

# Upgrade Blockers

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## Overview

When you upgrade to a newer version of cPanel & WHM or install cPanel & WHM on a new server, cPanel & WHM checks your system for compatibility with the version of cPanel & WHM that you wish to install. **Blockers** are conditions that do not allow the cPanel & WHM update process (upcp) to install a particular version.



### Important:

Before you begin a new installation, read our [Installation Guide](#) and [System Requirements](#) documentation. The cPanel & WHM installation and upgrade processes require **at least** 3 GB of additional disk space for staging purposes.

## Upgrades that include multiple major versions

If you run an update that includes multiple major version upgrades of cPanel & WHM, the cPanel & WHM update process (upcp) will upgrade your server to each intermediate version. The update process performs compatibility checks for each intermediate version prior to the upgrade to that version.

For example, after a system administrator runs an update on a server that runs cPanel & WHM version 70, and the target version is cPanel & WHM version 76, the cPanel & WHM update process (upcp) performs the following actions:

1. The update process detects that the system must first upgrade to cPanel & WHM version 72.
2. The update process performs compatibility checks for the upgrade to cPanel & WHM version 72.
  - If the system is compatible, the update process upgrades cPanel & WHM to version 72.
  - If the system is not compatible, the update process sends a list of the compatibility issues to the system administrator, and the server remains on cPanel & WHM version 70.
3. After the upgrade to version 72 is complete, the update process performs compatibility checks for the upgrade to cPanel & WHM version 74.
  - If the system is compatible, the update process upgrades cPanel & WHM to version 74.
  - If the system is not compatible, the update process sends a list of the compatibility issues to the system administrator, and the server remains on cPanel & WHM version 72.
4. After the upgrade to version 74 is complete, the update process performs compatibility checks for the upgrade to cPanel & WHM version 76.
  - If the system is compatible, the update process upgrades cPanel & WHM to version 76.
  - If the system is not compatible, the update process sends a list of the compatibility issues to the system administrator, and the server remains on cPanel & WHM version 74.

## System and software checks

The cPanel & WHM update and installation process performs two types of checks:

- Standard — Standard checks apply to all installations and upgrades.
- Version-specific — Version-specific checks are requirements that are specific to the version of cPanel & WHM to which you begin an installation or upgrade.

If cPanel & WHM encounters a compatibility issue that blocks the installation or upgrade process, the following events happen:

1. If you started an upgrade, the system remains at the last known compatible version. If you started a new installation of cPanel & WHM, the system remains in its pre-installation status.
2. cPanel & WHM sends a list of the blockers to the system administrator.
3. The installation or upgrade process exits.



### Warning:

After you upgrade to a new major version of cPanel & WHM, you **cannot** downgrade to a previous major version.

**Note:**

Before you upgrade the version of cPanel & WHM on a server, we **strongly** recommend that you restore cPanel & WHM's management of all FTP targets on your server. If the FTP RPM's target is set to `unmanaged` on a server that you wish to upgrade, you may encounter problems in the cPanel user interface.

For more information on how to restore cPanel & WHM management of all FTP targets on your server, read our [How to Set or Unset RPM Management](#) documentation.

## Standard checks for all upgrades

When you run an upgrade of cPanel & WHM to any version, the update process performs the following standard checks:

### License files

You **cannot** upgrade cPanel & WHM if any of the following conditions are true:

- The cPanel & WHM update process cannot find a valid cPanel & WHM license file. Without the license file, cPanel & WHM cannot function properly and will block all updates. You **must** purchase a valid license in order to upgrade, downgrade, or use cPanel & WHM.
- The cPanel & WHM update process cannot read your cPanel & WHM license file. To fix this issue, run the `/usr/local/cpanel/cpkeyclt scri` pt. If the problem persists, [contact our support staff](#).
- Your server's license is no longer eligible for updates.

If you experience difficulties with your license, [contact our customer service department](#).

### Read-only file systems

To ensure that the system can write files to critical directories, the cPanel & WHM update process will fail if the following directories file systems exist in a read-only state:

```
/etc
/var
/var/lib/rpm
/var/cpanel
/usr/local
/usr/local/cpanel
/usr/local/bin
/usr/bin
/tmp
/var/tmp
```

### RPM database integrity

As of cPanel & WHM version 11.36, the update process verifies the integrity of the RPM database. To verify the integrity of the RPM database, the update process installs and uninstalls a test RPM. The update process attempts to repair the problem, but if it cannot repair the RPM database, the upgrade attempt fails.


## cPanel & WHM version-specific installation requirements and upgrade blockers


The following table includes the installation requirements and upgrade blockers for each version of cPanel & WHM:

**Important:**

If a blocker for the version of cPanel & WHM to which you wish to upgrade is present on your system when you start the cPanel & WHM update process, the update process will fail.

cPanel & WHM version	Upgrade requirements	Upgrade blockers
82	None	None

80	<ul style="list-style-type: none"> <li>• MySQL® 5.6 and later, or any version of MariaDB®.</li> <li>• At least 360,000 inodes available on the target filesystem.</li> </ul>	<ul style="list-style-type: none"> <li>• MySQL 5.5</li> <li>• Less than 360,000 available inodes.</li> </ul>
78	<ul style="list-style-type: none"> <li>• EasyApache 4</li> <li>• LiteSpeed version 5.3.6 or later.</li> </ul>	<ul style="list-style-type: none"> <li>• EasyApache 3</li> <li>• LiteSpeed version 5.3.5 and earlier.</li> </ul>
76	None	None
74	None	None
72	None	None
70	None	None
68	<ul style="list-style-type: none"> <li>• LiteSpeed version 5.2.1 build 2 or later.</li> <li>• The <code>ea-apache24-config-runtime</code> package version 1.0-113 or later.</li> </ul>	<ul style="list-style-type: none"> <li>• LiteSpeed version 5.2.1 build 1 and earlier.</li> <li>• The <code>ea-apache24-config-runtime</code> package version 1.0-112 and earlier.</li> </ul>
66	None <div style="border: 1px solid #f0e68c; padding: 10px; margin-top: 10px;">  <b>Note:</b>  After the upgrade to cPanel &amp; WHM version 66 finishes, WHM users in an active session <b>must</b> refresh their browser windows. Until they do, they may see additional frames within the WHM interface on each page load. </div>	None
64	None	None
62	MySQL version 5.5 and later.	MySQL version 5.1 and earlier.
60	SNI support.	Apache (httpd) 2.2.11 or older
58	<b>Only</b> available for 64-bit systems.	<ul style="list-style-type: none"> <li>• CentOS 5, RHEL 5, and CloudLinux 5.</li> <li>• 32-bit systems.</li> <li>• The <code>perl514</code> RPM target is set to <code>installed</code> or <code>unmanaged</code>.</li> </ul>
56	None	None
54	None	None
11.52	<ul style="list-style-type: none"> <li>• New installations on CloudLinux and RHEL 7 servers require at least 1 GB of RAM, and are <b>only</b> available for 64-bit systems.</li> <li>• New installations on Amazon® Linux are only available for 64-bit systems.</li> </ul>	None
11.50	New installations on CentOS 7 servers require at least 1 GB of RAM, and are <b>only</b> available for 64-bit systems.	None
11.48	None	None
11.46	None	<ul style="list-style-type: none"> <li>• Microsoft® FrontPage® Extensions</li> <li>• The <code>cpanel-php53</code> RPM target is set to <code>installed</code>.</li> </ul>
11.44	None	None
11.42	None	None

11.40	None	None
11.38	None	Interchange is enabled.
11.36	<ul style="list-style-type: none"> <li>At least 1.6 GB of space available in the <code>/usr/local/cpanel/</code> directory</li> <li>cPanel package updates set to <i>Automatic</i> or <i>Inherit</i>. For more information on how to set the cPanel package updates to <i>Automatic</i> or <i>Inherit</i>, read the <a href="#">cPanel package updates</a> section below.</li> </ul> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p> <b>Note:</b></p> <p>When you upgrade to cPanel &amp; WHM version 11.36, the cPanel &amp; WHM update process may rebuild your Exim configuration. We recommend that you check your Exim configuration after you upgrade to cPanel &amp; WHM version 11.36.</p> </div>	<ul style="list-style-type: none"> <li>Less than 1.6 GB available in the <code>/usr/local/cpanel/</code> directory.</li> <li>The <code>/usr/local/cpanel/scripts/sysup</code> script is disabled.</li> <li>Third-party packages are disabled.</li> </ul>
11.34	<ul style="list-style-type: none"> <li>CentOS 5 or newer, CloudLinux™ 5 or newer, or RHEL 5 or newer</li> <li>MySQL® 5.0 or newer</li> </ul>	<ul style="list-style-type: none"> <li>CentOS 4 or earlier, CloudLinux 4 or earlier or RHEL 4 or earlier</li> <li>MySQL 4.x or earlier</li> </ul>
11.32	<ul style="list-style-type: none"> <li>CentOS 4 or newer or Red Hat® Enterprise Linux (RHEL) 4 or newer.</li> <li>The Maildir mail storage format. For more information on how to convert the mbox mail storage system to Maildir, read our <a href="#">How to Convert mbox Accounts to Maildir</a> documentation.</li> <li>Exim 4.77 or newer. To install Exim 4.77, enable Exim updates in WHM's <a href="#">Update Preferences</a> interface (<i>WHM &gt;&gt; Home &gt;&gt; Server Configuration &gt;&gt; Update Preferences</i>).</li> <li>The <code>/var/cpanel/sysinfo.config</code> file must exist and must contain entries. For more information on the <code>/var/cpanel/sysinfo.config</code> file, read the <a href="#">sysinfo.config</a> section below.</li> </ul>	<ul style="list-style-type: none"> <li>FreeBSD®</li> <li>CentOS 3 or earlier</li> <li>Red Hat 3 or earlier</li> <li>The mbox mail storage system</li> <li>Exim 4.0 or earlier</li> <li>The <code>/var/cpanel/sysinfo.config</code> file is empty or does not exist.</li> </ul>
11.30	None	None

## Additional blocker information

### cPanel & WHM version 80

#### MySQL 5.6 or newer required

cPanel & WHM version 80 requires that your server runs MySQL version 5.6 or newer. You **must** upgrade to **at least** MySQL version 5.6 or any version of MariaDB before you can upgrade your cPanel & WHM server.

You can upgrade your MySQL version in WHM's [MySQL or MariaDB Upgrade](#) interface (*WHM >> Home >> Software >> MariaDB/MySQL Upgrade*).

#### Remote MySQL 5.6 or newer required

cPanel & WHM version 80 requires that any remote database servers with active connections run MySQL version 5.6 or newer. You **must** upgrade those servers to **at least** MySQL version 5.6 or any version of MariaDB before you can upgrade your cPanel & WHM server.

You can check your remote database server profiles in WHM's [Manage MySQL Profiles](#) interface (*WHM >> Home >> SQL Services >> Manage MySQL Profiles*).

#### Minimum 360,000 inodes available

cPanel & WHM version 80 requires a minimum of 360,000 available inodes on the filesystem on which cPanel & WHM exists.

### cPanel & WHM version 78

#### EasyApache 4 required

You **must** migrate to [EasyApache 4](#) **before** you upgrade to cPanel & WHM version 78. You can migrate to EasyApache 4 from WHM's [EasyApache 4](#) interface (*WHM >> Home >> Software >> EasyApache 4*). For more information, read our [How to Install or Uninstall EasyApache 4](#) and [The EasyApache 3 to EasyApache 4 Migration Process](#) documentation.

#### LiteSpeed 5.3.6 required

If LiteSpeed exists on your server, you **must** upgrade to LiteSpeed version 5.3.6 or later **before** you upgrade to cPanel & WHM version 78.

### cPanel & WHM version 68

If LiteSpeed exists on your server, you **must** upgrade to LiteSpeed version 5.2.1 build 2 or later **before** you upgrade to cPanel & WHM version 68. Otherwise, websites will **not** provide the entire certificate chain and browsers may display an SSL error. For more information about how to upgrade LiteSpeed, read LiteSpeed's [cPanel Plugin](#) documentation. View the `/usr/local/lsws/autoupdate/build` file to verify your LiteSpeed version information.



**Note:**

If your server does not contain the `/usr/local/lsws/` directory, LiteSpeed likely does not exist on your server.

## cPanel & WHM version 66

After the upgrade to cPanel & WHM version 66 finishes, WHM users in an active session **must** refresh their browser windows. Until they do, they may see additional frames within the WHM interface on each page load.

## cPanel & WHM version 62

### MySQL upgrade required

cPanel & WHM version 62 requires that your server runs MySQL version 5.1 or earlier. You **must** upgrade to **at least** MySQL version 5.5 before you can upgrade your cPanel & WHM server. You can upgrade your MySQL version in WHM's [MySQL or MariaDB Upgrade](#) interface (*WHM >> Home >> Software >> MariaDB/MySQL Upgrade*).

## cPanel & WHM version 60

### SNI Required

cPanel & WHM version 60 requires a web server that supports SNI (for example, Apache (httpd) 2.2.12, LiteSpeed 4.1, or OpenLiteSpeed 1.4.12 or greater). You **cannot** upgrade to cPanel & WHM version 60 if your web server does not support SNI. Use WHM's [EasyApache](#) interface (*WHM >> Home >> Software >> EasyApache*) to upgrade your web server.

## cPanel & WHM version 58

### 64-bit systems only

cPanel & WHM version 58 is only available for 64-bit systems. You **cannot** install or upgrade to cPanel & WHM version 58 on a 32-bit system.

### CentOS, RHEL, and CloudLinux systems require version 6 or later

If your server runs the CentOS, RHEL, or CloudLinux operating systems, it **must** run version 6 or later. You **cannot** install or upgrade to cPanel & WHM version 58 on a server that runs CentOS 5, RHEL 5, or CloudLinux version 5.

### The perl514 RPM target is set to installed or unmanaged

If the perl514 RPM target's state is `installed` or `unmanaged` in **any** `.versions` file in the `/var/cpanel/rpm.versions.d/` directory, the upgrade to cPanel & WHM version 58 will fail.

- To fix this issue in the `/var/cpanel/rpm.versions.d/local.versions` file, use [the `/scripts/update\_local\_rpm\_versions` script](#).
- To fix this issue in a third-party provided `*.versions` file, update the file in your preferred text editor, and then run [the `/usr/local/cpanel/scripts/check\_cpanel\_rpms` script](#).

## cPanel & WHM version 11.52

### New installations on CloudLinux and RHEL 7, and Amazon Linux servers

- New installations on CloudLinux and RHEL 7 servers require a minimum of 1 GB of RAM, and are only available for 64-bit systems.
- New installations on Amazon Linux are only available for 64-bit systems.

## cPanel & WHM version 11.50

### New installations on CentOS 7 servers

New installations on CentOS 7 servers require a minimum of 1 GB of RAM, and are only available for 64-bit systems.

## cPanel & WHM version 11.46

### Microsoft FrontPage Extensions

You **must** remove the Microsoft FrontPage Extensions RPM entirely from your system. In cPanel & WHM version 11.44, you can remove FrontPage in WHM's [Uninstall FrontPage Extensions](#) interface (*WHM >> Home >> Front Page >> Uninstall FrontPage Extensions*).

## The cpanel-php53 RPM target

If you have set the `cpanel-php53` RPM target to `installed` in the `rpm.versions` system, the system will block an upgrade to cPanel & WHM version 11.46.

To uninstall the `cpanel-php53` target, run the following commands:

```
/scripts/update_local_rpm_versions --del target_settings.cpanel-php53 uninstalled
/scripts/check_cpanel_rpms --fix
```



### Note:

For more information, read our [How to Set or Unset RPM Management](#) documentation.

## cPanel & WHM version 11.44

### Nobody must own the transfer database

If a user owns the `whmxferr` database, you **must** delete the database.

## cPanel & WHM version 11.36

### Disk space on all cPanel version changes and new installs

As of cPanel & WHM version 11.36, to ensure that a partial upgrade does not break your current installation, the cPanel & WHM update process downloads new files to a staging directory inside the `/usr/local/cpanel/` directory.

To ensure that there is enough disk space available for the new files, the cPanel update process checks for a minimum of 1.6GB of available disk space in the `/usr/local/cpanel/` directory before an upgrade, update, or new installation can begin. After the cPanel & WHM update process downloads the files and completes the compatibility checks, the update process replaces the prior version of each file with the new version.



### Note:

cPanel & WHM checks for the amount of available disk space in the `/usr/local/cpanel/` directory, but some legacy RPMs (for example, Exim or MySQL) install outside that space. We do **not** check for sufficient disk space in the `/usr/` directory if it is in a different partition from the `/usr/local/cpanel/` directory.

### cPanel package updates set to Automatic or Inherit

To update to cPanel & WHM version 11.36, the following cPanel package updates must be set to *Automatic* or *Inherit*:

- MySQL
- Courier
- Dovecot®
- FTP
- NSD
- MYDNS
- Exim
- bandmin
- Python™



### Notes:

- To set the cPanel package update options to *Automatic* or *Inherit*, use WHM's [Update Preferences](#) interface (*WHM >> Home >> Server Configuration >> Update Preferences*).
- For information on how to modify cPanel & WHM's update configuration file, read our [The cPanel & WHM Update Configuration File - /etc/cpupdate.conf](#) documentation.

## Exim configuration

You **cannot** upgrade to cPanel & WHM version 11.36 if you set the `EXIMUP` key's value to `never` in the `/etc/cpupdate.conf` file.

To upgrade from cPanel & WHM version 11.34 and earlier, perform the following steps:

1. Run the `touch /var/cpanel/exim.unmanaged` command.
2. Run the cPanel & WHM update process.

To upgrade from a cPanel & WHM version 11.36 release prior to 11.36.07, perform the following steps:

1. Run the following command:

```
/usr/local/cpanel/scripts/update_local_rpm_versions --edit target_settings.exim unmanaged
```

2. Run the cPanel & WHM update process.

If you set the `EXIMUP` key's value to `inherit` in the `/etc/cpupdate.conf` file, you may receive an error that informs you that the `EXIMUP` key's value is set to `never`. To resolve this issue, perform the following steps:

1. Set the `CPANEL` key's value to `11.36` in the `/etc/cpupdate.conf` file.
2. Run the cPanel & WHM update process.
3. Set the `CPANEL` key's value to your desired support tier (for example, `RELEASE`) in the `/etc/cpupdate.conf` file.



**Note:**

For more information about support tiers, read our [Product Versions and the Release Process](#) documentation.

4. Run the cPanel & WHM update process again.

## cPanel & WHM version 11.32

`sysinfo.config`

cPanel & WHM automatically attempts to run the `/usr/local/cpanel/scripts/gensysinfo` script to generate this file during the upgrade procedure. If you encounter this error, perform the following steps:

1. Run the `/usr/local/cpanel/scripts/gensysinfo` script.
2. Examine the `/var/cpanel/sysinfo.config` file.
3. Correct any file permission problems or similar issues that prevent the `root` user's write privileges.



**Note:**

If the problem persists, [contact our support staff](#).

## Additional documentation

- [Upgrade Blockers](#)
- [Product Versions and the Release Process](#)
- [cPanel Deprecation Plan](#)
- [cPanel Long-Term Support](#)
- [The Long-Term Support JSON File](#)