

# The cpconftool Script

## Overview

The `/usr/local/cpanel/bin/cpconftool` script backs up, restores, and transfers server configurations. This is useful, for example, when you migrate your cPanel & WHM accounts to a new server.

You can use this script to back up, restore, and transfer the following configurations:

- Apache® — cPanel & WHM uses the Apache configuration to host websites.

**Notes:**

- The Apache configuration also contains the system's ModSecurity™ configuration. Apache uses ModSecurity to provide intrusion detection and prevention on your web server.
- For more information about Apache backups, restoration, and transfers, read the [More about Apache configurations](#) section below.

- Backups — cPanel & WHM uses the backups configuration as the system's primary back up and restore tool.

**Note:**

The backup configuration does **not** include legacy backup configurations.

- cPanel themes — cPanel & WHM uses the cPanel theme configuration in order to generate the cPanel and WHM interfaces.
- Exim — cPanel & WHM uses Exim as the system's main mail transfer agent.
- MySQL® — cPanel & WHM uses the MySQL configuration as the system's primary operations tool.

**Note:**

WHM's [Transfer Tool](#) interface (*WHM >> Home >> Transfers >> Transfer Tool*) does **not** allow you to back up, restore, or transfer MySQL configurations. You **must** use this script to perform these actions.

- WHM (`whmconf`) — cPanel & WHM uses the `whmconf` configuration to back up and restore WHM's common non-user-specific settings (for example, the settings from WHM's [Tweak Settings](#) interface (*WHM >> Home >> Server Configuration >> Tweak Settings*) and WHM's [Basic WebHost Manager Setup](#) interface (*WHM >> Home >> Server Configuration >> Basic WebHost Manager Setup*)).

## The `/usr/local/cpanel/bin/cpconftool` script

To use this script, run the following command as the `root` user:

```
/usr/local/cpanel/bin/cpconftool --argument
```

## Arguments

The `/usr/local/cpanel/bin/cpconftool` script accepts the following arguments:

Argument	Description	Example
<code>--restore</code>	Restore a backup file. For more information, read the <a href="#">Restore a configuration</a> section below.  <b>Important:</b> Make <b>certain</b> that you specify the backup file's full path with this argument.	<pre>--restore=/home /whm-config-backup- all-1.1-141 1229033.tar.gz</pre>

<pre>--backup</pre>	<p>Generate a backup file. For more information, read the <a href="#">Back up a configuration</a> section below.</p>	<pre>--modules=cpanel:smtp:exim --backup</pre>
<pre>--list-modules</pre>	<p>List the available modules on your server.</p>	<p>The output will resemble the following example:</p> <pre>cpanel::smtp:exim cpanel::system:backups cpanel::system:mysql cpanel::system:whmconf cpanel::easy:apache cpanel::ui:themes</pre>
<pre>--modules</pre>	<p>A comma-separated list of the modules to restore or back up.</p> <div data-bbox="586 1026 1008 1199" style="border: 1px solid orange; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> You can pass this argument with the <code>--restore</code> and <code>--backup</code> arguments to restore or backup specific modules.</p> </div>	<pre>--modules=cpanel:smtp:exim --backup</pre>

## Back up a configuration

To back up a configuration, perform the following steps:

1. Log in to the server as the `root` user via SSH.
2. Navigate to the `/usr/local/cpanel` directory.
3. To list available configurations, run the following command:

```
/usr/local/cpanel/bin/cpconftool --list-modules
```

The system will display a list of available configurations. For example:

```
cpanel::ui:themes
cpanel::easy:apache
cpanel::system:backups
cpanel::system:mysql
cpanel::system:whmconf
cpanel::smtp:exim
```

4. Run the following command to back up the configuration, where `configuration::to::backup` represents the configuration name:

```
/usr/local/cpanel/bin/cpconftool --backup  
--modules=configuration::to::backup
```

The system will display a confirmation message that resembles the following example:

```
Backup Successful  
/home/whm-config-backup-configuration__to__backup-10.550000-145200650  
7.tar.gz
```

**Note:**

The system will generate a unique backup filename. In this example, the system generated the backup as the `whm-config-backup-configuration__to__backup-10.550000-1452006507.tar.gz` file.

## Configuration backup contents

When you back up a configuration, the system backs up the following files for each type of configuration:

▼ [Apache configuration...](#)

```
/etc/cpanel/ea4  
/var/cpanel/easy  
/etc/apache2/conf.d  
/etc/apache2/conf  
/usr/local/apache/conf  
/var/cpanel/secdatadir  
/var/cpanel/modsec_cpanel_conf_datastore  
/var/cpanel/conf/apache/main  
/var/cpanel/conf/apache/local  
/usr/local/apache/conf/includes  
/var/cpanel/templates/apache*/local
```

▼ [Backups configuration...](#)

```
/var/cpanel/backups/config  
/var/cpanel/backups  
/var/cpanel/backups/extras
```

▼ [cPanel theme configuration...](#)

```
/var/cpanel/activate/features/set_paperlantern_as_default  
/var/cpanel/activate/features/paper_lantern  
/var/cpanel/customizations/*
```

▼ [Exim configuration...](#)

```
/etc/exim.conf
/etc/exim.conf.local
/etc/exim.conf.localopts
/etc/mail/spamassassin/BAYES_POISON_DEFENSE.cf
/etc/mail/spamassassin/CPANEL.cf
/etc/mail/spamassassin/KAM.cf
/etc/mail/spamassassin/P0f.cf
/etc/global_spamassassin_enable
/var/cpanel/config/email/query_apache_for_nobody_senders
/var/cpanel/config/email/trust_x_php_script
/var/cpanel/custom_mailhelo
/var/cpanel/custom_mailips
/var/cpanel/exim_ipv4_sort_bias
/var/cpanel/per_domain_mailips
/etc/backupmxhosts
/etc/cpanel_mail_netblocks
/etc/greylist_trusted_netblocks
/etc/neighbor_netblocks
/etc/senderverifybypasshosts
/etc/skipsmtpcheckhosts
/etc/spammeripblocks
/etc/trustedmailhosts
/usr/local/cpanel/etc/exim/acls/*
/usr/local/cpanel/etc/exim/acls.dist
```

#### ▼ MySQL® configuration...

```
/etc/my.cnf
```

#### ▼ WHM (whmconf) configuration...

```
/etc/cpupdate.conf
/etc/wwwacct.conf
/etc/wwwacct.conf.shadow
/etc/stats.conf
/var/cpanel/cpanel.config
```

**Note:**

Each file that this section lists will **only** exist when the configuration requires it.

## Restore a configuration

**Important:**

When you restore an EasyApache 4 configuration backup with the `/usr/local/cpanel/bin/cpconftool` script, it removes Apache's default include files. If Apache fails to start, run the `/usr/local/cpanel/scripts/rebuildhttpdconf` script and restart Apache.

To restore a configuration from a backup file, run the following command, where `/home/backup.tar.gz` represents the full path to the desired backup file and `config::to::restore` represents the configuration to restore:

```
/usr/local/cpanel/bin/cpconftool --restore=/home/backup.tar.gz
--modules=config::to::restore --prerestore_backup
```

**Notes:**

- The `--prerestore_backup` parameter is **optional** and causes the system to restore the original version of the file.
- The `--prerestore_backup` parameter is **always** active for Apache restorations and allows you to troubleshoot your system if an Apache configuration fails to restore.

When you restore a configuration, the following actions occur:

1. The system restores all of the configuration files.

**Note:**

If one of the configuration files exists on the destination server but **does not** exist on the origin server, the system removes that file.

2. The `/usr/local/cpanel/bin/cpconftool` script tests whether the configuration is valid.
3. The `/usr/local/cpanel/bin/cpconftool` script runs the `/usr/local/cpanel/scripts/buildeximconf` script.
  - If the test fails, the system reverts the changes.
  - If the test succeeds, the system restarts the configuration.

The restoration process returns output that resembles the following example:

```
Restore Successful
---
cpanel::system::whmconf:
  post_restore:
    data: "<span class=\"b2\">Your changes have been saved.</span><br /><br
/><span class=\"b2\">Restarting cPanel daemons...</span><span
class=\"b2\">done.</span><br /><br /><span class=\"b2\">Updating your
system to reflect any changes...</span><br /><pre>Processing post action
for <span class=\"setting_label\">Thunderbird and Outlook autodiscover and
autoconfig support (enables proxy subdomain and SRV record
creation)</span>:\nThe master proxysubdomains setting changed state so we
do not need to update the autodiscover domains.\nProcessing post action for
<span class=\"setting_label\">Conserve memory</span>:\nProcessing post
action for <span class=\"setting_label\">Standardized Hooks - Debug
Mode</span>:\nProcessing post action for <span
class=\"setting_label\">Include mailman in disk usage
calculations</span>:\nProcessing post action for <span
class=\"setting_label\">Include databases in disk usage
calculations</span>:\nProcessing post action for <span
class=\"setting_label\">Mail authentication via domain owner
password</span>:\nProcessing post action for <span
class=\"setting_label\">Number of failed or deferred messages a domain may
send before protections can be triggered</span>:\nProcessing post action
for <span class=\"setting_label\">Enable Email Archiving
support</span>:\nProcessing post action for <span
class=\"setting_label\">Email delivery retry time</span>:\nProcessing post
action for <span class=\"setting_label\">Allow cPanel & WHM to determine
the best value for your MySQL innodb_buffer_pool_size
```

```
configuration?</span>:\nProcessing post action for <span
class=\"setting_label\">Allow cPanel & WHM to determine the best value for
your MySQL max_allowed_packet configuration?</span>:\nProcessing post
action for <span class=\"setting_label\">Allow cPanel & WHM to determine
the best value for your MySQL open_files_limit
configuration?</span>:\nProcessing post action for <span
class=\"setting_label\">cPanel PHP max execution time</span>:\nProcessing
post action for <span class=\"setting_label\">cPanel PHP max POST
size</span>:\nProcessing post action for <span
class=\"setting_label\">cPanel PHP max upload size</span>:\nProcessing post
action for <span class=\"setting_label\">cPanel PHP
loader</span>:\nProcessing post action for <span
class=\"setting_label\">Allow users to relay mail if they use an IP address
through which someone has validated an IMAP or POP3 login within the last
hour (Pop-before-SMTP)</span>:\nProcessing post action for <span
class=\"setting_label\">Proxy subdomains</span>:\nCreating service domain
DNS entries in background. This process can take several minutes to
complete.\nProcessing post action for <span class=\"setting_label\">Require
SSL</span>:\nProcessing post action for <span
class=\"setting_label\">Enable Analog stats</span>:\nProcessing post action
for <span class=\"setting_label\">Enable Awstats stats</span>:\nProcessing
post action for <span class=\"setting_label\">Enable BoxTrapper spam
trap</span>:\nProcessing post action for <span
class=\"setting_label\">Enable Horde Webmail</span>:\nProcessing post
action for <span class=\"setting_label\">Enable Mailman mailing
lists</span>:\nmailman...(XID jcptbq) The \xE2\x80\x9Cmailman\xE2\x80\x9D
service is disabled.\nWaiting for \xE2\x80\x9Cmailman\xE2\x80\x9D to stop
\xE2\x80\xA6\xE2\x80\xA6\xE2\x80\xA6finished.<br />\n<br
/>\n...Done\nRestarting mailman\nConfiguration file passes test! New
configuration file was installed.\n\n\n\n/etc/exim.pl.local installed!\nSPF
is disabled in exim or unavailable, enabling SPF for
SpamAssassin\nRefreshing SMTP Mail protection.\nSMTP Mail protection has
been disabled. All users may make outbound smtp connections.\nDisabled
scgi-bin since suexec is enabled or the webserver runs as the
user\nDistilled successfully\nProcessing post action for <span
class=\"setting_label\">Enable Apache SpamAssassin\xE2\x84\xA2 spam
filter</span>:\nProcessing post action for <span
class=\"setting_label\">Enable Apache SpamAssassin\xE2\x84\xA2 Spam Box
delivery for messages marked as spam (user
configurable)</span>:\nProcessing post action for <span
class=\"setting_label\">Enable Webalizer stats</span>:\nProcessing post
action for <span class=\"setting_label\">Restrict outgoing SMTP to root,
exim, and mailman (FKA SMTP Tweak)</span>:\nProcessing post action for
<span class=\"setting_label\">Prefix &ldquo;mail.&rdquo; onto Mailman
URLs</span>:\nProcessing post action for <span class=\"setting_label\">Use
pre-4.1-style MySQL<sup>&reg;</sup> passwords</span>:\n</pre><span
class=\"b2\">Done.</span></div>\n</body>\n</html>\n"
```

```
status: 1
statusmsg: Update WHMhostmgr Succeeded
restore:
data:
```

```
warnings: []
status: 1
statusmsg: "Whostmgr::Config::Restore::System::WHMConf: ok"
```

## Transfer a configuration

To transfer a configuration, perform the following steps:

1. Perform the backup process for the desired configuration on the origin server.
2. Copy the `.tar.gz` file that the backup process creates from the origin server to the destination server.
3. Perform the restoration process for the desired configuration on the destination server.

## More about Apache configurations

When you back up and restore an Apache server, ModSecurity performs the following tasks for you:

- The system moves the `/var/cpanel/secdatadir` file to the same location on the destination server.
- The system moves the `/var/cpanel/modsec_cpanel_conf_datastore` file to the same location on the destination server.
- The system determines the [ModSecurity Vendors](#) configurations on your server, along with the inactive or active rules set on your system, and moves them to the destination server.
- The system determines the ModSecurity configurations on your server and then moves them to the destination server.

cPanel & WHM does **not** perform the following tasks for you:

- The system does **not** move the `modsec2.conf`, `modsec2.user.conf`, or `modsec2.cpanel.conf` files. The system does **not** move these files due to the differences in the Apache configurations, which may cause Apache to fail to restart.
- When the system moves the ModSecurity configurations, it modifies these configurations in the current `modsec2.*.conf` files, but does **not** replace them.
- If the user possess control of the `modsec2.user.conf` configurations, the system archives this file and any file the `modsec2.user.conf` configuration includes.

**Warning:**  
We **strongly** recommend that you do **not** manually extract these files.

## Additional documentation

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

- [The cpconftool Script](#)
- [WHM Scripts](#)
- [Exim Configuration Manager - Basic Editor](#)
- [Mail FAQ](#)
- [Remote Restoration](#)
  
- [Mail FAQ](#)
- [Change Style](#)
- [Backup for cPanel](#)
- [Backup Wizard](#)
- [File and Directory Restoration for cPanel](#)
  
- [The cpconftool Script](#)

- [How to Purchase a LiteSpeed Web Server License](#)
- [WHM Scripts](#)
- [Exim Configuration Manager - Basic Editor](#)
- [How to Configure Google Drive as a Backup Additional Destination](#)
  
- [UAPI Functions - Backup::fullbackup\\_to\\_scp\\_with\\_password](#)
- [UAPI Functions - Backup::fullbackup\\_to\\_scp\\_with\\_key](#)
- [UAPI Functions - Backup::fullbackup\\_to\\_ftp](#)
- [Guide to Testing Custom Code - Branding](#)
- [Guide to cPanel Interface Customization - UI Includes](#)