

Using an opcode cache (OPCache, APC or WinCache)

Christopher Nadeau - 2017-11-09 - Comments (2) - Performance

Deskpro is a large PHP application with hundreds of thousands of lines of PHP code in hundreds of source files. To drastically improve performance, we highly recommend using an opcode cache (also known as a bytecode cache) such as APC or WinCache. An opcode cache stores precompiled versions of scripts in memory, removing the need for PHP to load and parse scripts on every request.

OPCache (PHP 5.5 or above)

PHP 5.5 or higher comes with a bundled opcode cache (OPCache). If possible, we recommend you use PHP 5.5 - this removes the need to install the opcode cache separately.

If you have PHP 5.5, DO NOT install WinCache or APC as they are not required.

If you have 5.5 or above but the installation wizard prompts you to install OPCache, you may need to add these lines to your *php.ini* to enable it:

```
opcache.enable=1
```

and

```
zend_extension=/full/path/to/opcache.so
```

or on Windows:

```
zend_extension=php_opcache.dll
```

In some cases you may need to specify the full path to `php_opcache.dll`, e.g.:

```
C:\Program Files (x86)\PHP\v5.5\ext\php_opcache.dll
```

There are other OPCache settings in `php.ini` used to tune performance. We suggest starting with the following settings for most systems:

```
opcache.memory_consumption=128
```

If you have a server with lots of RAM (8 GB or more), try increasing `opcache.memory_consumption` to 256.

```
opcache.interned_strings_buffer=8opcache.max_accelerated_files=4000op  
cache.revalidate_freq=60opcache.fast_shutdown=1opcache.enable_cli=0
```

See <http://php.net/manual/en/opcache.installation.php> for more information on OPCache settings.

Restart your webserver after editing *php.ini* to apply changes.

ONLY if you can't upgrade your PHP version to 5.5, install a separate opcode cache from the ones below.

WinCache on Windows

If you are using IIS on Windows you can install WinCache from Microsoft's IIS website at <http://www.iis.net/downloads/microsoft/wincache-extension>

Installing APC on Linux with PECL

You can compile and install APC manually via PECL.

```
pecl install apc
```

For more information refer to the PHP manual and the APC PECL page:

- <http://pecl.php.net/package/apc>
- <http://php.net/manual/en/install.pecl.pear.php>

Installing APC on Debian or Ubuntu

```
sudo apt-get install php5-dev  
sudo pecl install apc  
sudo /etc/init.d/apache2 restart
```

Installing APC using yum on RedHat or CentOS

If you have installed PHP using yum, you can activate APC using yum as well:

```
yum install php-pear php-devel  
pecl install apc  
service httpd restart
```