

# Geo Mapper

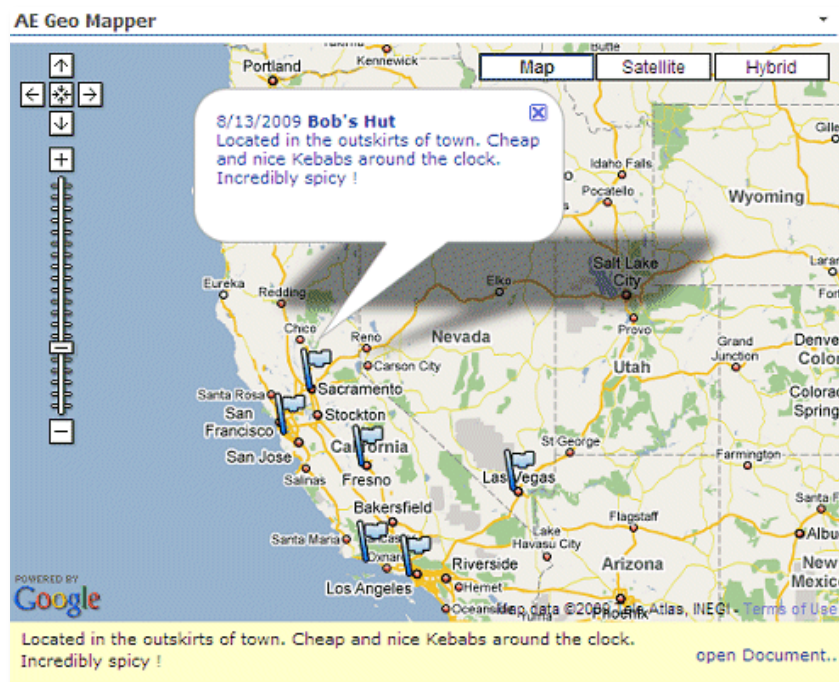
## Web Part

Enterprise Version

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Version 1.1

February 2010



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## Description

The Google Geo Mapper Web Part allows to display the geographical locations taken from a Sharepoint List or a Sharepoint Document Library. The map is created using Google's public Map API. Detailed information about each location is shown in the info bubble and in an optional info window below the map. List attachments and Document library files can be opened from the info window.

The Web Part can be connected to a Sharepoint List to get the Latitude/Longitude information from a Sharepoint List.

The Web Part can be used both with Windows Sharepoint Services V3, MOSS 2007 and Sharepoint 2010.

The following parameters can be configured:

- Sharepoint List or Document Library containing the **longitude/latitude** coordinates
- supports List Views for filtering
- Map width, height and initial Map Zoom level
- Default Map Pin Icon
- optional List column name containing the Pin Icon name. Allows to assign different pins to each location
- Info Bubble Text Template
- Info Box List Column to display additional information and file attachments below the map for each selected location

## Prerequisites

Before you attempt to install the solutions you need to make sure that you have the following installed on your server(s):

- Windows SharePoint Services 3.0, Microsoft Office SharePoint Server 2007 (MOSS) or Sharepoint 2010

## Installation

### Manual Installation

1. download and unpack the **AEGeoMapperWebpart.zip** file.  
The ZIP archive contains the AEGeoMapperWebpart.dll and the AEGeoMapper.webpart files.
2. drop the AEGeoMapperWebpart.dll either into the SPS web application bin directory or into the GAC of your Sharepoint server (c:\windows\assembly).  
Please note that you will have to deploy the web part into the **GAC** if you do not use "Interactive Mode" (see configuration settings below) in combination with Address Geocoding lookup, since in this case the web part calls the Google Geocoding web service to resolve the address. This requires either a "Full" trust setting (not recommended) or GAC deployment.
3. add the following line to the "<SafeControls>" section of your Web.Config file.  
Please make sure that the line is added as one single line (no line breaks):

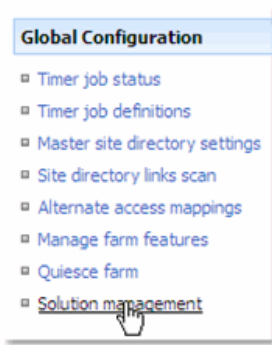
```
<SafeControl Assembly="AEGeoMapperWebpart, Version=1.0.0.0, Culture=neutral,
PublicKeyToken=7d929dde57a653ce" Namespace="AEGeoMapperWebpart" TypeName="*" Safe="True" />
```

4. from the top site go to "Site Actions/Site Settings/Modify All Site Settings/Galleries/Web Parts"
5. use the "Upload" menu option to upload the AEGeoMapper.webpart file.

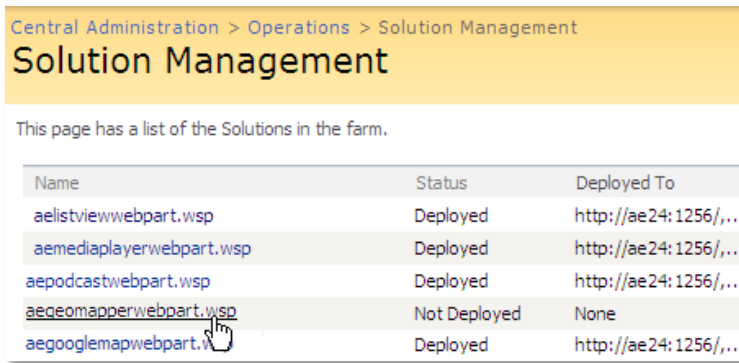
### Automatic Installation

1. Unpack the **AEGeoMapperWebpart.wsp** and **Install.bat** files from the Zip Archive and place the 2 files onto your Sharepoint Server.
2. Add the Solution by either running **Install.bat** or manually entering:  
stsadm -o addsolution -filename AEGeoMapperwebpart.wsp

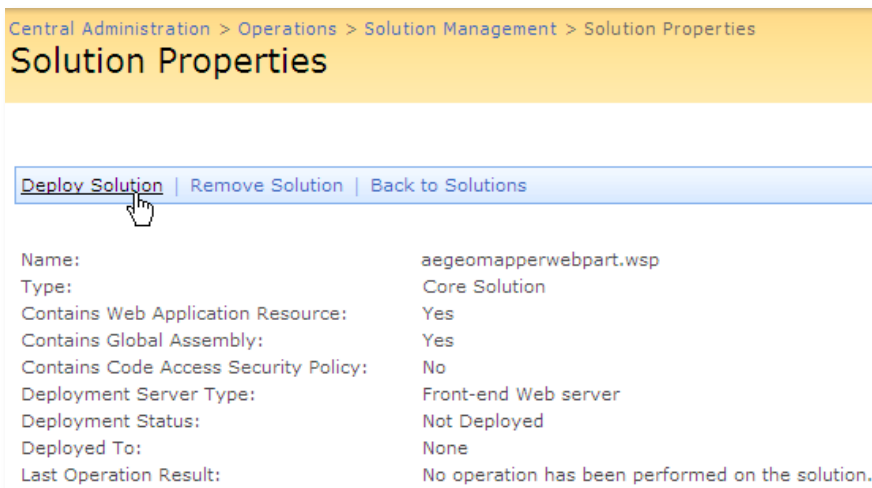
3. Deploy the solution by navigating with your browser to “Central Administration->Operations->Solution Management”:



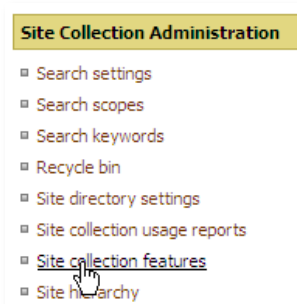
4. You should now see the **AEGeoMapperWebpart.wsp** in the farm’s solution store:



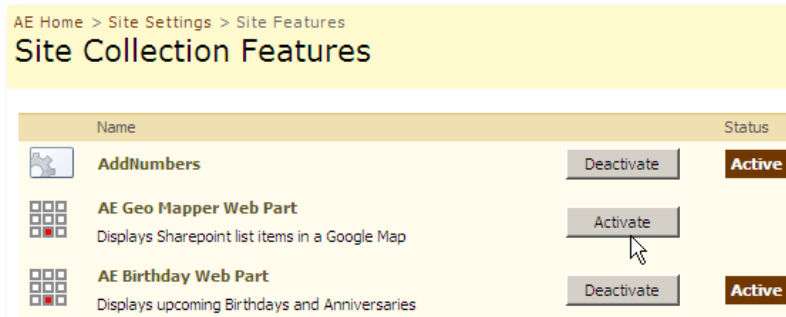
Click on “**AEGeoMapperWebpart.wsp**” to deploy the solution:



5. Proceed to activate the feature by navigating to the “**Site Actions/Site Settings**” page in your top-level site:



Choose “**Site collection features**” to navigate to the Site Collection Features page:

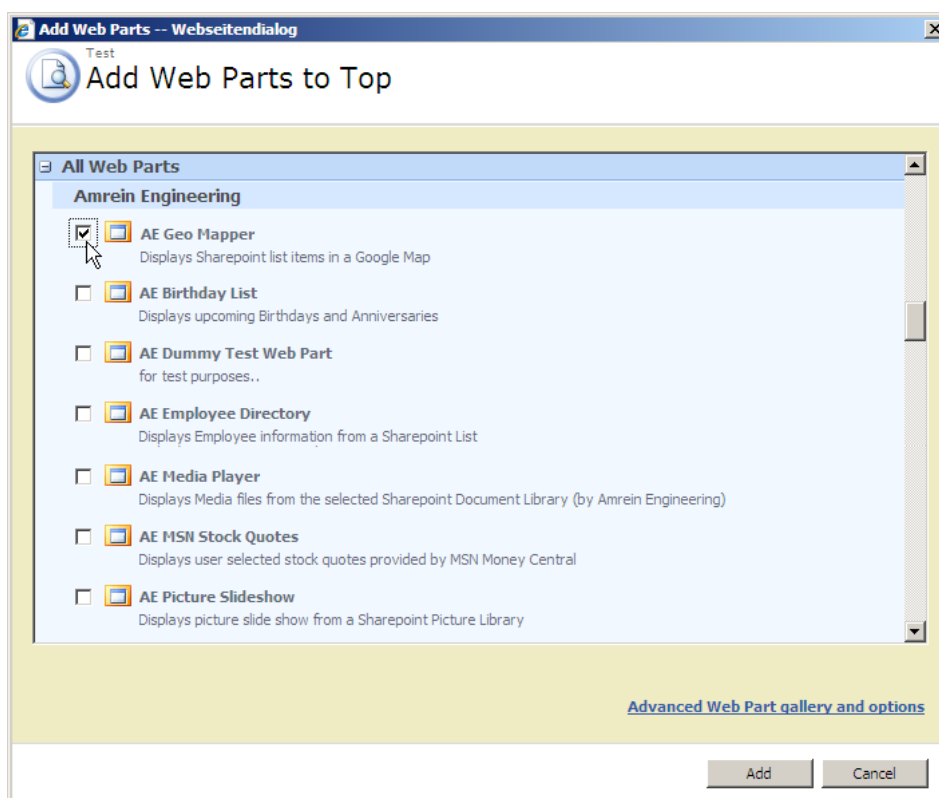


Activate the "AE Geo Mapper Web Part" feature

## Adding the Web Part to a Page

Navigate to a page where you would like to place the web part and choose "Site Actions/Edit Page"

1. Add the web part to the appropriate zone. The web part is listed in the "**Amrein Engineering**" gallery section :



## Web Part Configuration

1. If you want to **connect** the Geo Mapper Web Part to a Sharepoint List, either adapt an existing Sharepoint List or create a new List to store the data to be mapped. Also optionally define a suitable List View for the List if you want to sort or filter the data in a specific way

The list should include the two columns explicitly named "**Latitude**" and "**Longitude**" holding the latitude/longitude coordinates:

City	Address	Longitude	Latitude
New York	2175 Broadway	8.050747	47.394631

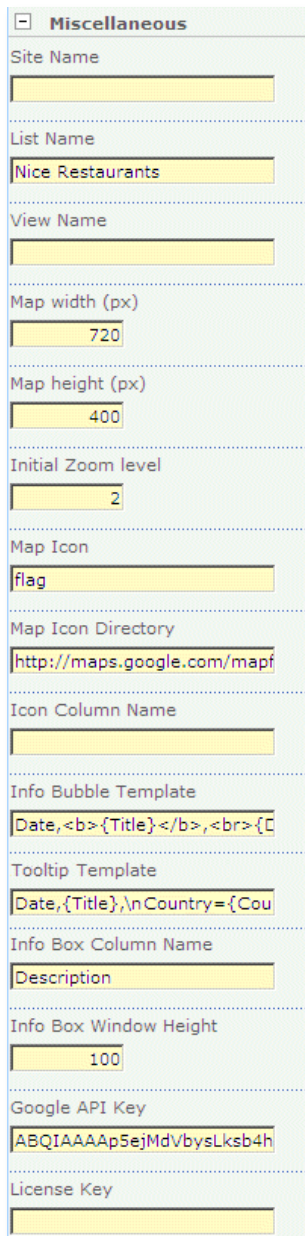
Create a Web Part Connection between the Sharepoint List and the Geo Mapper Map web part as follows:

- switch the page to "Edit" mode
- Choose "Connections" from the List Web Part "edit" menu
- Choose "Provide Row To"
- Select the Geo Mapper Web Part in the menu

The screenshot displays two side-by-side views from a SharePoint web part. On the left is a list view titled "Nice Restaurants" with columns for Title, Description, City, and Address. The list contains four entries, with "Charlie's Burger Joint" selected. On the right is a map view titled "Restaurant Locations" showing a street map with a red pin marking the location of "Charlie's Burger Joint" at the intersection of Broadway and W 76th St. The map also shows surrounding streets like W 77th St, W 78th St, and W 79th St.

New	Actions	Settings		
<input type="radio"/>	<a href="#">Pizza-Hüsli</a>	Located in the center. Nice pizzas, reasonable prices and fast delivery. Very spicy!	Aarau	Bahnhofstrasse 92
<input type="radio"/>	<a href="#">Ali's Kepab Stand</a>	Located in the outskirts of town. Cheap and nice Kebabs around the clock. Incredibly spicy !	Lenzburg	Bahnhofstrasse 50
<input type="radio"/>	<a href="#">Herbie's Fish and Chips</a>	Greasy fish and french fries. Only recommended for the brave at heart!	Luzern	St.Karlistrasse 39a
<input checked="" type="radio"/>	<a href="#">Charlie's Burger Joint</a> <small>NEW</small>	DELICIOUS. The food is always fresh tasting [no matter what time] and it always leaves you wanting more...	New York	2175 Broadway

2. Configure the following Web Part properties in the Web Part Editor "Miscellaneous" pane section as needed:



**Miscellaneous**

Site Name  
[Empty]

List Name  
Nice Restaurants

View Name  
[Empty]

Map width (px)  
720

Map height (px)  
400

Initial Zoom level  
2

Map Icon  
flag

Map Icon Directory  
http://maps.google.com/mapf

Icon Column Name  
[Empty]

Info Bubble Template  
Date, <b>{Title}</b>, <br>{C

Tooltip Template  
Date, {Title}, \nCountry = {Cou

Info Box Column Name  
Description

Info Box Window Height  
100

Google API Key  
ABQIAAAAp5ejMdVbysLksb4h

License Key  
[Empty]

- **Site Name:**

Enter the name of the site that contains the Sharepoint List or Document Library containing the data to be mapped.

  - leave this field empty if the List is in the current site (eg. the Web Part is placed in the same site)
  - Enter a "/" character if the List contained in the top site
  - Enter a path if the List is in a subsite of the current site (eg. in the form of "current site/subsite")
- **List Name:**

Enter the name of the desired Sharepoint List or Sharepoint Document Library containing the data to be mapped. Please note that the List must contain two columns named **Latitude** and **Longitude** containing the Latitude and Longitude values.

You can interactively look up Latitude/Longitude values on the → **Google Maps Lat/Lon Lookup** page at <http://www.amrein.com/apps/page.asp?Q=5776>
- **View Name:**

Optionally enter the desired List View of the list specified above. A List View allows you to apply specific data filtering and sorting.

Leave this field empty if you want to use the List default view.
- **Map width/Map height:**

Enter the desired map dimensions in pixels.

○ **Initial Zoom Level:**

enter the desired Zoom Level as follows:

- enter a value between 0 (min zoom) and 19 (max zoom)

○ **Map Icon:**

enter the name (without the trailing **.png** file extension) of the default map pin icon to be used. For a list of available icons see below. Please note that the free version always displays the red default pin icon.

○ **Map Icon Directory:**

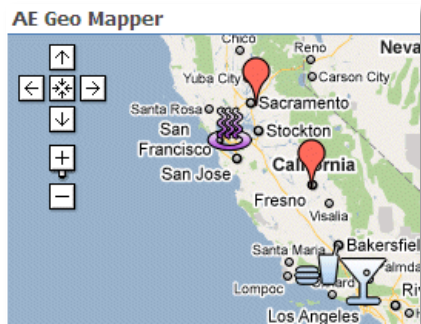
enter the URL of the location of the map icon images. You can either create your own icon collection on your web server or use one of the existing icon collections:

- <http://maps.google.com/mapfiles/ms/micons>
- <http://www.amrein.com/Pins>

You can also download the [Pins.zip](http://www.amrein.com/download/pins.zip) file from <http://www.amrein.com/download/pins.zip> and extract the icons into a suitable local folder on your web server.

○ **Icon Column Name:**

use this option if you want to assign individual icons to each List entry (leave field empty otherwise to default to the icon set in the "Map Icon" option above) by placing the name of the List column containing the icon name to be used for that list entry



○ **Info Bubble Template:**

Enter each List column that you want to display in the info bubble. Separate the values by commas. If you want to add a prefix and/or a postfix to a column, you need to surround the List column name by curly braces.

Examples:

**Title,Address,City**

**{Title},<br>{Address},<br><font color=green>{City}</font>**

○ **Info Bubble Height:**

Enter the height (in pixels) of the info bubble. Enter "0" if you want the bubble height to be calculated automatically.

Please note that you can override the default **Info Bubble Width** of 225 pixels by adding the following line to your web.config (typically found at c:\inetpub\wwwroot\wss\virtualdirectories\80) section as follows:

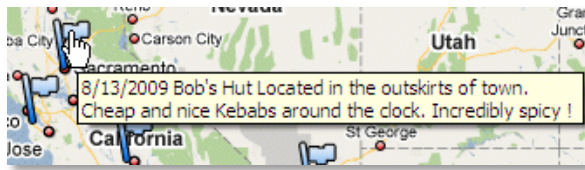
```
<appSettings>
.
.
  <add key="AEGM_Bubblewidth" value="500" />
</appSettings>
```

The above example sets the bubble width to 500 pixels.

○ **Tooltip Template:**

Enter each List column that you want to display in the pin tooltip. Separate the values by colons. If you want to add a prefix and/or a postfix to a column, you need to surround the List column name by curly braces. Use **\n** as a line separator.

The information is displayed as a tooltip when hovering over the map icon:



- **Info Box Column Name:**  
(optional) Enter the List column that you want to display in the info box below the map. List File attachments and Document Library files will be automatically listed at the bottom of the info box.
- **Info Box Window Height:**  
Enter the height (in pixels) of the info box window below the map. Enter "0" if you don't want to display the info box.
- **Google API Key:**  
Enter your valid Google API key which can be generated by visiting <http://code.google.com/intl/en/apis/maps/signup.html>
- **License Key:**  
enter your Product License Key (as supplied after purchase of the Geo Mapper Web Part license key). Leave this field empty if you are using the free 30 day evaluation version or if you choose one of the License Activation described below.

## License Activation

You have the following 3 options to enter your License Key:

1. Enter the License Key into the corresponding "License Key" field in the web part configuration pane (See Description above).

2. **WSP Solution Deployment:**

Add the **License.txt** file (as supplied by AMREIN ENGINEERING after having purchased a license) to the Solution at the following location:

```
c:\Program Files\Common Files\Microsoft Shared\Web Server  
Extensions\12\template\features\AEGeoMapperWebpart
```

3. **Manual Deployment:**

Add the License Key to your web.config (typically found at c:\inetpub\wwwroot\wss\virtualdirectories\80) <appSettings> section as follows:

```
<appSettings>  
<add key="AEGM" value="AEGM-x-xxxxx-xxxxx-xx-xx" />  
</appSettings>
```

Replace the "x" characters with your actual key values.

Please note that this method requires you to manually add the key to each Sharepoint application.