

# Advanced PHP Configuration

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## Overview

This document provides advanced PHP configuration file information. Use this document to ensure that you set the appropriate .ini files for your configuration.

## The php.ini files

The system searches for and reads php.ini files when PHP starts. When it loads a directive that a php.ini file specifies, it loads the **first** incident of each directive that it finds. The system searches for php.ini files in the following order:

1. A SAPI module specific location, such as the PHPIniDir directive in Apache, the PHP\_INI\_Path environmental variable, or the php\_ini parameter in NSAPI.
2. The PHPRC environmental variable.
3. The current working directory.
4. The webserver's SAPI module or PHP directory.

### Important:

- If a php-sapi.ini file exists, where sapi represents the SAPI in use, the system reads that file **instead** of the php.ini file.
- The Apache web server changes to the root directory at startup, which causes PHP to read php.ini files that exist in the root user's directories.

In cPanel & WHM, the system also scans the .ini files that exist in the /opt/cpanel/ea-php##/root/etc/php.d/ directory. The system reads these files in **alphabetical** order.

### Note:

To see the files that PHP loaded, you can execute the php\_ini\_scanned\_files() function with your PHP script or run PHP with the --ini option.

## PHP handlers and configuration files

### CGI

The CGI handler executes PHP applications through the mod\_cgi or the mod\_cgid Apache modules.

The system **only** uses the values that the /opt/cpanel/ea-php##/root/etc/php.ini file or the .ini files in the /opt/cpanel/ea-php##/root/etc/php.d/ directory specify. The system reads these files in **alphabetical** order.

### DSO

The DSO handler embeds the PHP language inside the Apache webserver. DSO allows you to use Apache directives (for example, the php\_value and php\_admin\_value directives).

The system **only** uses the values that the /opt/cpanel/ea-php##/root/etc/php.ini file or the .ini files in the /opt/cpanel/ea-php##/root/etc/php.d/ directory specify. The system reads these files in **alphabetical** order.

## FCGI Process Manager (FPM)

FastCGI serves PHP applications through the `mod_proxy_fcgi` Apache module.

The system loads the PHP INI values in the following order:

1. The values that the `/opt/cpanel/ea-php##/root/etc/php.ini` file or the `.ini` files in the `/opt/cpanel/ea-php##/root/etc/php.d/` directory specify. The system reads these files in **alphabetical** order.
2. The `/opt/cpanel/ea-php##/root/etc/php-fpm.conf` file.

**Note:**

If a key that starts with `php_admin_*` exists, it will **override** the system default value or any previously found value.

3. The `.conf` files in the `/opt/cpanel/ea-php##/root/etc/php-fpm.d/` directory.

**Important:**

Do **not** edit the `/opt/cpanel/ea-php##/root/etc/php-fpm.conf` file or the files in the `/opt/cpanel/ea-php##/root/etc/php-fpm.d/` directory. If you wish to make changes, you **must** edit the PHP-FPM `.yaml` files.

For more information, read our [PHP-FPM](#) documentation.

## FCGI daemon (FCGId)

FCGId serves PHP applications through the `mod_fcgid` Apache module. The `mod_fcgid` Apache module is an alternative to the `mod_cgi` Apache module.

The system **only** uses the values that the `/opt/cpanel/ea-php##/root/etc/php.ini` file or the `.ini` files in the `/opt/cpanel/ea-php##/root/etc/php.d/` directory specify. The system reads these files in **alphabetical** order.

**Important:**

- You can **only** use FCGId with MultiPHP on systems that run cPanel & WHM version 74 or later.
- On systems prior to cPanel & WHM version 78, if your default PHP version uses FCGId, then **all** PHP versions will use FCGId

For more information, read our [Apache Module: FCGId](#) documentation.

## LSAPI

LSAPI provides a fast and stable way to serve PHP applications. cPanel & WHM's version of LSAPI differs from the one that CloudLinux provides. This version disables Checkpoint/Restore in Userspace (CRIU), connection pooling, and opcache preservation.

The system **only** uses the values that the `/opt/cpanel/ea-php##/root/etc/php.ini` file or the `.ini` files in the `/opt/cpanel/ea-php##/root/etc/php.d/` directory specify. The system reads the files in the `/opt/cpanel/ea-php##/root/etc/php.d/` directory in **alphabetical** order.

## suPHP

This option provides the ability to run PHP scripts as the user with the `mod_suphp` Apache module.

The system loads PHP INI directives in the following order. The system uses the **first** instance of a directive that it finds.

**Warnings:**

- We **strongly** recommend that you allow your system to load the `.ini` files and directives as it finds them. This guarantees the most predictable results.
- We **strongly** recommend that you do **not** specify a location for your `.ini` file with the `[phprc_paths]` section of the `suphp.conf` file, the `suPHP_ConfigPath` directive, or set the [PHPRC environmental variable](#). Unexpected behavior may occur.

1. The `.user.ini` file that exists in the same directory as the PHP script.

**Important:**

- Do **not** set the `user_ini.filename` directive.
- If the system does **not** find a `.user.ini` file, it searches up the directory tree until finds one and uses that file as if it existed in the PHP file's directory.
  - In PHP 5, the system does **not** search below the domain's document root.
  - In PHP 7, the system **will** search below the domain's document root.
- The system ignores directives that are **not** allowed in `.user.ini` files.

2. The `php.ini` file that exists in the same directory as the PHP script.
3. The `.ini` files in the PHP version's `/opt/cpanel/ea-php##/root/etc/php.d/` directory.

**Note:**

PHP scans the files in alphabetical order. To see the files that PHP loaded, you can run the `php_ini_scanned_files()` command or run PHP with the `--ini` option.

4. The PHP version's global `php.ini` file.
5. The PHP default setting.

If you specified a location for your `.ini` file, the system does **not** load configurations in the `/opt/cpanel/ea-php##/root/etc/php.d/` directory. Instead, it loads the settings in the `php.ini` file that the directive specifies. We **strongly** recommend that you do **not** specify the location of a `php.ini` file.

The presence of one of the following sets the location of `.ini` file that the system reads:

- The `suPHP_ConfigPath` directive.
- The `[phprc_paths]` section of the `suphp.conf` file.
- If you set a file location with the PHPRC environmental variable,

**Important:**

- We **strongly** recommend that you do **not** set the `[phprc_paths]` section, the `suPHP_ConfigPath` directive or set the **PHP RC environmental variable**. Unexpected behavior may occur.
- If you specify the location of an `.ini` file, you **must** provide a complete `.ini` file. Run the following command to ensure that your users receive a complete `php.ini` file:

```
cat /opt/cpanel/ea-php##/root/etc/php.ini
/opt/cpanel/ea-php##/root/etc/php.d/*.ini >
/path/to/specified/php.ini
```

## Additional documentation

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

- [Manage PHP Handlers in EasyApache 4](#)
- [The cPanel PHPRC PHP Patch for EasyApache 4](#)
- [PHP Home](#)
- [EasyApache 4 Home](#)
- [EasyApache 4 FAQ](#)

## Content by label

There is no content with the specified labels





- [Manage PHP Handlers in EasyApache 4](#)
- [The cPanel PHPRC PHP Patch for EasyApache 4](#)
- [PHP Home](#)
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- [EasyApache 4 FAQ](#)
  
- [WHM API 1 Functions - php\\_set\\_vhost\\_versions](#)
- [WHM API 1 Functions - php\\_set\\_system\\_default\\_version](#)
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- [WHM API 1 Functions - php\\_fpm\\_config\\_set](#)
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