

## Product Distance Sort 2



## User Guide

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# Extension Overview

Our DistanceSort 2 extension allows customers to sort products by distance from their location. All you really need to do is add address information or even very general locations like Mount Rushmore or Disneyland to the products. With that information, either Google or Bing will automatically provide the latitude and longitude for the product's location and it will be saved to the product. Then all you need are customers. The customer's location will automatically be obtained from their IP address and the distance calculation will happen on the fly!

Our newest edition, version 2, includes a Layered Navigation slider which your customers can easily use to refine their search to only show products within the desired distance range.

Your products will also be plotted out on a Google Map at the bottom of the product list for a helpful visual reference.

Additionally, this extension will work with any theme or custom layered navigation module!

## Features:

- Sort products by distance from the customer's location.
- Layered Navigation distance allows the customer to refine their search range.
- Works on Category Pages and Search Results pages.
- Customer's location is automatically obtained from their IP address.
- User can enter a different "shopping from" location if desired.
- Products are plotted out on a Google Map.
- Choose whether to display distances in Miles or Kilometers.
- Option to use distance as default sort order.
- Display distance differently on Grid and List views.
- This extension does not require you to modify ANY code.

## Bullet Points:

- You **do not** need to have location information for every product. The extension will work perfectly even if you only have location info for some products.
- If user visits a category in which no products have location data, distance sort will purposely not be available.
- Product location can be obtained from either specific addresses or even very general locations.
- Distance Sort works internationally.
- This extension uses Free APIs from Google and Bing. NO PAID SUBSCRIPTIONS!

## How Does It Work?

DistanceSort 2 uses “geocoding”, that is the retrieval of latitude and longitude coordinates for an address or other geographical data. Special mathematical formulas are used to calculate the distance from the starting point(the customer) to the endpoint(the product). When a customer comes onto your website, their IP address is used to automatically obtain their location. Before the list of products loads, the distance from the user to each product is calculated and the resulting distance is temporarily added to the product.

You can sort the products in either Ascending or Descending order by distance. When sorting by distance, any products that don’t have location data associated with them will be pushed to the end of the list. All of the other sort options (name, position, price, etc) will still work exactly as they always have. This just adds another great option to the list.

## More On Geocoding

Geocoding is accomplished when the extension submits your product’s location to Google or Bing who then returns latitude and longitude coordinates. Once these coordinates are obtained, they are saved to the database eliminating the need to retrieve coordinates every time.

Google and Bing free accounts both have limits to the number of geocoding requests that can be submitted in a 24-hour period. Google allows 2,500 requests per day and as of the time of writing this, Bing’s limit could not be determined, but it is in the thousands. The extension primarily relies on Google, but if Google should fail or if you hit the limit, it then turns to Bing. This is how we virtually eliminate having to sign up for a paid subscription to Google and Bing Geocoding services.

The extension allows you to bulk geocode your products so that you do not have to submit them one by one. Once a product location is geocoded, it is saved to the product so that you do not need to geocode that product again. However, if you ever change the product location, it will trigger an event that re-geocodes the product automatically. It happens behind the scenes, you never have to do anything to make this happen.

If all of this “geocoding talk” is confusing, just check out the demo and see how it works. It’s much simpler than it sounds!

# Extension Installation

1. Disable your Cache and log out from Magento Admin panel if you are logged in.
2. Unpack the contents of the zip file and upload the folders to your Magento install root. The Core module must be installed as well as the Distance Sort extension. Both the Core module and Distance Sort module are included in the zip file.
3. Log into Magento Admin Panel.
4. Go to System > Configuration > CommerceExtensions > Distance Sort Enable to Yes.
5. In the panel titled "Geocoding API Configuration", follow the instructions to obtain your free Google and Bing API keys.

## Attribute Setup

If your products do not already have attributes assigned to them that contain address or location information, you will need to create those attributes and then fill them in for any products that you have location info for. If you already have location information saved to the product, you can use that.

**It is important that whichever attributes you create or assign to your product, they have "Used in Product Listing" set to Yes and that they are of the type Text or Dropdown. This will not cause them to be displayed on the frontend, it will simply make the data available to the extension.**

After this is done, go to System > Configuration > CommerceExtensions > Distance Sort > Attribute Mapping and tell the system which attributes correspond to your address or location data. If you have your addresses all in one attribute field instead of broken down by city, state, zip, etc, that is ok. Simply click "Add Field" and add just one line. From the column on the right(Address Field), select the option that says "Full Address Is In One Field" and then save.

Attribute Mapping

Here, tell the extension which product attributes make up the address or other location data. We use this to render the address into a form that is readable by both Google and Bing to retrieve

Address Field Mapping

Attribute	Address Field	
Street Address	Address Line 1	Delete
City	City	Delete
State	State/Province	Delete
Zip Code	Zip/Postal Code	Delete
Country	Country	Delete
		Add Field

[STORE VIEW]

Now the extension knows where your products are located.

## Product Setup

If you have not yet entered address/location info for your product(s), do so now. When you click the “Save” button, you will notice that the Latitude and Longitude fields are automatically filled in for you.



The screenshot shows a web form titled "Distance Sort" with a sub-header "My Computer (Default)". The form is divided into two main sections. The left section contains address-related fields: "Street Address", "City" (populated with "Morristown"), "State" (populated with "NJ"), "Postal Code" (populated with "07960"), and "Country" (populated with "US"). The right section contains "Latitude" (populated with "40.7967667") and "Longitude" (populated with "-74.4815438"). Below each of these two fields is a small explanatory text: "This field is filled in automatically and/or updated whenever you add or change the location of the product."

If you need to geocode the products in bulk, proceed to your product grid at Catalog > Manage Products. Select the checkboxes of any products you still need to obtain Latitude and Longitude for. Select “Geocode Products” from the mass action drop down menu on the grid.

## Troubleshooting

### Google Maps is causing an alert on the frontend of my site.

You most likely did not enable **Google Maps JavaScript API v3** when obtaining your API key. Please refer back to the instructions for obtaining your Google API Key and review them step by step.

### The Distance Sort functionality is not appearing in my category or search results pages.

1. Make sure that you have entered your Google and/or Bing API Keys in System > Configuration > CommerceExtensions > Distance Sort > Geocoding API Configuration.
2. Go to System > Configuration > CommerceExtensions > Distance Sort > Attribute Mapping and make sure that you have mapped out the address fields.
3. Make sure that at least one product in the category you are trying to view has an address or at least some general location information entered for it.
4. In the Catalog > Manage Products, select a product and go to the Distance Sort tab for that product. Make sure there is an entry for the Latitude and Longitude fields. Assuming your address fields are properly mapped as per step 2, add or edit the product’s address information and save. The Latitude and Longitude coordinates should now be automatically filled in for you.

## Support

CommerceExtensions offers FREE 1hr of support and 1 year of updates for all extensions.

If you need support related to CommerceExtensions extension usage, feel free to contact me at [scottbolasevich@gmail.com](mailto:scottbolasevich@gmail.com)