

MAGENTO VISUAL SEARCH PLUGIN VPS Installation AND INTEGRATION GUIDE

V1.0.0



REVISION HISTORY

The following table shows the revision history for this document.


Revision Summary	Author
06/16/2019 version 1.0.0	
First version release 1. VPS 1.0.0 description, installation, configuration, integration process.	Tarhib Al Azad


TABLE OF CONTENTS

INTRODUCTION.....	3
PRE-REQUISITES:.....	7
INSTALLATION:.....	8
CONFIGURATION:.....	8
STEP1: SETUP ENVIRONMENT.....	Error! Bookmark not defined.
STEP 2 : SET ACCELX CREDENTIAL.....	9
STEP 3 : PRODUCT CONFIGURATION.....	9
STEP 3.1.2 : HANDSHAKE WITH ML SERVER.....	Error! Bookmark not defined.
STEP 3.1.3 : PRODUCT IMAGE CONVERSION.....	10
STEP 4: SET MODE for SUGGESTED PRODUCT PAN.....	11
POST CONFIGURATION PRODUCT ADD/REMOVE.....	11

INTRODUCTION

This document describes the installation and integration steps of Visual Product Search extension developed by Accelx Inc. Visual Search is a technique to use an image as a query rather than text and search for identical or visually similar images within a product image collection or inventory. Accelx visual search module deploys sophisticated AI technology, which can identify close to 94% top-5 accurate identical or similar product images.

Once the visual search module is installed and configured into ecommerce website, a special icon  called "Visual Search Icon" should appear in the Search Bar. A new search window will appear when you click on the visual search icon. This new visual search window enables customers to visually search products in ecommerce site in 4 different methods as described below.

Method 1: Search product using image file as an input. Using "Upload an Image " Tab on the visual search window, a customer can browse & upload a product image, and search identical or similar products in ecommerce site by clicking on the  icon (Figure-1).

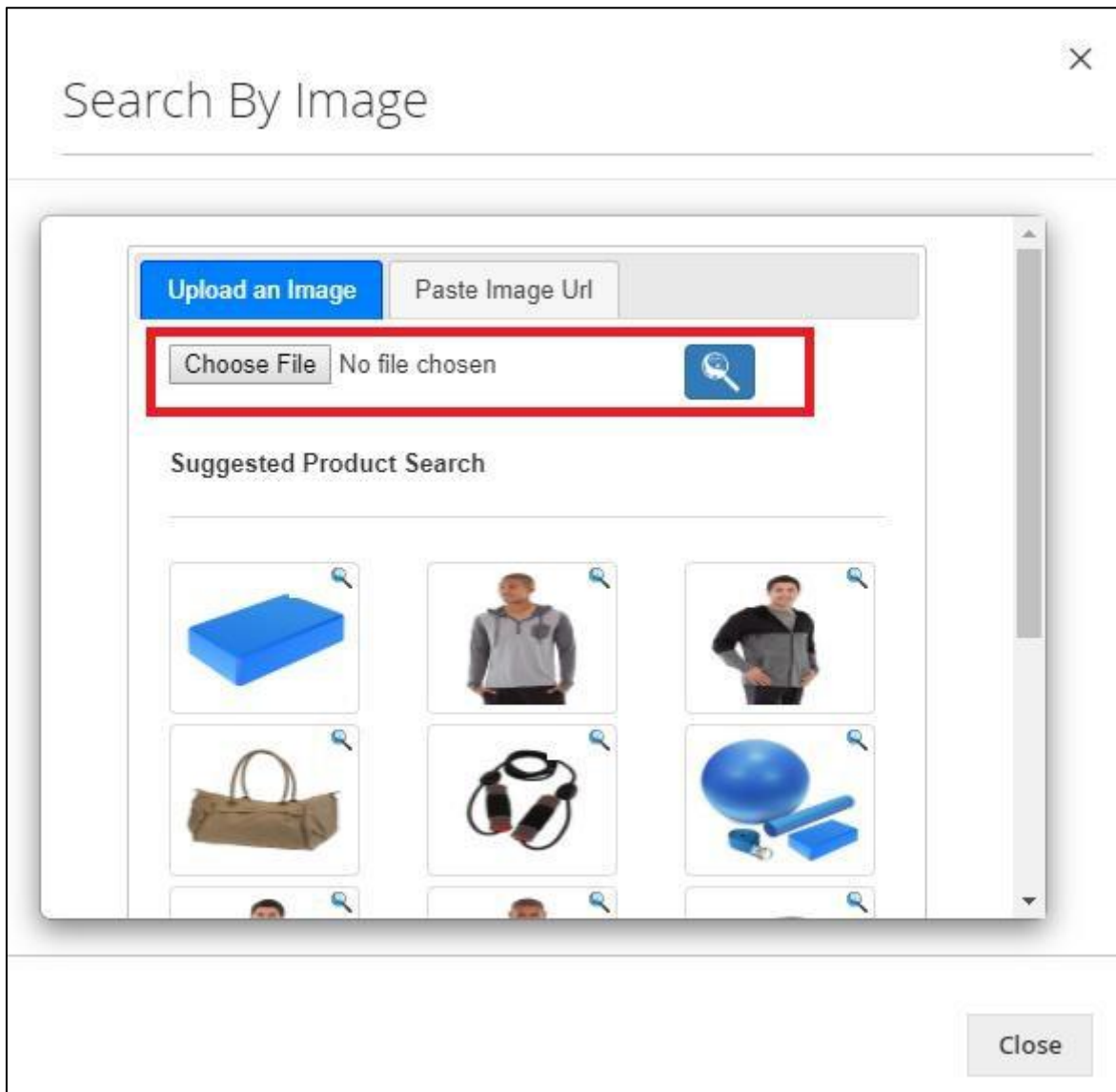



Figure 1

Method 2: Search product using image URL. Using "Paste Image URL" Tab on the visual search window, a customer can paste product image link copied from other websites, and search for identical or similar products in ecommerce site by clicking on the  icon (Figure 2).

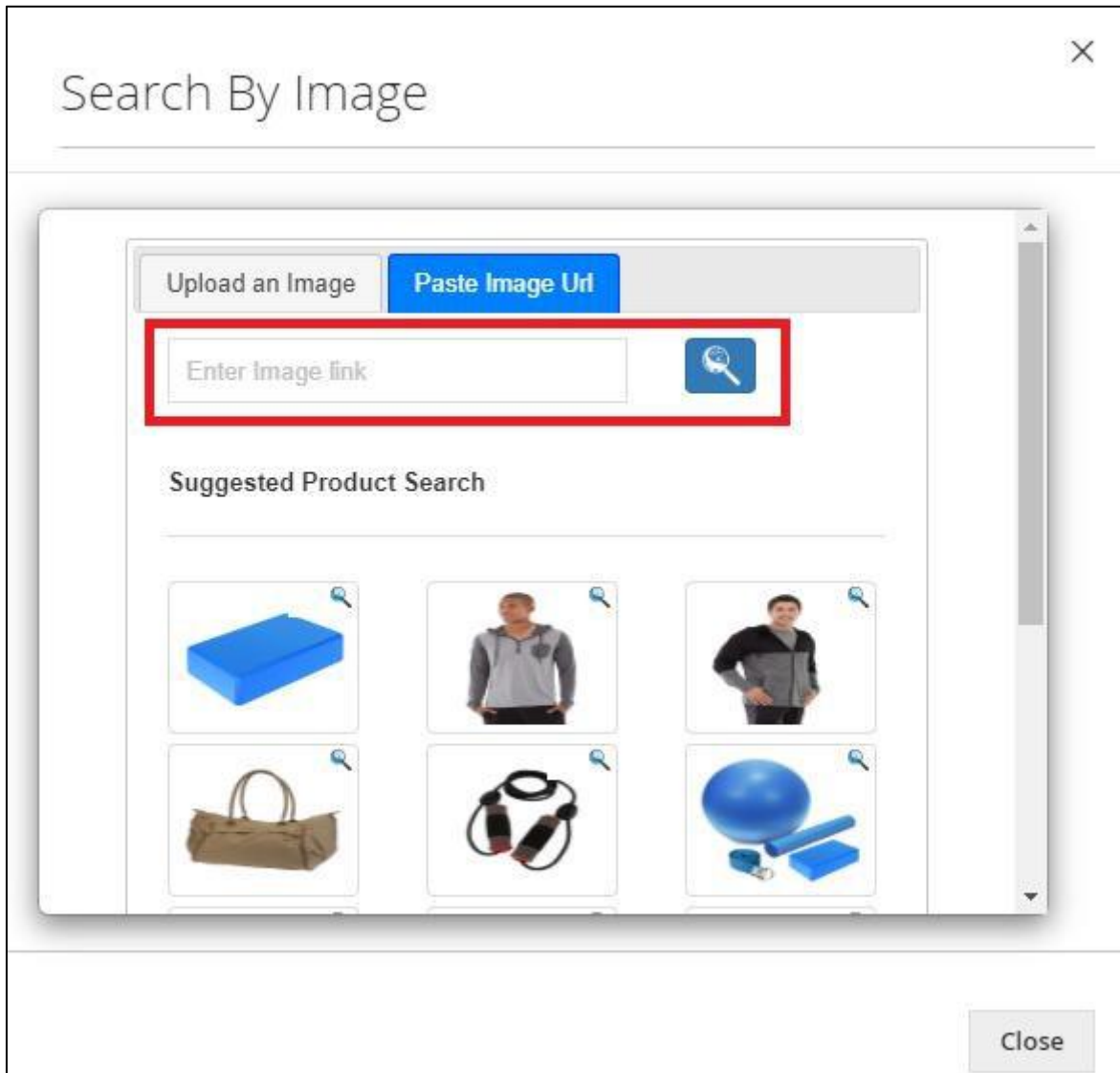


Figure 2

Method 3: Product search by clicking images on the 'Suggested Product' pan. A customer can search identical and similar products by clicking images displayed on the suggested product pan of the visual search window. This page can be configured for three different modes: 'Best-selling', 'Random', and 'Most Viewed' product images (Figure 3).

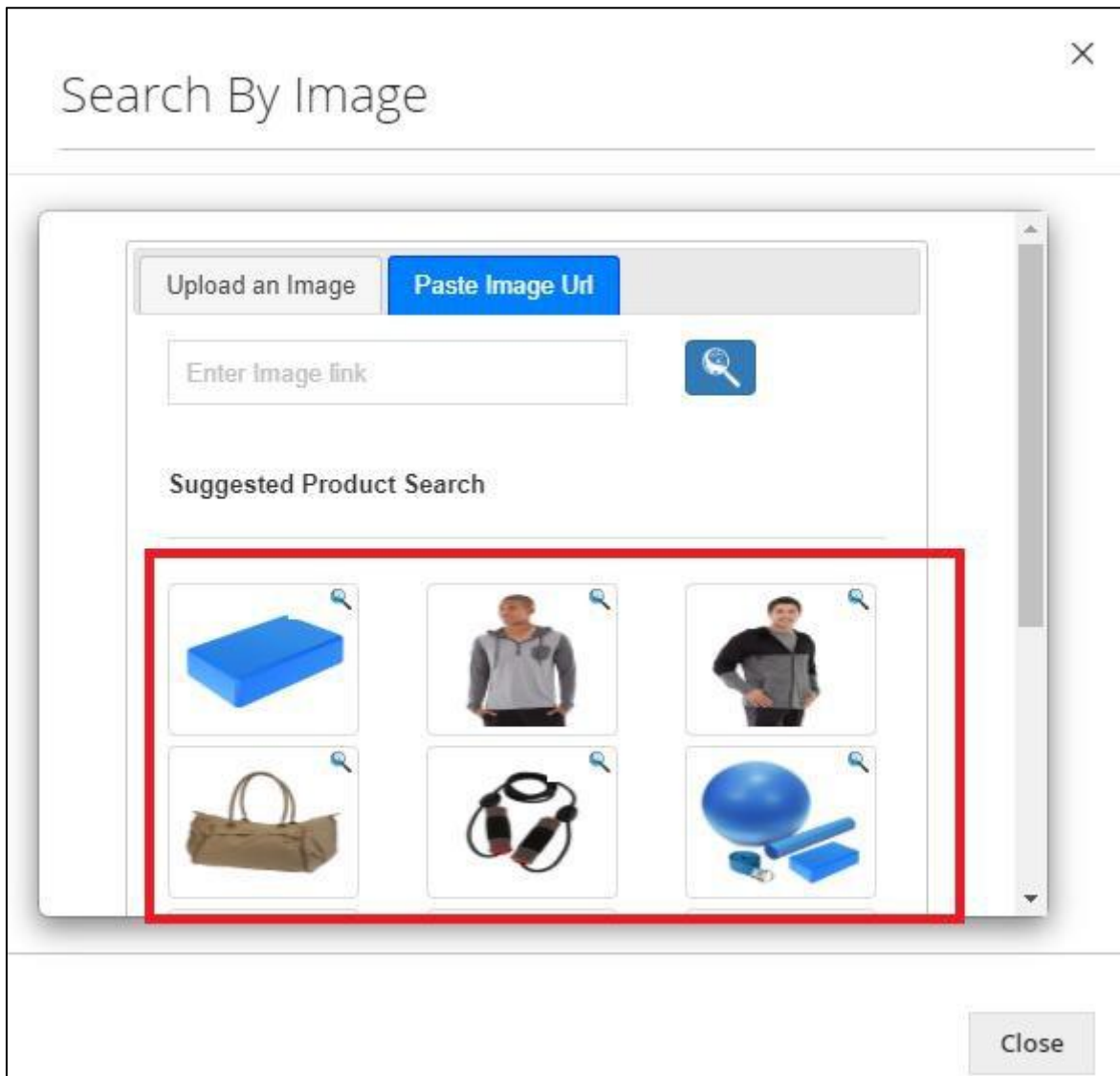



Figure 3

Method 4: Explore visually similar items. When Visual Search results are displayed for a particular search items, customers can explore visually similar products by clicking the  icon that appears in the top right corner of every product image (Figure-4). Those could be items with similar colors, patterns and shapes

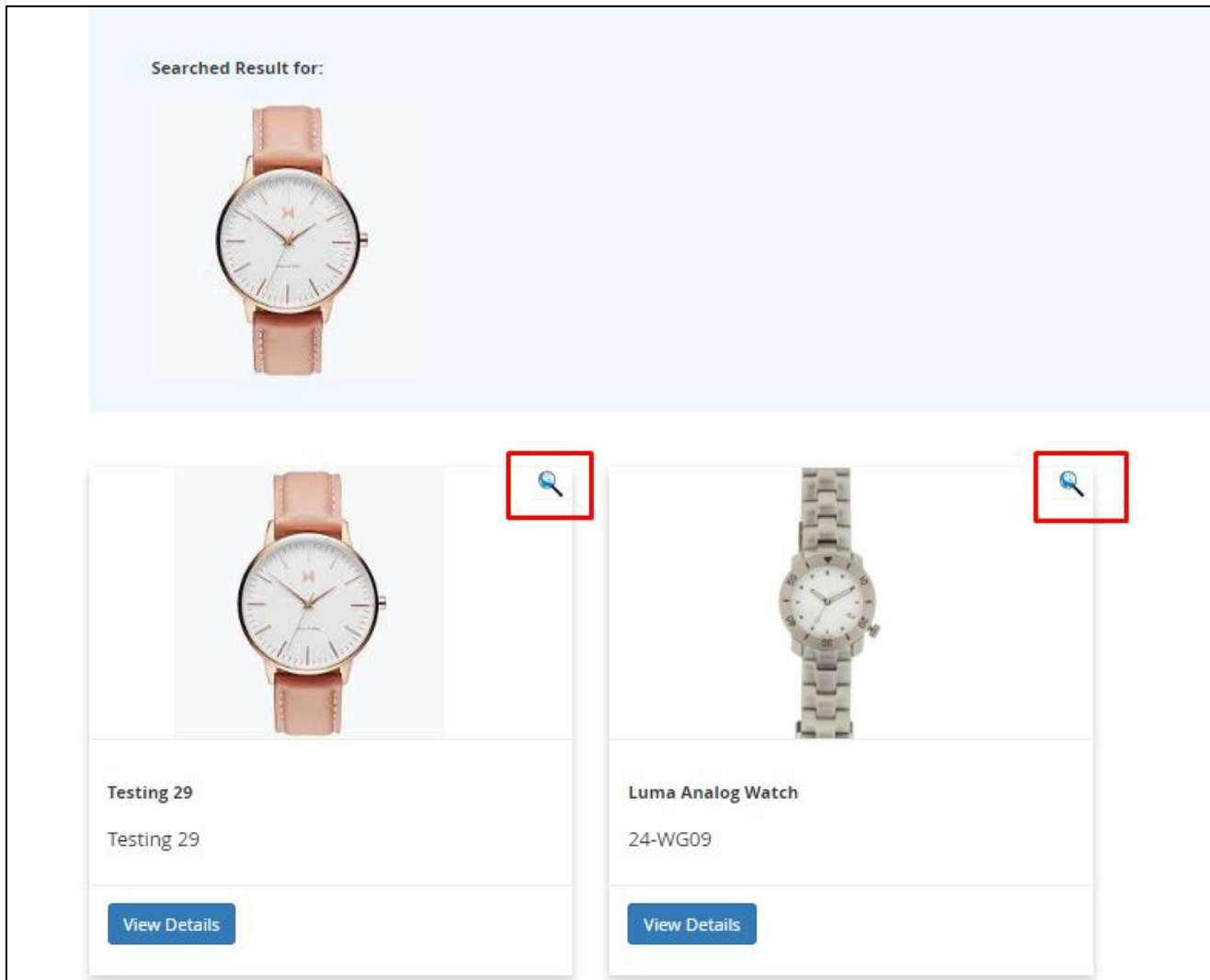


Figure 4

PRE-REQUISITES:

The Visual Search version 0.5 needs the following packages to be installed in your server/web-server

1. PHP 5.5.0+
2. Magento 2 (Tested In Magento 2.2.x series)
3. An Accelx User Account along with a subscription to a service plan (create one at this [link](#)).

INSTALLATION:

In order to install the Visual Search Extension into ecommerce website the following steps must be performed .

Step 1: Upload the visual search Extension zip file (add link) (Recommended ftp clients: FileZilla, WinSCP, cuteFtp)

Step 2: Log into your hosting space via a FTP client

Step 3: Unzip extension package and upload them into <Magento root directory>/app/code .And if app/code folder is not present in your Magento version, please create it and then upload the package into it.

Step 4: Enter the following at the command line from Magento root directory :

```
php bin/magento setup:upgrade
```

```
php bin/magento setup:static-content:deploy -f
```

(Note: If you are using ftp you need to set the file permission and ownership correctly using following command:

```
chown -R <owner>:<group> <magento root directory path>
```

if you are using cpanel then you don't need to execute the above command)

CONFIGURATION:

The configuration steps verify Accelx account credentials, gathers product images from the ecommerce database and pre-process them. To start off, you will need to create an Accelx account and sign-up for a service package available at this [link](#).

Once the extension has been installed, Visual Search Module will be present on the menu bar on the left in Magento admin panel. Clicking on it will lead to the Setup Page. Here you will find the Dashboard, Settings and Logs navigation bar. The

Dashboard tab displays Accelx account details and version information of the extension while the Logs tab displays the latest visual search logs of the extension.

For configuration, click on the “Settings” and complete the following steps:

STEP 1: SETUP ACCELX CREDENTIAL

In the Accelx Credential Section, enter the Username and Password that was used to sign up on the Accelx.net website and click the Save button. This should gather the API Key from Accelx and display it.

In this section, the Username and password can be updated when needed (Figure 8).

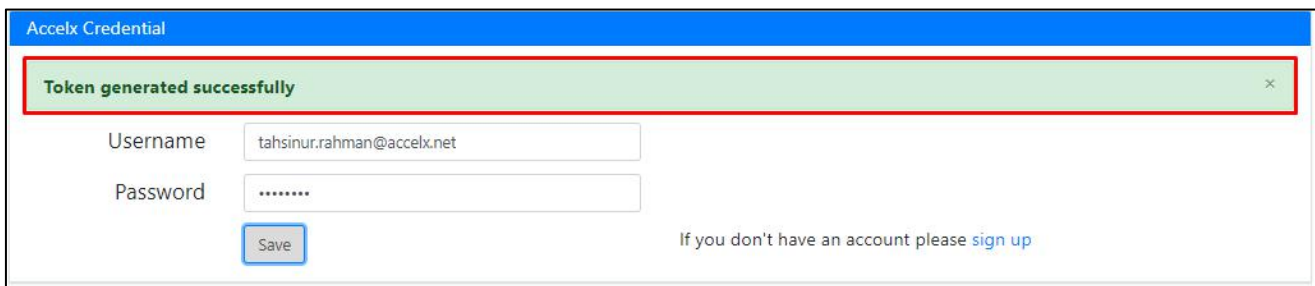


Figure 8

STEP 3 : PRODUCT CONFIGURATION

In this section you will find two buttons, “Start Configuration” and “Remove Configuration”. Clicking on the “Start Configuration” button should display the next three steps automatically.

STEP 3.1.1 : PRODUCT COLLECTION

‘Product Collection’ tab: This collects the images of all the products on your website necessary for visual search (Figure 9). Click on the tab to start the process.

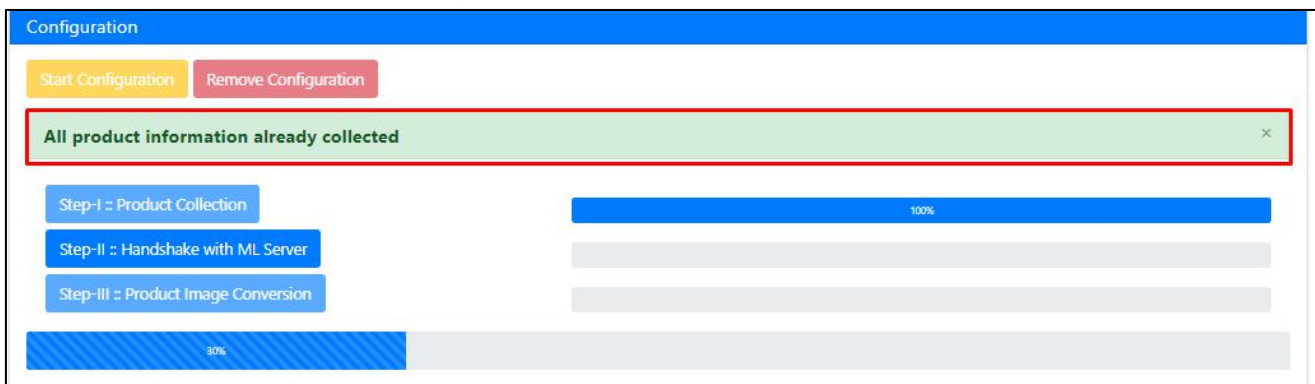


Figure 9

Figure 10

STEP 3.1.2 : PRODUCT IMAGE CONVERSION

Again, when Step-2 is completed, Step-3 will automatically become active for launch. Once click, Step-3 will start conversion of the product images collected in Step-1 to a form suitable for AI based visual search (Figure 11). A progress bar shows the current status of product image conversion.



Figure 11

After completing these three steps, you will see that the “Start Configuration” button will be deactivated and the “Remove Configuration” will be activated (Figure 12). You can use remove configuration button at any time to remove configuration set up of this extension.

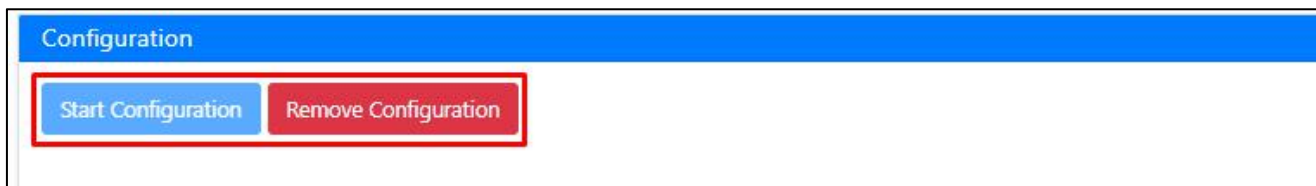
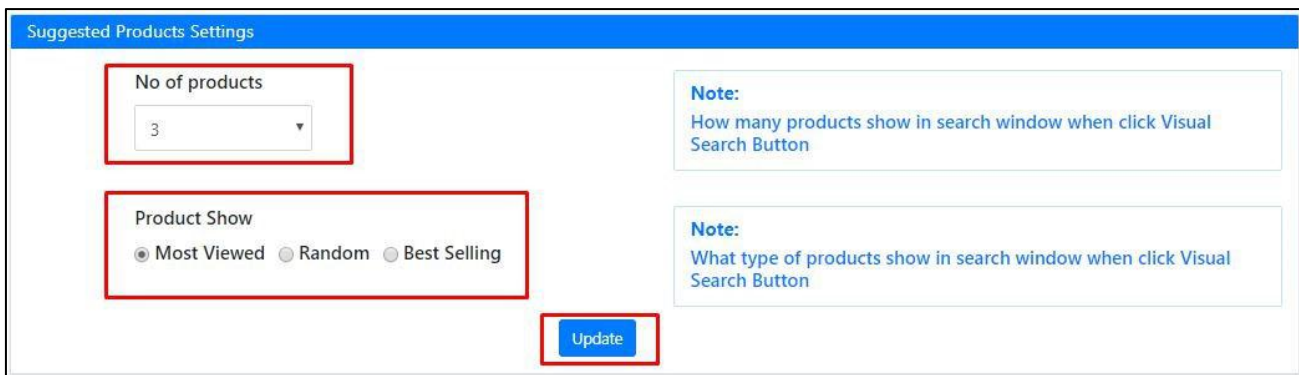


Figure 12

STEP 4: SET MODE for SUGGESTED PRODUCT PANEL

In this section, suggested products for searching can be configured. Here you can configure the number of products and type of products that is to be shown in search window when Visual Search Icon is clicked. There are three options (3,9 and 12) for choosing the number of suggested products. Additionally, there are three options for product types, viz. Most Viewed, Random and Best Seller. Default number of products is 3 and default product type has been set to Random .To change this, please select preferred option and press “Update” button to update the changes (Figure 13).



The screenshot shows the 'Suggested Products Settings' form. It has a blue header with the title. Below the header, there are two main sections. The first section is 'No of products', which contains a dropdown menu currently set to '3'. The second section is 'Product Show', which contains three radio buttons: 'Most Viewed' (selected), 'Random', and 'Best Selling'. To the right of these sections are two 'Note' boxes. The first note says 'How many products show in search window when click Visual Search Button'. The second note says 'What type of products show in search window when click Visual Search Button'. At the bottom center of the form is a blue 'Update' button.

Figure 13

If Most Viewed or Best Seller is selected, make sure there exists some products in those categories or customers will see “No Suggested products found ” message in search window. Please flush cache using Magento Admin Panel’s Cache management after updating suggested product type and number.

POST CONFIGURATION PRODUCT ADD/REMOVE

Clicking on Manage Product tab, will display “Number of Products” currently searchable by the Visual Search Extension. When the existing catalog is updated, either by adding new products or removing old ones through Magento, you will have to sync the new catalog with the visual search extension. This will allow the new products to be displayed and old removed products hidden from the visual search results.

In order to sync your updated catalog with the extension, you will have to click the “Database Sync” button (Figure 14).

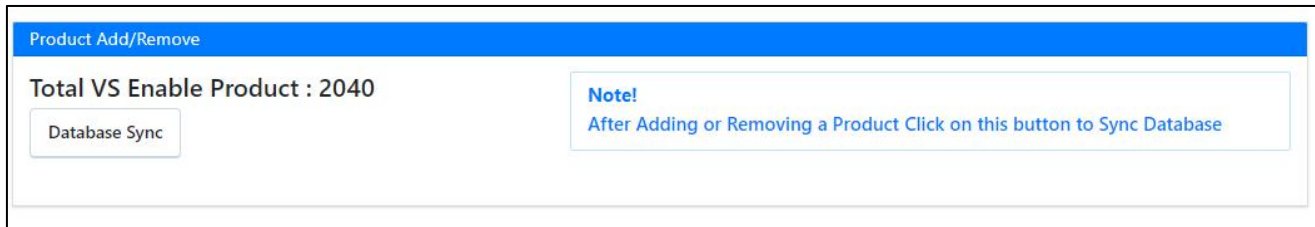


Figure 14

This automatically detects changes in product catalog and makes the necessary changes in the extension. A message containing number of added or removed products will be shown.

If no new products are added, then clicking on “Database Sync” button will give the message that “No New Products are found” (Figure 15).



Figure 15

REMOVE VISUAL SEARCH PLUGIN CONFIGURATION

“Remove Configuration” button can be used to remove all configuration data as integrator’s discretion (corrupt files etc). When click, It will open a window containing a warning message to confirm whether or not to remove all configurations (Figure 16).

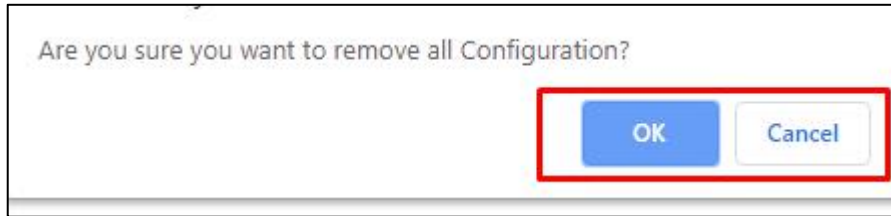





Figure 16

Clicking on the “OK” button will then remove all configurations from the extension and clicking on “Cancel” button will close the window. Please ensure that you really wish to remove the configurations before hit the “OK” button as the Visual Search Extension will have to be reconfigured again before user can use it.

VS PLUGIN INTEGRATION:

Visual search capabilities are implemented by placing  icon and links. Typically the  icon will be showed on the Search bar of the main page when your configuration is completed.

In case,  icon is not showed, then it will be due to overriding change of Magento_Search section template by a Theme.If a theme changes the template file “form.mini.phtml” under Magento_Search module, then you need to override the file. You need to override the file from following location:

```
app/design/frontend/yourThemespacename/yourtheme/Magento_Search/templates/form.mini.phtml
```

Then you need to copy the file from following location :

“app/code/Accelx/VisualSearch/view/frontend/templates/form.mini.phtml”

Now, you have to replace the previous file from theme to Visual Search Extension file.

To replace the file you can use following command:

```
“cp app/code/Accelx/VisualSearch/view/frontend/templates/form.mini.phtml  
app/design/frontend/yourThemespacename/yourtheme/Magento_Search/templates  
/form.mini.phtml”
```

This command will override the file. It will only extend the template file and theme's css will not be replaced for Search Bar.

KNOWN ISSUES & DEBUG

ISSUE 1: Visual Search Extension is dependent on picture orientation. Currently pictures taken in the landscape orientation is supported only.

ISSUE 2: Visual Search has 4 options to search using an image, all of which are active. There is no way to deactivate any of these options.

ISSUE 3: Currently Visual Search extension is not applicable for Age and Gender detection. But this feature is coming very soon in our future releases.

ISSUE 4: If a product is updated with new image, Visual Search Extension cannot detect this change. Therefore newly updated image will not be shown during search. A workaround to this is to remove the product entirely and add it again.

ISSUE 5: There is no health check system in Visual Search Extension after installation.

SUPPORT:

HOW TO FIND UPDATES?

<https://www.accelx.net/>

HOW TO GET HELP?

To create an account : <https://account.accelx.net/signup>

To get additional help: <https://www.sample.accelx.net/#contact>