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# Google Map Web Part

Enterprise Version

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Version 1.0

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## Description

The Google Map Web Part allows you to display the geographical location of a given address. The address can either be static or contained in a connected Sharepoint List. The map is created using Google's public Map API.

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

The following parameters can be configured:

- Connection to a Sharepoint List containing the address or longitude/latitude coordinates
- Interactive/static mode (static mode needs no Google API key)
- Map Zoom Level

## 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 or Microsoft Office SharePoint Server 2007

## Installation

### Manual Installation

1. download and unpack the **AEGoogleMapWebpart.zip** file.  
The ZIP archive contains the AEGoogleMapWebpart.dll and the AEGoogleMap.webpart files.
2. drop the AEGoogleMapWebpart.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):

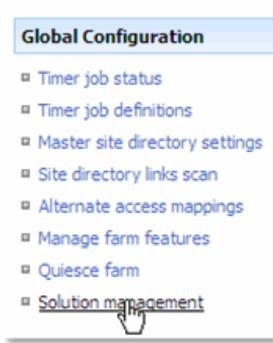
```
<SafeControl Assembly="AEGoogleMapWebpart, Version=1.0.0.0, Culture=neutral,
PublicKeyToken=89fdb7914132c23b" Namespace="AEGoogleMapWebpart" TypeName="*" Safe="True" />
```

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 AEGoogleMap.webpart file.

### Automatic Installation

1. Unpack the **AEGoogleMapWebpart.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 AEGoogleMapwebpart.wsp`

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



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

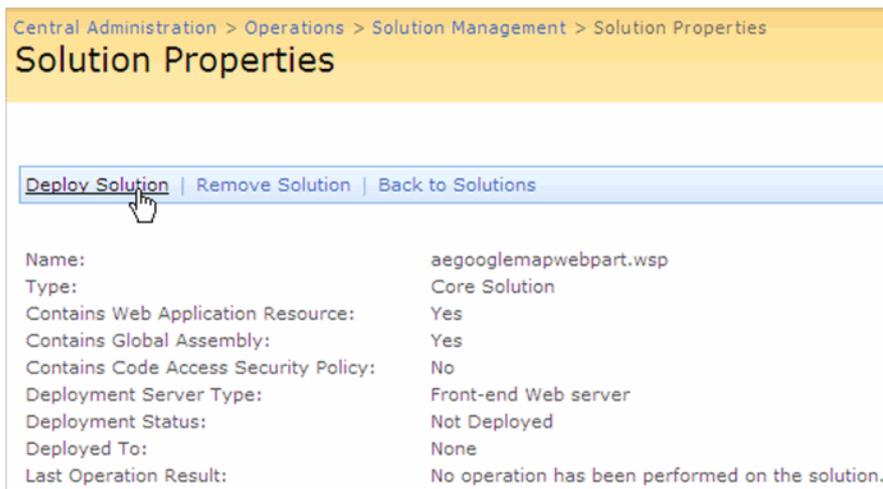
Central Administration > Operations > Solution Management

## Solution Management

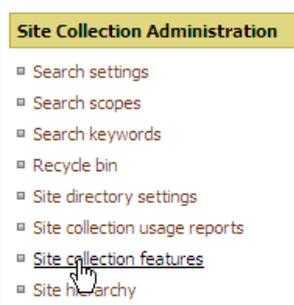
This page has a list of the Solutions in the farm.

Name	Status	Deployed To
<a href="#">addnumbers.wsp</a>	Deployed	http://ae24/
<a href="#">aecalendarwebpart.wsp</a>	Deployed	http://ae24:1256/...
<a href="#">aegooglemapwebpart.wsp</a>	Not Deployed	None

Click on “AEGoogleMapWebpart.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:

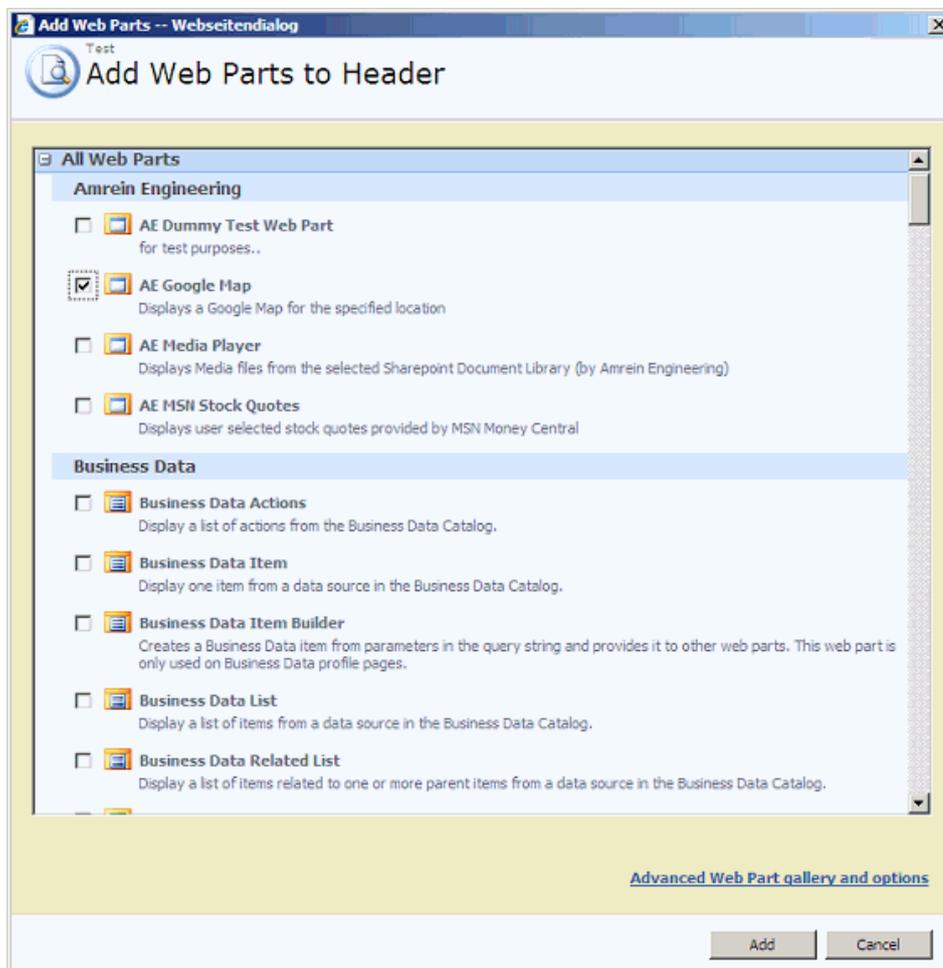


Activate the "AE Google Map Web Part" feature

## 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 :



1. If you want to **connect** the Map 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

- either one or more columns to hold the street address to be mapped.
- or 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 Google 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 Google Map Web Part in the menu

The screenshot shows two side-by-side web parts. On the left is a table titled "Nice Restaurants" with columns for Title, Description, City, and Address. The selected row is "Charlie's Burger Joint" with the address "2175 Broadway, New York". On the right is a Google Map web part titled "Restaurant Locations" showing a map of the area around 2175 Broadway with a red pin indicating the location of Charlie's Burger Joint.

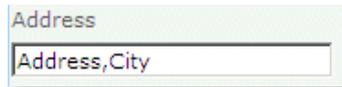
2. Configure the following Web Part properties in the Web Part Editor "Miscellaneous" pane section as needed:

The screenshot shows the "Miscellaneous" pane of the Web Part Editor. The following properties are configured:

- Address: 2175 Broadway, New York
- Longitude: 8.0507
- Latitude: 47.3946
- Map width (px): 340
- Map height (px): 300
- Zoom level: 15
- Interactive Map
- Display Traffic Information
- Google API Key: ABQIAAAp5ejMdVbysLksb4h
- License Key: (empty)

- **Address:**  
If you want to use the web part stand-alone (eg. without a connection to a Sharepoint List), enter the street address of location to be displayed. The address should be sufficiently detailed to allow a correct lookup via the Google Geocoding service.

If the web part is connected to a Sharepoint List, please enter the list column names to be used for the dynamic lookup. Separate each column by a comma



The image shows a text input field with the label 'Address' above it. Inside the field, the text 'Address, City' is entered, demonstrating how to separate multiple list column names for a dynamic lookup.

- **Longitude/Latitude:** If you use the web part stand-alone, you can alternatively specify the latitude and longitude values instead of the Street Address. In this case, no Google API Key needs to be given (see below). Enter the values with up to six decimal places. The value for a desired location can be looked up via <http://maps.google.com>

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

- **Map width/Map height:** Enter the desired map dimensions in pixels.
- **Zoom Level:** enter the desired Zoom Level as follows:
  - enter a value between 1 (max zoom) and 17 (min zoom) in static mode mode
  - enter a value between 0 (min zoom) and 19 (max zoom) in interactive mode
- **Interactive Map:** either display the map as a static image (no user interaction with the map) or as a dynamic Google map (allows interactive panning and zooming). The interactive mode requires a valid Google API key (see below).
- **Display Traffic Information:** add traffic information to the map (if available, Google currently provides this service only for selected cities).



- **Google API Key:** if you select the interactive map mode, you need to specify a 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 "Google Map 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.

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## 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\AEGoogleMapWebpart
```

**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="AESU" value="AESU-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.