

# **Doofinder for Magento 2**

User Manual

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# Overview

This module provides integration between Magento 2 and the [Doofinder](#) search service to enhance the overall search experience in your site.

You can integrate Doofinder at two different levels in your page:

- **Front-end only:** Use this level of integration if you want to provide Doofinder's search layer to your users but you want Magento to manage the search when the user submits the search form. This level requires having [your own data file](#) to feed Doofinder with your products information.
- **Complete:** Use this level of integration if you want to provide Doofinder's search layer to your users and / or you want Doofinder to manage search results when the user submits the search form. This level of integration indexes your data directly through Doofinder's REST API and requires a *Management* API key<sup>1</sup> to authenticate requests.

## Support

- For technical support, get in touch from your [Doofinder Account](#) or drop us an email at [support@doofinder.com](mailto:support@doofinder.com).
- If you're a developer, you can file an issue or contribution request in our public code repository at Github: <https://github.com/doofinder/doofinder-magento2>.

## Pre-requisites

- This module requires Magento 2.1 or greater, due to technical incompatibilities with Magento 2.0.
- Hardware and software requirements are the same as for Magento 2. Check Magento 2 technical requirements for more information.
- This module is heavily based on Cron. Magento 2 requires Cron to properly work, so you must have Cron up and running in your server for the module to work.
- To use the Doofinder module you need an active Doofinder account. Doofinder is a paid service but you can try it 30 days for free and benefit from the *freemium* plan if you have a small store. If you don't have an account yet you can sign up at:

<https://www.doofinder.com/signup>

Plans and pricing are available at:

<https://www.doofinder.com/price>

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<sup>1</sup> There are two kind of API keys: search-only keys and management keys. The latter allow to make changes to your search engines.

# Installation

Doofinder can be installed via Component Manager as a *free* purchase done in Magento Marketplace, or via Composer, the *the-facto* PHP package manager, if you feel at home working from the command line directly in your server.

**WARNING:** Do not install this module via FTP or direct upload to your server's filesystem. This module has external software dependencies that Component Manager and Composer know how to deal with. If you try to install the module by any other way than recommended you may experience errors in your system.

## Installation via Magento Marketplace

For up-to-date instructions refer to the official Magento documentation:

- [Make a Purchase](#)
- [Download the Software](#)
- [Install the Extension](#)

Doofinder module is a free purchase so you have to pay nothing to use it. The only cost for you is the price of the Doofinder service once the trial period has ended.

## Installation via Composer

1. Log into your Magento 2 server via SSH.
2. Go to Magento 2 installation path, for instance:

```
$ cd /var/www/domains/shop.example.com
```

3. Execute:

```
$ composer require doofinder/doofinder-magento2  
$ php bin/magento setup:upgrade  
$ php bin/magento setup:di:compile
```

**WARNING:** Some versions of the module, specially initial versions, may be in a *beta* stage. That means they include features that may not work in some circumstances. To install them you will have to specify the proper *support stability tag*, *@beta* in this case.

## Post-Installation

After installing the module, a new “*Doofinder*” menu should have been added to “*Stores > Configuration*”.

There you will find all the module configuration options.

GENERAL	▼
CATALOG	▼
CUSTOMERS	▼
SALES	▼
DOOFINDER	▼
SERVICES	▼
ADVANCED	▼

## Module Configuration

### Read First

As you will probably know, Magento 2 can be configured at different levels; you can set up default values and be more specific for each store view.

This module makes use of that configuration scheme but not all settings are available at all levels, some will be at the default level and some others will be specific for each store view. You must pay attention so the module is properly configured.

Before configuring the module we should clarify some concepts:

- From Magento’s point of view, Doofinder is a search engine. This concept clashes with Doofinder’s concept of search engine. In Magento 2 the search engine is the system you use for search and you can use only one. MySQL is Magento’s default search engine but you can use Doofinder instead.
- In Doofinder’s slang a search engine is a single container where you can put documents you want to search. You can have multiple search engines in the same account, each with a different unique ID which is called a Hash ID. When you set up search in Magento 2 with the Doofinder module, you associate each store view with its own search engine by using different Hash ID values.

Module configuration is structured in two submenus:

1. **Configuration:** General configuration of the module, like authentication, search engine identifiers or whether to use the Doofinder Layer in the frontend or not.
2. **Index Settings:** Configuration about the data being exported.

**WARNING:** A third menu for legacy *Data Feed* settings is available for backwards compatibility and as a fallback for very specific cases but may be removed at any time with no advise and its use is discouraged.

Almost all module your configuration will take place inside those two sections. To make the most of the module there are some considerations to take into account first so reading the next section is recommended.

## Configuration Flow

These are the recommended steps to have Doofinder up and running in the shortest time.

### Sign Up

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Create a free account by visiting <https://www.doofinder.com/signup> in your web browser. Once registered you will automatically enter the next step.

**NOTICE:** If you already have a Doofinder account you can omit this step.

### Search Engine Creation

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If you already have a search engine in your account you can create a new one from the list of search engines by clicking the *New Search Engine* button.

The search engine creation wizard consists of three steps:

#### Site Information

In this screen you will have to enter:

- A name for your search engine to easily distinguish it from other search engines in your account.
- The web address of your site's home page.

Once available, click the *Continue* button.

#### Choose Platform

The application should have detected that your site is using Magento 2. If that's not the case choose *Magento 2*. Doofinder will try to read the configuration from your site. If you get an error message, check that you've installed the plugin properly.

#### Magento 2 Module

This module requires a search engine for each store view. You can create a single search engine or one for each detected store view (recommended unless you know what you're doing).

CHOOSE A STORE VIEW FROM THE LIST OR LET US CONFIGURE ALL FOR YOU

Automatically create all required search engines (recommended) ▾

Continue

Back

If everything went as expected you will be asked if you want Doofinder to generate a search engine for each store view in your site or if you want to create only one search engine. The default action (generate all search engines) is recommended.

Once done click the *Continue* button.

Doofinder will create a single search engine or, in case you followed the recommended action, as many search engines as store views in your site, and you will be presented a summary with the data required to configure the plugin.

### Magento 2 Module

Here you have the data for your Magento 2 installation. To learn more about how to configure the module refer to the [documentation](#).

API Token	eu1-d4389814f3a76a5bd28da22f9b027b78dff6445d 		
HASH IDS	Search Engine	Store View	Hash ID
	Your Site (M2) [default]	default	921e2b358b764a852bf441cfeaa8094a 
	Your Site (M2) [es]	es	ce274386c8b0783d42db3e0986b73b4a 

Annotate all information (copy and paste into a text file should work fine) and continue.

### Doofinder Layer Script

This step is optional at this stage of the installation process. If you want to configure the script now, click the *Yes, let's go!* button and follow the instructions of the wizard. Otherwise click the *Skip this step and finish* button.

You will be able to configure the layer later by accessing your search engine and going to *Configuration > Installation Scripts > Doofinder Layer*.

## Module Configuration

Once you have all *hashids* and the *API Key* you can configure the Doofinder module.

It's recommended to start setting proper values in the *Configuration* section, first for the *Default Config* scope (*API Key* and global options), then for each store view (*hashid*, layer script...).

Optionally, you can customize the information being exported in the *Index Settings* section.

**NOTICE:** It's recommended to take some time to configure the module before enabling Doofinder as Magento's search engine.

## Magento Configuration

Once you configured the module, it's time to set Doofinder as Magento's search engine. Here are some things to consider.

### Doofinder as Magento's search engine

The module replaces the default search engine (MySQL) and indexes all your products in the Doofinder servers. After the initial import, the module sets the search catalog index mode to *Update On Save* so only changes are sent to Doofinder, reducing the consumption of credits in the service.

**NOTICE:** The recommended index mode for the search results catalog is *Update On Save*. If your catalog index is configured to *Update By Schedule* it will be automatically changed after the first indexing. This way the index is updated atomically when a change is done in your catalog instead of reindexing everything.

**NOTICE:** If you change the search catalog index mode to *Update By Schedule* you may experience problems with search because your data will be erased and re-indexed in Doofinder based on that schedule.

**NOTICE:** Starting at version 0.2.0-beta, the module introduced a new way of notifying changes to the Doofinder service that reduces even more the consumption of queries and reduces overhead in sites with big catalogs. Instead of sending events as soon as they happen, they're sent periodically each minute thanks to the cron system. As this is a new functionality it's not enabled by default, but it's worth to give it a try.

### Prevent indexing wrong image URLs

Due to some well known bugs in Magento 2, it may occur that images are indexed in Doofinder with wrong paths, resulting in errors when they're displayed.

To fix this, ensure you explicitly set media URLs:

- On the Admin Panel, go to `Stores > Settings > Configuration`.
- On the left panel, under `General`, select `Web`.
- Open the `Base URLs` section.
- Make sure you have configured *Base URL for User Media Files* and *Secure Base URL for User Media Files* so they point to the right place (usually, they are not configured by default).
- For *Base URLs (Secure)*: Fix *Secure Base URL* and *Secure Base Link URL* first, because they may have the value **0/** and the form won't validate on submit. In a local development environment you can use the same protocol (<http://>) as for Base URLs.

### Recommended Catalog Search Settings

Once you select Doofinder as Magento's search engine, you may have questions about what to do with the other settings that appear next to the *Search Engine* selector. These are our recommendations:

- **Enable EAV Indexer:** From Doofinder's point of view there's no recommended setting. For a shop with a big number of products, you can try to enable it and see if it performs faster. If it doesn't, and you don't have a plugin that uses it, it can remain disabled.
- **Autocomplete limit:** Doofinder does not use it, so it can be ignored.
- **Enable Search Recommendations:** Switching this option on may slow down searching a bit, but you can enable it if you want this feature.
- **Enable Search Suggestions:** It's not used so it can be switched off.



# Configuration

## Account

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### API Key

Global

If you plan to use Doofinder as your Magento 2 search engine instead of the default (MySQL), or you plan to use only the *Atomic Updates* feature (see *Index Settings* later) you will need an API Key to properly authenticate requests done from your server against Doofinder servers.

**WARNING:** Doofinder offers two different types of API Keys depending on the use. Remember to configure a *Management API Key* so your Magento 2 can perform indexing operations in Doofinder.

**WARNING:** This setting must be configured BEFORE selecting Doofinder as Magento 2 search engine or enabling the *Atomic Updates* feature.

If you don't have an API Key:

- Log into your Doofinder account.
- In the top menu press your account's email to open the menu and go to *API Keys*.
- Press *New API Key*.
- Enter a name for your API Key so you know where you're using it and check *I will use this API Key with the management API*.
- Press *Create API Key*.

## Search Engine

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### Use Doofinder for Internal Search

Global

This is actually a shortcut to configure Doofinder as the Magento 2 search engine. If the link doesn't work you only have to go to *Stores > Configuration > Catalog > Catalog* and, under *Catalog Search* uncheck *Use System Value* for *Search Engine* and choose *Doofinder* instead.

**WARNING:** When you choose Doofinder as Magento's search engine the catalog index will require a reindex.

### Max Requests per Search

Global

Due to the way Magento 2 works, Doofinder must get all results for each search. That can consume too much queries so it's limited to 5 requests per search by default.

### Update Products on Save

Global

Enable this option to send changes to Doofinder whenever you save a product to the database so it's updated as soon as possible for search.

**NOTICE:** You don't need this setting if you're using Doofinder for internal search.

**WARNING:** This setting requires a valid Management API Key.

### Hash ID

Store View

This is the unique ID of a search engine in Doofinder. It's a 32-character long string. You can get it from the list of search engines that appears when you access your Doofinder account.

**WARNING:** This setting must be configured BEFORE selecting Doofinder as Magento 2 search engine or enabling the *Atomic Updates* feature.

## Doofinder Layer

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Doofinder provides some Javascript layers to easily integrate search with any website. You can also use those layers in your Magento 2 website and this section provides a place to paste the necessary Javascript code to make them work.

To generate a layer for your website:

1. Log into your Doofinder account.
2. Access the search engine you want to configure.
3. Go to *Configuration > Installation Scripts > Doofinder Layer*.
4. Press *Configure Doofinder Layer*.
5. Follow the wizard steps.

**WARNING:** Magento 2 uses RequireJS to load Javascript dependencies. When creating your script you must change the type of script. The recommended value to paste the script in this section is *RequireJS (HTML script tag, easy)*.

### Enabled

Global, Store View

Enable or disable the layer globally or per store view.

### Script

Store View

This is the place where you have to paste the layer script.

# Index Settings

## Settings

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### Export Product Prices

Global, Store View

Choose whether to export prices or not.

### Price Export Mode

Global, Store View

Choose *Auto* (default) to export prices the same way as they're displayed in your store. If your store displays prices with and without taxes included you will want to choose an specific mode: *With Taxes* or *Without Taxes*.

### Image Size

Global, Store View

Export product images at the given width. Leave empty to export at the original size.

**WARNING:** Take into account that, if the images don't exist at the specified size, they will have to be generated, which is a high time and resources consuming process. It is recommended to leave it empty and use the default size of the selected image attribute.

### Export only categories present in navigation menus

Global, Store View

The module exports only active categories. This option will limit them to categories used for navigation purposes.

### Update Products on Save

Global

Enable this option to send changes to Doofinder whenever you save a product to the database so it's updated as soon as possible for search.

**NOTICE:** If you're using Doofinder for internal search this feature is enabled by default.

**WARNING:** This setting requires a valid Management API Key.

### Delayed product updates (Beta)

Global

Requires Doofinder set as Magento's internal search engine and *Update Products On Save* option enabled.

Recommended for big stores with frequent product updates. Indices won't be refreshed immediately after saving a product, but after a short period of time, saving requests to Doofinder servers.

**WARNING:** This setting requires a valid Management API Key.

## Attributes

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When indexing products in Doofinder, a default attribute set is used. You can customize the attributes being exported globally or per store view.

**NOTICE:** Some *virtual* attributes are available. They're prefixed by *Doofinder:* string and are used to perform calculations so proper values are exported. You can change them and use RAW attributes but it's not recommended.

## Data Feed (legacy)

This mode of indexing data in Doofinder is going to disappear in the near future but it is still available to provide a *fallback* for users that don't want to use Doofinder as Magento 2 search engine. We are working to separate indexing and search as a new feature.

### Cron Settings

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**Enabled**

Global, Store View

Choose whether to generate a data feed via Cron or not.

**Feed Generation Start Time**

Global, Store View

The time at which the feed generation starts.

**Step Delay**

Global, Store View

The interval (in minutes) between subsequent stages of the feed generation process. It should not be smaller than the frequency of execution of your Cron process.

**Step Size**

Global, Store View

The maximum number of products added to the feed on each iteration of the generation process (maximum recommended value: 1000).

**Security Phrase**

Global, Store View

You can set a secret word to protect your data feed. The name of the generated file will contain the secret word so nobody can guess it from the module defaults.

# Troubleshooting

**Q: Right after installing the module, trying to save the module configuration I get an error:**

Warning: array\_merge(): Argument #1 is not an array in /var/www/html/ vendor/ doofinder/ doofinder-magento2/Helper/Indexer.php on line 63

**A:** Right after the installation of the module, Magento doesn't know about the default settings, which can trigger this error. The solution usually is to clean the cache after installing the module.

You can execute this in the CLI:

```
$ php bin/magento setup:upgrade
$ php bin/magento setup:di:compile
$ php bin/magento cache:flush
```

Or go to *System > Cache Management* and choose Flush Magento Cache.

**Q: I have my indexes configured to be updated on save: when will the items be indexed?**

**A:** They should be indexed after a while, assuming cron works properly - indexes are revalidated in case of invalidation in cron no matter of index mode.

**Q: I can't change the Update Products on Save configuration in Index Settings**

**A:** When Doofinder is configured to be Magento's search engine, atomic updates configuration is forced. When your indexes are configured to be updated on save, atomic updates are enabled. When they are configured to be updated by schedule, atomic updates are disabled.

If you don't use Doofinder as Magento's search engine (for instance, you only use the Javascript layers), you can configure atomic updates yourself.

**Q: Some products are being indexed with a wrong link, they point to the *backoffice* instead of the correct frontend store view.**

**A:** Unfortunately at the time of writing this, there's a bug in Magento 2 which produces wrong URLs in certain conditions:

<https://github.com/magento/magento2/issues/4247>

To prevent this, make sure every product has a URL key set.

