

# The Task Queue System

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## Overview

Events in cPanel & WHM often cause one or more services to restart. For example, if you add a subdomain, the system restarts Apache and the nameserver daemon. On busy servers, these restart requests can degrade the quality of service.

To handle these requests, cPanel & WHM includes a system to queue and process tasks from various subsystems. Those subsystems do **not** perform restarts and other requests directly. Instead, the task queue system combines multiple instances of an outstanding request into a single action in order to improve server response time.

- The `queueprocd` daemon, which resides in the `/usr/local/cpanel/libexec` directory, processes the task queue periodically. The startup process starts this daemon. To manage the daemon, use the `/usr/local/cpanel/scripts/restartsrv_queueprocd` script.
- The `chkstrvd` daemon monitors the `queueprocd` daemon.
- The task queue system stores the queue of tasks as JSON files in the `/var/cpanel/taskqueue` directory.

## The servers\_queue script

The task queue system uses the `/usr/local/cpanel/bin/servers_queue` script to manage task queue tasks.

You can use the following arguments when you call the `/usr/local/cpanel/bin/servers_queue` script:

Argument	Description	Example
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queue

Use this argument to pass a quoted command string to add to the task queue.

- If the system successfully adds that command to the task queue, you will receive a message that resembles the following example:

```
Id:  
TQ:TaskQueue:  
3
```

In this example, `TQ:TaskQueue:3` represents the task's ID number in the task queue.

- If you pass an invalid command to the task queue, you will receive the following error message, where `command` represents the command that you specified:

```
No known  
processor for  
'command'. at  
/usr/local/li  
b/perl5/site_  
perl/5.8.8/
```

```
/usr/local/cpan  
el/bin/servers_  
queue queue  
'apache_restart  
'
```

unqueue

Use this argument to remove a task from the task queue. When you use this argument, you **must** pass the task's unique task ID with it. The system outputs this number when you queue a task, or you can find the task ID number in the `/var/cpanel/taskqueue/servers_queue.json` file.

If the system successfully removes the task, you will receive a success message that resembles the following example:

```
1 tasks  
unqueued
```

```
/usr/local/cpan  
el/bin/servers_  
queue unqueue  
TQ:TaskQueue:3
```

schedule

Use this argument to pass a wait time, in seconds, and a quoted command string to add to the task queue. The task queue will **not** process the command until after the wait time passes.

- If the system successfully adds the command to the task queue, you will receive a message that resembles the following example:

```
Id:
TQ:TaskQueue-
Scheduler:43
```

In this example, TQ: TaskQueue-Scheduler:43 represents the task's ID number in the task queue.

- If you pass an invalid command to the task queue, you will receive the following error message, where `command` represents the command that you specified:

```
No known
processor for
'command'. at
/usr/local/li
b/perl5/site_
perl/5.8.8/
```

```
/usr/local/cpan
el/bin/servers_
queue schedule
600
'apache_restart
'
```

unschedule

Use this argument to remove a task from the task queue. When you use this argument, you **must** pass the task's unique task ID with it. The system outputs this number when you queue a task, or you can find the task ID number in the `/var/cpanel/taskqueue/servers_queue.json` file.

If the system successfully removes the task, you will receive a success message that resembles the following example:

```
1 tasks
unscheduled
```

```
/usr/local/cpan
el/bin/servers_
queue
unschedule
TQ:TaskQueue-Sc
heduler:43
```

run

Use this argument to perform a synchronous flush of the task queue, which runs all of the task queue's queued jobs immediately. This argument does not return output.

```
/usr/local/cpan
el/bin/servers_
queue run
```

help	Use this argument to display usage information for the script.	<pre>/usr/local/cpanel/bin/servers_queue help</pre>
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## Task queue subprocesses

The following table lists the subprocesses in the `/usr/local/cpanel/Cpanel/TaskProcessors` directory that services can pass to the `/usr/local/cpanel/bin/servers_queue` script:

Module	Function
ApacheTasks.pm	apache_restart
ApacheTasks.pm	build_apache_conf
API.pm	verify_api_spec_files
BackupMetadataConversion.pm	backups_create_metadata
BackupMetadata.pm	vacuum_metadata
BackupMountTasks.pm	release_mount_lock
BandwidthDBTasks.pm	create_bandwidthdb
BINDTasks.pm	rndc
CgiCleanupTasks.pm	clean_cgiemail
CheckRPMTasks.pm	check_cpanel_rpms
CheckRPMTasks.pm	update_horde_config
ClamTasks.pm	fresh_clam
CPAddons.pm	rebuild_available_rpm_addons_cache
CpDBTasks.pm	ftp_update
CpDBTasks.pm	update_userdata_cache
CpDBTasks.pm	build_global_cache
CpDBTasks.pm	update_domainips_and_deps
cPHulkTasks.pm	purge_old_logins
cPHulkTasks.pm	add_known_ip_for_user
cPHulkTasks.pm	notify_login
cPHulkTasks.pm	notify_brute
cPHulkTasks.pm	update_country_ips
Cplisc.pm	check
CpServicesTasks.pm	startcpsrvd
CpServicesTasks.pm	restartsrv
CpServicesTasks.pm	setupservice
CpServicesTasks.pm	hupcpsrvd
DAV.pm	dav_change_hostname

DKIMTasks.pm	setup_dkim_keys
DKIMTasks.pm	update_keys
DKIMTasks.pm	enable_spf_dkim_globally
DNSTasks.pm	remove_zones
DovecotTasks.pm	flush_dovecot_auth_cache
DovecotTasks.pm	flush_entire_account_dovecot_auth_cache
DovecotTasks.pm	build_mail_sni_dovecot_conf
DovecotTasks.pm	restartdovecot
DovecotTasks.pm	reloaddovecot
EximTasks.pm	buildeximconf
FilemanTasks.pm	empty_trash
HordeTasks.pm	setup_horde_db
HordeTasks.pm	clean_horde_db
LocaleTasks.pm	build_locale_databases
LogdTasks.pm	runweblogs
MydnsTasks.pm	importmydnsdb
MysqlTasks.pm	flushprivs
MysqlTasks.pm	mysqluserstore
MysqlTasks.pm	dbstoregrants
MysqlTasks.pm	dbindex
MysqlTasks.pm	protecthomecheck
NameServerIPTasks.pm	updatenameserveriplist
NotificationTasks.pm	notify
NotificationTasks.pm	notify_from_subqueue
PaperLantern.pm	pl_update_users
PerlModuleTasks.pm	installtaskcpaincore
PHPFPMTasks.pm	ensure_fpm_on_boot
PHPFPMTasks.pm	enable_fpm
PHPFPMTasks.pm	rebuild_fpm
PluginTasks.pm	install_plugin
PluginTasks.pm	uninstall_plugin
ProxySubdomains.pm	check_proxy_subdomains
ProxySubdomains.pm	remove_autodiscover_proxy_subdomains
ProxySubdomains.pm	add_autodiscover_proxy_subdomains
ProxySubdomains.pm	update_autodiscover_proxy_subdomains
ProxySubdomains.pm	remove_proxy_subdomains
ProxySubdomains.pm	add_proxy_subdomains

ResellerTasks.pm	setup_reseller_and_sync_web_vhosts
RubyTasks.pm	write_gemrc
SpamassassinTasks.pm	enable_spamassassin
SSLCleanupTasks.pm	autossll_purge_user
SSLCleanupTasks.pm	unset_tls
SSLTasks.pm	instal_best_available_certificate_for_domain
SSLTasks.pm	autossll_check
SystemTasks.pm	recache_system_reboot_data
TailwatchTasks.pm	restarttailwatch
TailwatchTasks.pm	reloadtailwatch
TailwatchTasks.pm	eximstats_import_sql_file
TemplateTasks.pm	rebuild_templates
TestTasks.pm	sleep
WHMChromeTasks.pm	rebuild_whm_chrome


## Additional documentation

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

- [The Task Queue System](#)
- [Task Queue Monitor](#)

## Content by label

There is no content with the specified labels



- [The Task Queue System](#)
- [Task Queue Monitor](#)
- [UAPI Modules - UserTasks](#)
- [UAPI Functions - UserTasks::retrieve](#)
- [UAPI Functions - UserTasks::delete](#)