

# How to Fix Quotas

## Fix quotas

[Run the mount command](#)

[Examine the fstab file contents](#)

[How to enable quotas](#)

[Specify quotas in the fstab file](#)

[Verify that you enabled quota files](#)

[Ensure quotas report on the system](#)

[What if my quotas still do not function?](#)

[A note about Virtuozzo®](#)

[Additional documentation](#)

## Overview

### Warnings:

- We enable quotas by default on new installations.
- If you disable and then reenable quotas, servers that use the XFS® filesystem and run CentOS 7, CloudLinux™ 7, or Red Hat® Enterprise Linux (RHEL) 7 require additional actions for quotas to function properly:
  - **WHM Interface** — Use WHM's *Initial Quota Setup* interface (*WHM >> Home >> Server Configuration >> Initial Quota Setup*) to configure quotas.
  - **Command Line** — Run the `/scripts/fixquotas` script and then reboot the server.
  - **Manually via the Command Line** — For instructions on how to perform the `/usr/local/cpanel/scripts/fixquotas` script's actions manually, read the Red Hat [XFS](#) and [XFS Quota Management](#) documentation.
- If you have enabled [Quota System Administration notifications](#), the system sends notifications when it is ready to reboot **and** when the quota scan finishes and quotas are functional.
- CloudLinux 7 updates may break quotas. For this reason, after each CloudLinux 7 update, you **must** run the `/usr/local/cpanel/scripts/fixquotas` script and then reboot the server.

This document describes how to confirm whether you properly configured the disk space quotas on your system's devices.

- You **must** enable quotas for any device on which cPanel accounts exist.
- cPanel & WHM versions 76 and later enable quotas by default on new installations.

## Fix quotas

To verify whether your devices use quotas, perform the following actions:

### Important:

You **must** log in as the `root` user via SSH on your system before you perform these actions.

## Run the mount command

Run the `mount` command to obtain basic information about currently-mounted [file systems](#).

When you run this command without any arguments, the system displays information for all of its mounted file systems.

### Note:

Entries that contain the `usrquota` variable are quota-enabled.

The following example confirms that the `/dev/mapper/VolGroup00-LogVol100` device uses quotas:

```

/dev/mapper/VolGroup00-LogVol100 on / type ext3 (rw,usrquota)
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
devpts on /dev/pts type devpts (rw,gid=5,mode=620)
/dev/sda1 on /boot type ext3 (rw)
tmpfs on /dev/shm type tmpfs (rw)
none on /proc/sys/fs/binfmt_misc type binfmt_misc (rw)
/usr/tmpDSK on /tmp type ext3 (rw,noexec,nosuid,loop=/dev/loop0)
/tmp on /var/tmp type none (rw,noexec,nosuid,bind)
sunrpc on /var/lib/nfs/rpc_pipefs type rpc_pipefs (rw)

```

**Note:**

For more information about the `mount` command, visit the [mount command documentation](#).

## Examine the `fstab` file contents

The file system table (`fstab`) file maps devices to their respective mount points within a system.

The contents of the `fstab` file will resemble the following example:

**Remember:**

Entries that contain the `usrquota` variable are quota-enabled.

```

/dev/sda5      /backup      ext3 defaults,noexec 0 0
LABEL=/boot   /boot        ext3 defaults,usrquota
1 2
tmpfs          /dev/shm     tmpfs defaults          0 0
devpts        /dev/pts     devpts gid=5,mode=620 0 0
sysfs         /sys         sysfs defaults          0 0
proc          /proc        proc defaults          0 0
/dev/sda5     /swap        swap defaults          0 0
/usr/tmpDSK   /tmp         ext3 defaults,noauto
0 0

```

The `fstab` system configuration file displays configuration options in six columns. These options determine the purpose of each file system and how it should mount.

Column	Description	Example
<b>Device</b>	The physical device that contains the data.	<code>/dev/sda5</code>
<b>Mountpoint</b>	The filepath to the device's data storage location.	<code>/backup</code>
<b>FSType</b>	The type of file system.	<code>ext3</code>
<b>Options</b>	The mount options for the file system. These options include whether quotas are enabled and whether the system or users can execute programs on the device.	<code>defaults,noexec</code>
<b>Dump</b>	The <code>dump</code> option. The <code>dump</code> backup utility uses this option.	<code>0</code>

<b>Pass</b>	The <code>fsck</code> option. The <code>fsck</code> file checking utility uses this option.	0
-------------	---	---

**Notes:**

- The *Dump* and *Pass* values do not impact quotas.
- For more information about the `fstab` file, visit the [fstab command documentation](#).

## How to enable quotas

After you verify which devices do not use quotas, perform the following steps to enable quotas for the desired devices.

### Specify quotas in the `fstab` file

To enable quotas on a device, open the `/etc/fstab` file with a text editor and add the `usrquota` string to the *Options* column. Use spaces and tabs to create blank spaces between entries, for example:

```
LABEL=/boot          /boot          ext3      defaults,usrquota
1 2
```

After you edit the `fstab` file, run the `mount` and `remount` commands to remount the file system.

For example, to remount the `/dev/mapper/VolGroup00-LogVol100` device, run the following command:

```
mount -o remount /boot
```

**Note:**

The `-o` argument passes an option to the `mount` utility.

### Verify that you enabled quota files

After you edit the `/etc/fstab` file, confirm that the quota files exist in the root directory (`/`) and that each file is greater than 0 bytes.

Use the `ls` command with a wildcard character. For example:

```
root@host [/#]# ls -l /*.user
-rwxr--r-- 1 root root 13312 Apr 26 16:39 /aquota.user*
-rwxr--r-- 1 root root    32 Apr 19 16:26 /quota.user*
```

**Note:**

The example above uses the `ls` command to list the contents of the root directory (`/`). The `-l` flag causes `ls` output to display in long listing format. This format displays the following information:

- The file's permissions.
- Which user owns the file.
- Which group owns the file.
- The size of the file in bytes.
- The file's last modification date.

If these files do **not** exist, run the `/scripts/initquotas` script to create the files.

If these files **do** exist but quotas do not function, delete these files and then run the `/scripts/initquotas` or `/scripts/fixquotas` scripts.

## Ensure quotas report on the system

Run the following command to confirm that you successfully enabled quotas on the device:

```
repquota -a
```

This command prints all of the file systems that exist in the `/etc/mtab` file with read and write privileges and quota options enabled.

## What if my quotas still do not function?

If you experience further problems, perform one of the following actions:

- Disable the *Cache disk quota information* option in the *System* section of WHM's *Tweak Settings* interface (*WHM >> Home >> Server Configuration >> Tweak Settings*).
- Set the `disablequotacache` parameter to 0 in the `/var/cpanel/cpanel.config` file.

If you still experience problems with quotas, [open a support ticket](#).

## A note about Virtuozzo®

If you use Virtuozzo, you **must** perform the following actions:

1. Enable second-level (per-user) quotas in addition to first-level (per-container) quotas.
2. Enable second-level quotas from the parent node.

For more information, visit our [Enable Quotas on a Virtuozzo VPS](#) documentation.

## Additional documentation

Suggested documentation For cPanel users For WHM users For developers

- [How to Fix Quotas](#)
- [How to Disable Filesystem Quotas](#)
- [Overselling](#)

## Content by label

There is no content with the specified labels



- [How to Fix Quotas](#)
- [How to Disable Filesystem Quotas](#)
- [Overselling](#)
- [UAPI Functions - Ftp::set\\_quota](#)
- [WHM API 0 Functions - editquota](#)

- [UAPI Functions - Quota::get\\_quota\\_info](#)
- [UAPI Modules - Quota](#)
- [WHM API 1 Functions - editquota](#)