



Server and PHP Requirements for Magento 2

for

Running Magento 2 requires specific server configurations. Using unsupported PHP versions or missing extensions causes errors and security vulnerabilities. This guide covers the requirements for current Magento versions.

Quick Reference Table

Magento Version	PHP Versions	MySQL	MariaDB	Elasticsearch/OpenSearch
2.4.7	8.2, 8.3	8.0	10.6	ES 8.x / OS 2.x
2.4.6	8.1, 8.2	8.0	10.6	ES 7.17, 8.x / OS 2.x
2.4.5	8.1	8.0	10.4	ES 7.17 / OS 1.2
2.4.4	8.1	8.0	10.4	ES 7.16 / OS 1.2

PHP Requirements

PHP Version

Always use a supported PHP version for your Magento release. Running on unsupported versions:

- Causes fatal errors and broken functionality
- Creates security vulnerabilities
- Voids support eligibility

Required PHP Extensions

These extensions must be installed and enabled:

```
bcmath  
ctype  
curl  
dom  
fileinfo  
filter  
gd  
hash  
iconv  
intl  
json
```

```
libxml
mbstring
openssl
pcre
pdo_mysql
simplexml
soap
sockets
sodium
spl
tokenizer
xmlwriter
xsl
zip
zlib
```

Check installed extensions:

```
php -m
```

PHP Settings

Recommended `php.ini` settings:

```
memory_limit = 2G
max_execution_time = 18000
max_input_vars = 10000
post_max_size = 64M
upload_max_filesize = 64M
realpath_cache_size = 10M
realpath_cache_ttl = 7200
opcache.enable = 1
opcache.memory_consumption = 512
opcache.max_accelerated_files = 60000
opcache.validate_timestamps = 0
```

Note: Set `opcache.validate_timestamps = 1` in development for file change detection.

Database Requirements

MySQL

- MySQL 8.0 is required for Magento 2.4.x
- Use InnoDB storage engine
- Enable `innodb_large_prefix` (default in MySQL 8.0)

MariaDB

- MariaDB 10.4+ for Magento 2.4.4-2.4.5
- MariaDB 10.6 for Magento 2.4.6+

Database Settings

```
innodb_buffer_pool_size = 1G
innodb_log_file_size = 256M
max_allowed_packet = 64M
tmp_table_size = 64M
max_heap_table_size = 64M
```

Search Engine Requirements

Magento 2.4+ requires Elasticsearch or OpenSearch. MySQL search is no longer supported.

Elasticsearch

- Version 7.17 or 8.x depending on Magento version
- Java 11 or higher required

OpenSearch

- OpenSearch 1.2 or 2.x depending on Magento version
- Compatible alternative to Elasticsearch

Verify Elasticsearch is running:

```
curl -X GET "localhost:9200"
```

Web Server Requirements

Ngix (Recommended)

- Nginx 1.x
- PHP-FPM configured
- Sample config included in Magento at `nginx.conf.sample`

Apache

- Apache 2.4
- `mod_rewrite` enabled
- `AllowOverride All` for Magento directory

Composer

- Composer 2.x required for Magento 2.4+
- Composer 1.x no longer supported

Check version:

```
composer --version
```

Additional Requirements

Redis (Recommended)

- Redis 6.x or 7.x for caching and sessions
- Significantly improves performance

Varnish (Optional)

- Varnish 7.x for full-page caching
- Recommended for high-traffic stores

RabbitMQ (Optional)

- RabbitMQ 3.11+ for message queues
- Required for B2B and some async operations

Checking Your Setup

Magento includes a readiness check:

```
bin/magento setup:config:set --help
```

Or check PHP requirements:

```
php -r "echo 'PHP Version: ' . PHP_VERSION . PHP_EOL;"  
php -m | sort
```

Cloud Environments

Adobe Commerce Cloud and managed hosting providers handle most requirements automatically. Verify with your provider if you're unsure about specific versions.

Need More Help?

Documentation:

- [All Help Articles](#) - Complete documentation overview

Support:

- [Contact Support](#) - Get help from our team

