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
`--restore`	Restore a backup file. For more information, read the Restore a configuration section below.	`--restore=/home/whm-config-backup-all-1.1-1411229033.tar.gz`

`--backup`	Generate a backup file. For more information, read the Back up a configuration section below.	```--modules=cpanel::smtp::exim --backup```
`--list-modules`	List the available modules on your server.	The output will resemble the following example: ```cpanel::smtp::exim cpanel::system::backups cpanel::system::mysql cpanel::system::whmconf cpanel::easy::apache cpanel::ui::themes```
`--modules`	A comma-separated list of the modules to restore or back up. **Note:** You can pass this argument with the `--restore` and `--backup` arguments to restore or backup specific modules.	```--modules=cpanel::smtp::exim --backup```

Back up a configuration

To back up a configuration, perform the following steps:

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

```
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
```

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

```
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-b`
> `ackup-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

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

```
bin/cpconftool --restore=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 `/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:\nProcessing post action for Mail authentication via domain owner
password:\nProcessing post action for Number of failed or deferred messages a domain may
send before protections can be triggered:\nProcessing post action
for Enable Email Archiving
support:\nProcessing post action for Email delivery retry time:\nProcessing post
action for Allow cPanel & WHM to determine
the best value for your MySQL innodb_buffer_pool_size
configuration?:\nProcessing post action for Allow cPanel & WHM to determine the best value for
your MySQL max_allowed_packet configuration?:\nProcessing post
action for Allow cPanel & WHM to determine
the best value for your MySQL open_files_limit
configuration?:\nProcessing post action for cPanel PHP max execution time:\nProcessing
post action for cPanel PHP max POST
size:\nProcessing post action for cPanel PHP max upload size:\nProcessing post
action for cPanel PHP
loader:\nProcessing post action for 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):\nProcessing post action for Proxy subdomains:\nCreating proxy domain DNS
entries in background. This process can take several minutes to
complete.\nProcessing post action for Require
SSL:\nProcessing post action for Enable Analog stats:\nProcessing post action
for Enable Awstats stats:\nProcessing
post action for Enable BoxTrapper spam
trap:\nProcessing post action for Enable Horde Webmail:\nProcessing post
action for Enable Mailman mailing
lists:\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.
\n
\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 Enable Apache SpamAssassin\xE2\x84\xA2 spam
filter:\nProcessing post action for Enable Apache SpamAssassin\xE2\x84\xA2 Spam Box
delivery for messages marked as spam (user
configurable):\nProcessing post action for Enable Webalizer stats:\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 existing `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. You can find these files in the tarball that you manually extract.

> **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

- The backup_restore_manager Script

- Global Configuration

- Exim Configuration Manager - Basic Editor

- Backup Restoration

- Change Style

- Mail FAQ

- Backup for cPanel

- Backup Wizard

- File and Directory Restoration for cPanel

- The cpconftool Script

- How to Purchase a LiteSpeed Web Server License
- Nginx
- How to Create a Custom Transport Script for Backups
- How to Configure the Exim Outgoing IP Address

- WHM API 1 Functions - set_public_contact
- WHM API 1 Functions - get_public_contact
- Tutorial - Create a Custom cPanel Style
- WHM API 1 Functions - backup_destination_list
- WHM API 1 Functions - backup_destination_add