1. Overview

Import/Export Product Attributes for Magento 2 extension helps administrators to quickly import product attributes into websites via a standard CSV file.

Admin needs to prepare this CSV file with all necessary information about product attributes, then import by only one click. Moreover, the extension also supports exporting all available attributes into a CSV file conveniently.

Import/Export Product Attributes for Magento 2 extension is often used in case store owners want to change their Magento 2 websites into new ones or change from another platform to Magento 2.

Therefore, installing this module, they don't take them much time and human resources to do manually as before.

EXPLORE Magento 2 Import Export Extension Combo to break the default limit!

2. How Does It Work?

2.1. Import Product Attributes

You go to **System ⇒ Import by BSS** and select **Product Attributes** in the drop-down list of **Entity Type**.

Import Settings

Entity Type	*	Product Attributes ▾	Download Sample File

Version: 1.1.6

Import Behavior

Import Behavior	*	-- Please Select -- ▾	❓

Validation Strategy	*	Stop on Error ▾

Allowed Errors Count	*	10

Please specify number of errors to halt import process

Multiple value separator	*		

Option Value Separator		:

Store View Separator		;

2.1.1. In Import Behavior

- **Import Behavior:** There are 3 options for you to select.

+ **Add/Update**: This option allows administrators to add new attributes to the website. In addition, it also updates attributes if their attribute_codes exist.

+ **Replace**: This option allows administrators to add new attributes to the website. In case attribute _ codes in the import data match with attribute_codes of existing attributes, these attributes are deleted and new records are created using the CSV data.

+ **Delete**: This option allows administrators to remove attributes in case their attribute_codes exist.

- **Validation Strategy**: select one option from the drop-down list to determine how the system operates when there are errors in the import process.

+ **Stop on Error:** the system stops importing when there are errors.

+ **Skip error entries:** the system skips errors and continues to import.

- **Allowed Errors Count**: This setting allows you to choose the allowed maximum number of errors when importing. If the number of errors happening in the import process exceeds that maximum number you fill in this field, the system will stop importing.
- **Multiple value separator**: Choose a character to separate data in a field column. In our CSV sample file, the vertical bar (|) is set up as the default value.
- **Option value separator**: separator between store view ID and values of attribute options.
- **Store view separator**: separator between values of different store views.

For example:

AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP
is_visible	is_filterab	search_we	is_html_a	used_in_p	used_for_	swatch_in	attribute	attribute_	attribute_options_swatchte
0	1	1	1	1	0	visual	0:Black;1:	0:#000000:1	0:#1857f7:1	0:#945454:1	
0	0	1	1	0	0		0:Hike	0:Outdoor	0:Running	0:Warmup	0:Yoga
0	1	1	0	0	0		
1	1	1	1	0	0	text	2:Test1;0:Admin 1;1: 1:Swa1:0;2:Swa2:0	1:Swa3:

Formula bar content for AL2: `0:Black;1:?en|0:Blue|0:Brown|0:Gray|0:Green|0:Lavender|0:Light`

2.1.2. CSV file preparation

Before you import product attributes via a CSV file, you need to prepare the CSV file with enough necessary information. You can download this CSV sample file by clicking **Download Sample File**. Then you open this file and fill in fields:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	entity_typ	attribute_	attribute_	attribute_	is_global	is_user_d	is_filterab	is_visible	is_require	is_visible	is_searcha	is_unique	frontend_	is_visible	is_compar	is_fi
	4	color_test	Bottom	Product D	1	1	1	1	0	0	0	0		0	0	
	4	option_te	Test	Product D	1	1	1	1	0	1	0	0		0	1	
	4	simple_te	Top	Product D	1	0	0	1	0	0	0	0		0	0	

Data	Format	Meaning
attribute_code	A string of characters	Required to enter data. Notify errors if you leave it blank.
attribute_set	attribute_set1|attribute_set2...	+ When **attribute_set** of an attribute is left blank, this attribute is added as a new one that does not belong to any attribute sets or any attribute groups.

		+ When attribute_set doesn't exist in the database, a new attribute set is created.
attribute_group_na me	A string	The name of the attribute group to which the attribute is assigned after importing. + when you leave it blank, the attribute is added to the last attribute group of the assigned attribute set. + when attribute_gro up_name doesn't exist in the database, a new one is auto created.

attribute_group_code		(not required): It is auto-created based on the attribute group name. If attribute_group_code is similar to attribute_group_code of an available group in the database, you will face an error.
is_global	0,1,2	0 ~ Store View 1 ~ Global 2 ~ Website If it is left blank or wrong, it auto turns 0.
is_user_defined	0, 1	0 ~ attribute is defined as system attribute. 1 ~ attribute is not system attribute.

		Admin can delete it.
is_filterable	0,1,2	Corresponding to the Use in Layered Navigation config in the StoreFront Properties tab of the attribute: 0 ~ No 1 ~ Filterable (with results) 2 ~ Filterable (no results) If you enter the wrong value, the config auto gets 0 after importing.
is_visible	0,1	Determines whether the attribute is visible in the grid or not: 0 ~ No 1 ~ Yes

is_required	0,1	Corresponding to the Value Required config of the attribute 0 ~ No 1 ~ Yes
is_visible_on_front	0,1	Corresponding to the Visible on Catalog Pages on Storefront config: 0 ~ No 1 ~ Yes
is_searchable	0,1	Corresponding to the Use in Search config: 0 ~ No 1 ~ Yes
is_unique	0,1	Corresponding to the Unique Value config: 0 ~ No 1 ~ Yes

frontend_class		Optional. Database value
is_visible_in_adva nced_search	0,1	Determines whether the attribute is shown in advanced search or not: 0 ~ No 1 ~ Yes
is_comparable	0,1	Corresponding to the Comparable on Storefront config of the attribute 0 ~ No 1 ~ Yes
is_filterable_in_sea rch	0,1	Corresponding to the Use in Search Results Layered Navigation config: 0 ~ No 1 ~ Yes

is_used_for_price_rules	0,1	Determines whether the attribute is used for price rules or not: 0 ~ No 1 ~ Yes
is_used_for_promo_rules	0,1	Corresponding to the Use for Promo Rule Conditions config: 0 ~ No 1 ~ Yes
sort_order	Natural numbers	Smaller value, higher priority
position	Natural numbers	The display position of the attribute in layered navigation.

frontend_input		Corresponding to Catalog Input Type for Store Owner: *text* – Text Field *textarea* – Text Area *texteditor* - Text Editor (from Magento 2.3) *date* – Date *boolean* – Yes/No *multiselect* – Multiple Select *select* – Dropdown, Visual or Text Swatch *price* – Price *media_image* – Media Image *wee* – Fixed Product Tax (Notify errors and skip them when entering

		wrong values)
backend_type		Optional. Database value
backend_model		Optional. Database value
source_model		Optional. Database value
frontend_label	label|store_code1:label|store_code2:label	Label for the attribute, you can import label for many store views. (Notify errors and skip them when you leave it blank)
default_value	String	Default value for the attribute
apply_to	simple|group|bundle|configurable|downloadable|virtual	Determines product type which the attribute is used for

is_wysiwyg_enabled	0,1	Corresponding to the Enable WYSIWYG config: 0 ~ No 1 ~ Yes
is_required_in_admin_store	0,1	0 ~ No 1 ~ Yes
is_used_in_grid	0,1	Determines whether the attribute is used in the product grid or not: 0 ~ No 1 ~ Yes
is_visible_in_grid	0,1	
is_filterable_in_grid	0,1	Determines whether the attribute is used to filter in the product grid or not: 0 ~ No 1 ~ Yes

search_weight		Defines the weight of the attribute in search.
is_html_allowed_o n_front	0,1	Corresponding to the Allow HTML Tags on Storefront config. 0 ~ No 1 ~ Yes
used_in_product_li sting	0,1	Corresponding to the Used in Product Listing config: 0 ~ No 1 ~ Yes
used_for_sort_by		Corresponding to the Used for Sorting in Product Listing config: 0 ~ No 1 ~ Yes

swatch_input_type	Visual or text	Determines style of attribute having Catalog input type as select: *visual ~* attribute has visual swatch *text ~* attribute has text swatch
attribute_options	admin:Label;store_code1:Label1|admin:Label2 Example: admin:Hike;default:Hike default;test:Hike New|admin:Outdoor;test:Outdoor Test	Enters labels for the attributes with select type: + Admin ~ required + Store_code ~ not required. ('|' is corresponding to the Multiple value separator. ':' is corresponding to the

		Option Value Separator.)
attribute_options_swatchvisual	admin:value1:type;store_code1:value2:type|store_code2:value3:type Example: admin:#000000:1|admin:#1857f7:1|admin:#945454:1|	+ Value: is the value of swatch (it can be the image link or color code). + Type: is specified in the database. 1 is corresponding to **visual color** type and 2 is corresponding to **visual image** type. **For example**: +Visual color type: 0:#000000:1 + Visual image type: 0:a/_/a.jpg:2
attribute_options_swatchtext	admin:value1:type;store_code1:value2:type;store_code2:value3:type Example: admin:Swa:0;default:Swa1:0;test:Swa2:0|admin:Swa3:0;default:Swa4:0;test:Swa4:0|	+ admin: required to enter. + store_code1, store_code2: not required+ Value: is the value of

		swatch.+ Type: is always 0.For example: **1:S:0;2:Small:0**

*Notes:

- Your CSV file must include enough the number of columns like the sample file so that you can successfully import it. (If the number of columns is greater or fewer than those in the sample file, the system will notify you about errors).
- You can assign 1 attribute for many attribute sets in only 1 row in the CSV file. The format of the attribute set column is **attributeSet1|attributeSet2|...**
- If you enter the wrong product type in the **"apply_to"** column, the value of this column is changed into NULL.
- For columns with **values as 0 or 1**: if you enter the wrong value, the system will change into default value as 0.
- For columns including multiple values, you need to add multiple separators in the end. For example: **0:KBowl1;2:Elongated;1:Allong|**
- You mustn't leave **backend_type** column empty:

+ if **backend_type** is static, you need to create a column in the catalog_product_entity. If you don't do this one, you cannot save the attribute's value when saving the product. However, it's better that you shouldn't select backend_type as static.

+ If backend_type is varchar, int, decimal, text, or data time, you can definitely save the attribute's value.

- If your CSV file includes special characters that belong to your own language (in case you do not use English), you need to convert your CSV file to UTF-8 format. You can read our instructions **HERE**.

2.1.3. In File to Import

After you finish the CSV file, tab **Choose File** button to select the file to import.

2.1.5. Check Data and Import

After you select the CSV file, you need to click **Check Data** button to validate data before importing.

- If your CSV file is free from errors, there is a message to notify validation results and the Import button now appears to click.

File to Import

Select File to Import *   [Choose File] product_attributes.csv

File must be saved in UTF-8 encoding for proper import

Images File Directory   [   ]

For Type "Local Server" use relative path to <Magento installation>/var/import/images, e.g.
product_images, import_images/batch1

Validation Results

ⓘ   Checked rows: 3, checked entities: 0, invalid rows: 0, total errors: 0

✔   File is valid! To start import process press "Import" button   [Import]

Show notification about validation results after checking data and
if the CSV file is valid, Import button now appears to click

You click the Import button to start importing product attributes in the CSV file into Magento 2
website. To check these imported attributes, you navigate to

Stores → Products Attributes to see them in a grid view:

Product Attributes

Attribute Code ↓	Default Label	Required	System	Visible	Scope	Searchable	Use in Layered Navigation	Comparable
activity	Activity	No	No	Yes	Global	No	Filterable (with results)	Yes
category_gear	Category Gear	No	No	Yes	Global	No	Filterable (with results)	No
category_ids	Categories	No	Yes	No	Global	No	No	No
climate	Climate	No	No	Yes	Global	No	Filterable (with results)	No
collar	Collar	No	No	Yes	Global	No	Filterable (with results)	No
color	Color	No	No	No	Global	No	Filterable (with results)	No

- If your CSV file includes errors, the Import button cannot be displayed for you to click and there is a notification about these problems.

*NOTE: You had better take notice about these following issues in the CSV file which affect data checking.

- **Errors in the CSV file make you not successfully import:**

+ Leave **attribute_code** as blank.

+ Enter the wrong **Entity Type ID**.

+ Enter a number of columns that are greater or less than those in the sample CSV file. (Please follow the sample file we provide you and don't add more columns or remove).

+ Enter the wrong value in the"**is_global**" column. (Please remember the standard values just includes 1,2 and 3).

- **However, there some specific errors in your CSV file, but the system will skip and continues to import as well as still notifies you about problems. Let's check these skipped errors as below:**

+ Enter the wrong **backend_type or frontend_input.**

+ Enter the wrong **attribute_code** when you choose Import behavior as **Delete**.

+ Enter the different multiple value separator from the one set up in the backend.

+ Enter the wrong format in the **"attribute_option" or "attribute_option_swatch"** columns.

When you are in this situation, your CSV file is still imported but it contains errors. Therefore, thanks to notification about these errors, you can edit the file and also do it better for the next time.

2.2. Export Product Attributes

You go to **System ⇒ Export by BSS** and select **Product Attributes** in the drop-down list of **Entity Type**.

You choose CSV in the **Export File Format** field.

● **In Entity Attributes and Export**

In **Entity Type** section: you can export all available product attributes by choosing All from the drop-down list or export each attribute set.

Then click **Continue** button to export chosen items in a CSV file.

*Note: The admin can export product attributes that are not assigned to any attribute sets. (Update from version 1.0.9)

3. Tips

You can quickly import attributes with many options using source_model of attributes.

+ Create a source file in the module: Bss_ProductAttributesImportExport - this source file can be similar as the following file:

```php
<?php
namespace Bss\ProductAttributesImportExport\Model\Attribute\Source;

class Label extends \Magento\Eav\Model\Entity\Attribute\Source\AbstractSource
{
    /**
     * @return array
     */
    public function getAllOptions()
    {
        $optionArray = [];
        for ($i = 1; $i <= 2000; $i++) {
            $optionArray[] = ['label' => "$i", 'value' => $i];
        }
        if (!$this->_options) {
            $this->_options = $optionArray;
        }
        return $this->_options;
    }
}
```

The path is Bss\ProductAttributesImportExport\Model\Attribute\Source\Label.

Enter this path to the source_model of the CSV file.

More Magento 2 Import Export extension from BSSCommerce are useful for your work:

- Import Export Product Reviews
- Import Export URL Rewrites
- Import Export Categories
- Import Export Newsletter Subscribers
- Import Export Wishlist Items
- Import Export CMS Page