt certificates in three clicks.
- CONTROL IPTABLES - increase the security of the server - manage firewall rules via web interface.
- CRON TASK WIZARD - plan tasks: e-mail distribution, data upload, antivirus checks.
- LOAD STATISTICS - analyze the statistics of the server resources consumed by the server resources in real time.

Modules

Need more features? Connect additional modules in the panel directly. We update the list of available modules constantly

- SUPPORT OF ALL VERSIONS OF PHP - for each site under the control panel, you can assign any PHP version.
- AWSTATS INTEGRATION - allows to get websites access statistics based on server logs.
- WEB-CLIENT SHELL IN A BOX - allows to run SSH terminal in the panel without any additional software.
- VIRUS SCANNER CLIENT - free scan for viruses, malware and infected scripts.
- ROUNDcube MAIL CLIENT - browser-based multilingual IMAP client with an application-like user interface.
- SPAM ASSASSIN - effective tool with flexible settings for spam filtering.

Intuitive interface

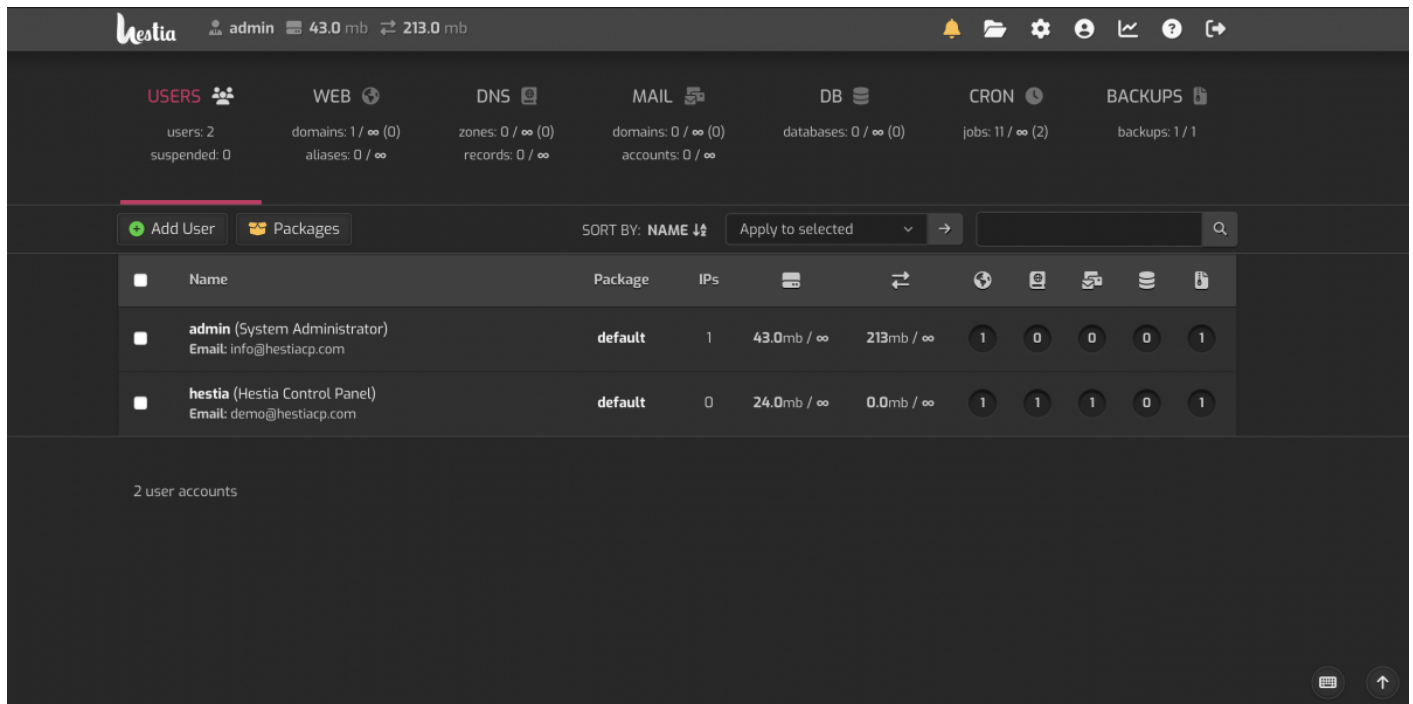
Clean, simple and modern design. Customize the display order of sites and controls the way you want, and the dark theme will make it easier to work at night

The developer provides an online demo, which can be viewed at the link

<https://fastpanel.direct/demo>

HestiaCP

Hestia Control Panel is an open source server management software. Fast, reliable, modern – everything you wanted can now be installed with one command.



To access the HestiaCP control panel, enter the address from which the panel will be accessible in the address bar of your browser, and then enter your login and password in the appropriate fields. All this data will be sent to your email after installing the operating system and the control panel (to do this, check the "Hestia control panel" box on the OS selection page). Access data comes in this form (example):

// Access data for HestiaCP:

URL: <https://192.168.0.10:8083/login/>

Username: admin

Password: WiNUH28A

Quick and easy to learn how to work

Hestia is made with ease of use in mind. Creating a user or website is as easy as clicking a button and filling in a couple of fields, and advanced features are also easily accessible.

Made with love and pride

Hestia is open source software created by passionate people from all over the world. This means that the code is reviewed by multiple people, and everyone can contribute to it!

Extensible and powerful!

Hestia is extensible, yet easy to learn. You can create your own themes, web templates, quick-install apps, and interact with them using third-party software via the API.

Community-powered development

Hestia has a great support community - join the forum for discussions at <https://forum.hestiacp.com> !

Control Panel Key Features

Users

Share your server access with other users and limit their resources.

- SFTP chroot jails support
- Two-factor authentication support for the admin panel
- SSH keys for SFTP and SSH login

Web Domains

Add multiple domains and quickly install apps on them.

- Nginx FastCGI cache support for Nginx + PHP-FPM
- Nginx Proxy cache support for Nginx + Apache2
- TLS certificates for each domain
- MultiIP support for Web/Mail/DNS
- Multi-PHP support for PHP 5.6 (EOL),PHP 7.0 (EOL),PHP 7.1 (EOL),PHP 7.2 (EOL),PHP 7.3 (EOL),PHP 7.4 (EOL),PHP 8.0, PHP 8.1,PHP 8.2

One-click application installation

- WordPress
- Dokuwiki
- Drupal
- Grav
- Laravel

- MediaWiki
- NextCloud
- OpenCart
- Prestashop
- Symphony

DNS

Manage your own DNS server!

- Create your own nameserver
- Easy DNS cluster setup
- DNSSEC support on domains

Mail

Host your own mailboxes, no need to pay a business mail provider!

- TLS certificates for each domain for incoming and outgoing mail services (Exim4, Dovecot, Webmail)
- Limits are configurable per user or email account.
- Let's Encrypt support for mail domains
- Latest RoundCube version
- Optional Rainloop installation

Databases

From e-commerce to blogging, databases are always useful, and you can choose between MySQL and PostgreSQL.

- MariaDB 10.2 -> 10.11 support with 10.11 by default
- MySQL 8 support
- PostgreSQL support
- Latest version of phpMyAdmin and phpPgAdmin

The developer provides an online demo version, which can be viewed at the link <https://demo.hestiacp.com:8083/>

VPN-server

Why do I need a VPN server?

VPN is a technology that provides high-level 256-bit encryption, which makes it almost impossible for your hackers and cyber criminals to violate your online security.

With a VPN, all your data is completely encrypted, no one can violate your privacy - even an Internet provider is not able to track your actions on the network. This service will not affect the connection speed, because VPN networks are equipped with such features as SOCKS, proxies, smart DNS, etc.

VPN is the thinnest tool in matters of online security, privacy and freedom at the same time. Consequently, 100% reliable.

How it works?

At our service, we offer automatic deployment of a VPN server. It can be install in parallel with other services on your server. When ordering a service, select in the list of additional software - VPN server. Further, after the installation of the operating system is completed, a VPN server based on the CISCO IPsec protocol will also be installed. After that, you will receive data for access to the operating system and also access to the VPN. Sample data for access:

“ Credentials to access IPsec VPN-server:

IP address: 192.168.10.11

Shared key: CZqh3RkvCi5G36bVKKqrsbko6mcPxHWx

Username: vpn

Password: zycv0yiS

This data must be specified in the network settings of your device. Now you have access to the Internet from the IP address of your server, and not the actual IP-address of the device.

Disk partitioning

It is recommended to leave the disk layout with the default settings, in experience these are the optimal parameters for the comfortable operation of the operating systems of the Linux family. If you need special parameters and you know exactly how they will affect the system, then you can safely change them. For a general understanding, we give a small explanation of the purpose of certain partitions.

Boot partition

The partitioning of the Linux hard drive begins with the creation of this partition. Everything is very simple here. This partition contains the configuration files and boot loader modules that are read at startup of Grub, as well as the kernel and init RAM-disk image. These files do not take up much space, about 100 megabytes, but in some distributions Grub themes can be placed here, as well as old kernel versions will accumulate over time, so it's better to allocate 512 megabytes for comfortable work in the future. That will be quite enough.

Swap partition

This is the partition of the page file where unused pages of RAM will be sent if it is full. Also, all memory contents are recorded here when the computer goes into sleep or hibernation mode. The file system is special - swap.

Root partition

This is the main partition of your system. It will contain all system files, and other sections will be connected to it. All applications will be installed here. Given all this, you need to allocate a sufficient amount of space. The minimum requirements are to fit all the files from the installation disk, as well as all future applications and files (if you have one partition).

By default, all remaining free space is allocated for this section. But if you want the system to be on a separate partition, specify the required volume in gigabytes in the corresponding field. The rest of the disk space will not be allocated and it can be mounted after installing the operating system.

Root password

How to change the root password for SSH access in Linux operating systems

It often happens that for security reasons you need to change the root password to another one. This is very easy to do in the console, after connecting via SSH or in your personal account when connecting via the Web console. To do this, simply enter the command:

```
passwd
```

Next, enter the new password twice, for security reasons, the new password will not be displayed on the screen.

That's it! Now you will see a message about the successful password change and will be able to use it to connect to the server in the future.

Below you can see a screenshot of this procedure.

```
Linux US-1155 6.1.0-28-amd64 #1 SMP PREEMPT_DYNAMIC Debian 6.1.119-1 (2024-11-22) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Tue Dec 17 11:49:55 EET 2024 on ttyS0
root@US-1155:~# passwd
New password:
Retype new password:
passwd: password updated successfully
root@US-1155:~# _
```

Also, if there are multiple users on the system, changing the password will look similar, except you will need to specify the username. For example, to change the password for the admin user, the command will look like this:

```
passwd admin
```

Next, again, enter the new password twice.