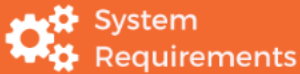
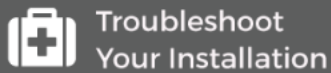
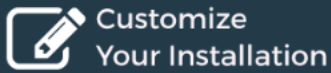


# Installation Guide - Customize Your Installation



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## Overview

Before you begin the installation process, you can customize the configuration for certain portions of cPanel & WHM.

## Installation methods

New installations of cPanel & WHM use the fast installation method by default. This method handles certain aspects of cPanel & WHM differently to drastically reduce installation time. For example, the fast installation method:

- Uses tarballs to download certain code cPanel & WHM files.
- Uses system RPMs, if they are available, to set up the Perl `local::lib` library.

**Note:**

When you install cPanel & WHM on a CentOS server with a CloudLinux™ license, the installer will automatically convert the server to CloudLinux.

## Installation options

You can use the following options to customize cPanel & WHM's installation process:

Option	Description
<code>--confirm</code>	Require confirmation before the installation script runs.
<code>--noexec</code>	Do not run the installation script.
<code>--keep</code>	Do not delete the target directory after installation.
<code>--nox11</code>	Do not spawn an X terminal input terminal.
<code>--nochown</code>	Do not assign permissions for the extracted files to the current user.
<code>--target NewDirectory</code>	Extract the cPanel & WHM installation files to the <code>NewDirectory</code> directory.
<code>--tar arg1 [arg2 ...]</code>	Access the contents of the <code>arg1</code> archive through the <code>tar</code> command.
<code>--force</code>	Force installation on an unrecommended configuration.
<code>--skip-cloudlinux</code>	Skip the automatic CloudLinux conversion process even if a license exists.

## Legacy installation method

Some system administrators may wish to override this default in order to use the legacy installation method.

**Important:**

This method requires **substantially more time** than the fast installation method. We **strongly** recommend that you use the fast installation method.

To disable the fast installation method, create the `/etc/cpanel/disable_fast_install` touch file before you begin the cPanel & WHM installation process.

## Basic server setup

The `/etc/wwwacct.conf` file contains the basic setup information for cPanel & WHM. After you install cPanel & WHM, you can find and edit this information in WHM's *Basic WebHost Manager Setup* interface (*WHM >> Home >> Server Configuration >> Basic WebHost Manager<sup>®</sup> Setup*).

To customize this configuration, perform the following steps:

1. As the `root` user, create the `/etc/wwwacct.conf` file.
2. Enter all of the `wwwacct.conf` file's parameters, with one entry per line:
  - ✓ [Click for an example file to copy-paste from...](#)

**Note:**

Separate each parameter and its value with a space.

```
ADDR 10.0.0.1
NS2 ns2.domain.tld
CONTACTPAGER user@examplesms.com
LOGSTYLE combined
CONTACTEMAIL user@example.com
HOMEMATCH home
TTL 14400
NSTTL 86400
NS ns1.domain.tld
ETHDEV eth0
ADDR6
HOST
NS4
DEFMOD paper_lantern
HOMEDIR /home
NS3
SCRIPTALIAS y
```

3. Define the following **required** values:

- DEFMOD
- HOMEDIR
- LOGSTYLE
- NS
- NS2
- SCRIPTALIAS

**Important:**  
If you do not define these values, account creation **will** fail.

Click for an example file to copy-paste from...

```
DEFMOD paper_lantern
HOMEDIR /home
LOGSTYLE combined
NS ns1.domain.tld
NS2 ns2.domain.tld
SCRIPTALIAS y
```

**Note:**  
In this example, ns1.domain.tld and ns2.domain.tld are your nameservers' identities.

4. Specify values for any other parameters that you wish to configure. Refer to the [configuration values](#) table for a complete list of available parameters.

### Configuration values

You can configure the following values in the /etc/wwwacct.conf file:

Value	Description	Example
ADDR	The server's shared IPv4 address.	10.0.0.1

ADDR6	The server's shared IPv6 address.	10.0.0.1
CONTACTEMAIL	The system administrator's contact email address.	user@example.com
CONTACTPAGER	The number to which the server sends Short Message Service (SMS) notifications.	user@examplesms.com
DEFMOD	<p><b>Required</b></p> <p>The default cPanel theme that you wish to use for newly-created accounts.</p> <div style="border: 1px solid #f0e68c; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> This value does <b>not</b> impact cPanel theme behavior for <b>existing</b> accounts.</p> </div>	paper_lantern
ETHDEV	<p>The default ethernet device. This parameter defaults to the eth0 value.</p> <div style="border: 1px solid #f0e68c; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> Specify <code>venet0:0</code> if the server runs Virtuozzo®.</p> </div>	eth0
HOMEDIR	<p><b>Required</b></p> <p>The path to the default home directory.</p>	/home
HOMEMATCH	A string that determines which partitions to use as home directories for new accounts. (For example, a value of <code>users</code> matches system mounts of <code>users</code> , <code>users1</code> , or <code>users3</code> .)	home
HOST	The server's hostname.	hostname
LOGSTYLE	<p><b>Required</b></p> <p>The Apache log format to use.</p> <div style="border: 1px solid #f08080; padding: 5px; margin-top: 10px;"> <p><b>Important:</b> You <b>must</b> define this value as <code>combined</code>.</p> </div>	combined
NS	<p><b>Required</b></p> <p>The primary nameserver to add to DNS zones by default.</p> <div style="border: 1px solid #f08080; padding: 5px; margin-top: 10px;"> <p><b>Important:</b> If you do not specify a value for <code>NS</code>, account creation <b>will fail</b>.</p> </div>	ns1.domain.tld

NS2	<p><b>Required</b></p> <p>A second nameserver to add to DNS zones by default.</p> <div style="border: 1px solid red; padding: 5px; margin: 10px 0;"> <p><b>Important:</b> If you do not specify a value for NS 2, account creation <b>will</b> fail.</p> </div>	ns2.domain.tld
NS3	An additional nameserver to add to DNS zones by default.	ns3.domain.tld
NS4	An additional nameserver to add to DNS zones by default.	ns4.domain.tld
NSTTL	The default time to live (TTL) value that DNS zones will use.	86400
SCRIPTALIAS	<p><b>Required</b></p> <p>Whether the system aliases a <code>/cgi-bin/</code> directory on account creation.</p> <div style="border: 1px solid red; padding: 5px; margin: 10px 0;"> <p><b>Important:</b> This value <b>only</b> accepts <code>y</code> or <code>n</code>.</p> </div>	y
TTL	The default time to live value.	14400

## Configuration settings

When you install cPanel & WHM, the system reads the `/root/cpanel_profile/cpanel.config` file. This file stores the settings that WHM's [Tweak Settings](#) interface (*Home >> Server Configuration >> Tweak Settings*) contains, as well as various configuration settings for other cPanel & WHM features. The system uses these settings to set the values in the `/var/cpanel/cpanel.config` file.

### Warnings:

- Some of the values that the `/root/cpanel_profile/cpanel.config` file contains are dynamic, or require specific values.
- You can configure the version of MySQL® or MariaDB to use in the `/root/cpanel_profile/cpanel.config` file's `mysql-version` key **before** you install cPanel & WHM. However, we do **not** support the configuration of existing installations of cPanel & WHM.
- If you set MySQL to version 5.1 (`mysql-version=5.1`) or lower when you install cPanel DNSONLY™, the installation process automatically upgrades the MySQL installation to version 5.5. cPanel & WHM version 11.46 discontinued support for MySQL 5.1 and lower, and cPanel DNSONLY does **not** include an easy way in which to upgrade your MySQL installation.
- Because cPanel & WHM displays the [Feature Showcase](#) after installation, Feature Showcase items can overwrite settings that you preconfigure on servers, such as the `cpanel.config` file.

To set these parameters, perform the following steps:

1. As the `root` user, create the `/root/cpanel_profile/cpanel.config` file.
2. With one entry per line, list the parameters and values that you wish to configure in `key=value` format. For example, to preconfigure your server to deny the `nobody` user the ability to send email to a remote address, add the `nobodyspam=1` line to the `/root/cpanel_profile/cpanel.config` file before you install cPanel & WHM.

## Account restoration

The `/etc/cpanelacctrestore` file contains a list of accounts to automatically restore during the cPanel & WHM installation process. You can use this file to restore accounts to a freshly-installed server.

### Note:

When you create a backup file, you **must** use one of the following formats:

- `cpmove- $\{USER\}$`
- `cpmove- $\{USER\}$ .tar`
- `cpmove- $\{USER\}$ .tar.gz`
- `$\{USER\}$ .tar`
- `$\{USER\}$ .tar.gz`
- `backup- $\{BACKUP-DATE\_TIME\}$ - $\{USER\}$ .tar`
- `backup- $\{BACKUP-DATE\_TIME\}$ - $\{USER\}$ .tar.gz`

To restore a list of cPanel accounts during the cPanel & WHM installation process, perform the following steps:

1. As the `root` user, use a text editor to create the `/etc/cpanelacctrestore` file.
2. List the user account names, one entry per line.
3. Upload the backup file or files to one of the following directories:
  - `/home`
  - `/home2`
  - `/home3`
  - `/root`
  - `/usr`
  - `/usr/home`
  - `/web`

## Release tiers

The `/etc/cpupdate.conf` file determines the product version for your installation of cPanel & WHM. This file also controls when your server performs the automatic upgrades to new major versions of cPanel & WHM.

When you preconfigure this file, cPanel & WHM will install the specified version or the major version that corresponds to the specified release tier.

### Notes:

- For more information about our release tiers, read our [Product Versions and the Release Process](#) documentation.
- For more information about the `/etc/cpupdate.conf` file, read our [cPanel Update Configuration File - cpupdate.conf](#) documentation.

To preconfigure the cPanel & WHM release tier, perform the following steps:

1. As the `root` user, create the `/etc/cpupdate.conf` file.
2. In the `/etc/cpupdate.conf` file, use the `CPANEL` parameter to set your desired release tier. For example, to configure your server to use the **STABLE** tier, add the `CPANEL=stable` value to the `/etc/cpupdate.conf` file.

## The `/etc/cpsources.conf` file

The `/etc/cpsources.conf` file determines the locations from which your server downloads updates. By default, cPanel & WHM servers retrieve updates directly from cPanel, Inc. through our `httpupdate.cpanel.net` pool of update servers.

### Warning:

Invalid modifications to this file may cause **serious** problems. We **strongly** recommend that you do **not** modify this file unless you understand the full technical ramifications of your actions and can maintain these customizations.

## Invalid data

If you see the following error in your server's logs, the `/etc/cpsources.conf` file likely contains invalid data:

```
[2015-12-08 14:12:54 +0200] ***** FATAL: Unable to retrieve tier version  
info: timeout
```

To resolve this issue, move the `/etc/cpsources.conf` file to another location, then run the `/usr/local/cpanel/scripts/upcp` script. The system will automatically restore a valid cPanel-supplied version of the `/etc/cpsources.conf` file.

### Note:

To disable FastUpdate on your server, SSH to your server as the `root` user and run the following command:

```
touch /var/cpanel/never_ever_use_fast_update_not_even_a_check
```

To reenable FastUpdate on your server, run the following command as the `root` user:

```
rm /var/cpanel/never_ever_use_fast_update_not_even_a_check
```

## yum

Yellowdog Updater, Modified (yum) is an RPM package management tool for Linux servers that automatically installs with your operating system.

### Warning:

When you install cPanel & WHM, you must **only** use vendor-provided repositories. Third-party repositories may replace vital parts of the system and cause unexpected results.

## Exclude packages

Because cPanel & WHM handles its own installation of services through the `rpm.versions` system, you **must** exclude several packages before you install cPanel & WHM.

To exclude these packages, perform the following steps:

1. As the `root` user, use a text editor to edit the `/etc/yum.conf` file.
2. Locate the line that begins with `exclude=` and confirm that it contains the following entries:

```
bind-chroot dovecot* exim* filesystem httpd* mod_ssl* mydns* mysql*  
nsd* php* proftpd* pure-ftpd* ruby* spamassassin* squirrelmail*
```

- a. If you do not find the line that begins with `exclude=`, insert it in the file under the `[main]` line as **one** line of code.
  - b. The `squirrelmail*` entry is optional. For more information, read our [cPanel Deprecation Plan](#) documentation.
3. Save and close the file. You may then use your preferred method to install yum on your server.

## Remove yum groups

### Note:

To obtain a list of yum groups, run the `yum grouplist` command.

Before you install cPanel & WHM, make certain that the following yum groups are **not** installed on your server:

- FTP Server
- GNOME Desktop Environment
- KDE (K Desktop Environment)
- Mail Server or E-mail Server
- Mono
- Web Server
- X Window System

To remove a yum group, run the `yum groupremove` command. For example, to remove the Mono and Mail Server groups, run the following command:

```
yum groupremove "Mono" "Mail Server"
```

## Apache

### EasyApache 4

cPanel & WHM installs [EasyApache 4](#) by default.

EasyApache 4 allows you to preconfigure your profile before you install cPanel & WHM on your server. To preconfigure your profile before install, create the `/etc/cpanel_initial_install_ea4_profile.json` file. The installation process installs this profile then copies it to the `/etc/cpanel/ea4/profiles/custom/` directory when complete.

#### Notes:

- The `/etc/cpanel_initial_install_ea4_profile.json` file **must** exist as both a valid JSON file and a valid EasyApache 4 profile. If your JSON file contains errors, no data, or the installation fails, the system installs the default EasyApache 4 profile.
- If your selected version of EasyApache fails to build, the installation process continues and you **must** troubleshoot the issue manually.
- If your system runs CloudLinux™, the system installs the CloudLinux EasyApache 4 repository and the default CloudLinux profile.
- Systems that do **not** run CloudLinux install cPanel & WHM's EasyApache 4 repository and default profile.

For information about how to create an EasyApache 4 profile, read our [EasyApache 4 - Create a Profile](#) documentation.

### EasyApache 3

#### Important:

We no longer develop and **only** provide security updates for EasyApache 3. We will **deprecate** EasyApache 3 on December 31, 2018. After that date, we will **no longer** update EasyApache 3. In cPanel & WHM version 78, we will **remove** support for EasyApache 3. We **strongly** recommend that you install EasyApache 4.

For more information, read our [cPanel Long-Term Support](#) documentation.

If you wish to install EasyApache 3 on your system, you can use EasyApache 3 to configure the Apache web server before installation. To do this, you **must** also access an existing cPanel & WHM server that runs EasyApache. EasyApache allows you to adjust several configuration options.

#### Notes:

- You **must** create the `/etc/install_legacy_ea3_instead_of_ea4` touch file to install EasyApache 3 by default on a fresh install of cPanel & WHM version 58 or higher.
- The cPanel & WHM installation process installs Apache 2.4 and PHP 5.5 by default.

To create and customize a new profile, perform the following steps:

1. Create a new EasyApache profile:
  - **Command line** — Log in to the existing server through SSH as the `root` user and run the `/scripts/easyapache` script.
  - **WHM** — Log in to WHM on the existing server as the `root` user and use the [EasyApache 3](#) interface (*Home >> Software >> EasyApache 3*).
2. Run [EasyApache 3](#).
3. In the *Exhaustive Options List* stage, perform the following steps:
  - a. Assign a file name, a display name, and a brief profile description to the new EasyApache profile.
  - b. Select *Save Only (Do Not Build)*. Your server stores the new profile in the `/var/cpanel/easy/apache/profile/custom/` directory, but does **not** recompile Apache and PHP.
  - c. Run the `scp` command to copy the profile to the `/etc/cp_easyapache_profile.yaml` file on the new server.
4. To create a `/var/cpanel/easy/apache/prefs.yaml` file, which stores your preferences separately from the build profile, perform the following steps:
  - a. Set the desired preferences in EasyApache.
  - b. On your new server, run the following command:



```
mkdir -p /var/cpanel/easy/apache/
```

- c. Copy the `/var/cpanel/easy/apache/prefs.yaml` file from the existing system to the `/var/cpanel/easy/apache/` directory on the new server.
- d. Place your build profile in the `/etc/cp_easyapache_profile.yaml` file on the new server.

## Override customizations

To override the cPanel & WHM installation system's default settings or any customizations that you made, run the `/usr/local/cpanel/scripts/copy-etc-files` script. This script performs the following actions:

- Creates copies of the contents of your current system's `/etc/bashrc`, `/etc/issue`, and `/etc/issue.net` files.
- Stores the copied files in the `/usr/local/cpanel/etc` directory.
- Replaces the customized files with the copied files' contents.

## Additional documentation

Suggested documentation [For cPanel users](#) [For WHM users](#) [For developers](#)

- [Installation Guide - Troubleshoot Your Installation](#)
- [Installation Guide - Customize Your Installation](#)
- [Installation Guide - System Requirements](#)
- [Installation Guide](#)
- [Installation Guide - cPanel DNSONLY Installation](#)
  
- [Server Information for cPanel](#)
  
- [Installation Guide - Troubleshoot Your Installation](#)
- [Installation Guide - Customize Your Installation](#)
- [Installation Guide - System Requirements](#)
- [Upgrade Blockers](#)
- [cPanel Long-Term Support](#)
  
- [WHM API 1 Functions - expunge\\_mailbox\\_messages](#)
- [WHM API 1 Functions - get\\_all\\_contact\\_importances](#)
- [WHM API 0 Functions - sethostname](#)
- [WHM API 1 Functions - sethostname](#)
- [WHM API 1 Functions - get\\_available\\_profiles](#)