

Guide to install Augmented Maps on Windows
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Tested install on Windows 7, XP, 32 bit OS
Versions of the installers/packages used

- * ms4w 3.0.1
- * Postgres 9.0.1
- * Python 2.6.2
- * OpenLayers 2.8
- * MapFish 1.1

Setting up machine for deployment: -

1. Install ms4w, picking the exe from Map server downloads page.
 - * ms4w is designed to be installed in the root of a drive, like D:\ms4w
 - * In windows 7, XP, there are problems with Permissions if we install ms4w in C drive.
2. Installing Apache
 - * Start your MS4W Apache Web Server by running /ms4w/apache-install.bat (at the command line or by double-clicking it). This file installs Apache as a Windows service (called "Apache Web Server") so that it starts whenever your machine is restarted
 - * To test that Apache is running properly, open your Web browser and find your local host Web service by entering http://localhost/
 - **NOTE for Win95, 98, ME users:**
 - * You will not be able to install Apache as a service, so instead you will have to manually start Apache each time, by clicking on /ms4w/Apache/bin/httpd.exe. An empty DOS window will open, which means Apache is running. To stop Apache you will have to close this empty DOS window.
 - ** Notes for Microsoft Vista **
 - * In order to run the apache-install.bat file, you must do the following:
 1. In Windows Explorer, goto the location of your cmd.exe file (C:/Windows/System32)
 2. Right-click the cmd.exe executable and choose "Run as Administrator"
 3. Navigate to your ms4w folder in the command prompt window and run apache-install.bat
3. MapScript configuration
 - * Unpack ``/ms4w/Apache/cgi-bin/mapsript/python/mapsript*win32.zip`` in a safe location
 - * In the directory structure that results from the above step, navigate to ``\Python-2.6.2\Lib\site-packages``
 - * You should find three files there:
 - * _mapsript.pyd
 - * mapsript.py
 - * mapsript.pyc
 - * Copy the three files into the site-packages directory of your Python 2.6.x installation (eg., ``C:\Python26\Lib\site-packages``)
 - * Add ``<drive_letter>:\ms4w\Apache\cgi-bin`` to your system's PYTHONPATH environment variable.
4. Postgres installer can be downloaded from the Postgres site.
 - * In windows 7, XP, there are problems with Permissions/UAC if we install ms4w in C drive.
 - * Installing to some other drive easier, though by removing the permissions issue, one can install Postgres in C drive as well
 - * Install Postgres with default options
 - * After the installation of Postgres, a wizard will be launched to choose the packages on top of Postgres. Choose Postgis.
 - * We need to specifically give permissions to use geometry_column, spatial_ref_sys columns
 - * Open psql command prompt and grant all users permissions to insert, update geometry_column, spatial_ref_sys columns
 - * \c template_postgis
 - * GRANT ALL ON geometry_columns TO PUBLIC;
 - * GRANT ALL ON spatial_ref_sys TO PUBLIC;

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5. Configuration changes in Apache, Php, Postgres

* Enable mod_rewrite in Apache, configuration file is located at
ms4w\Apache\conf\httpd.conf

* We need to uncomment the statement to load module mod_rewrite

* Enable php_pgsqll.dll, php_pdo_pgsqll.dll in php.ini, located at
ms4w\Apache\cgi-bin\php.ini

* We need to uncomment the commented statements to Load these modules

7. Install Openlayers

* Download the zip of latest release of OpenLayers from the website

* Unzip it in ms4w\Apache\htdocs\ or Keep it in a different location and add
this configuration in httpd.conf

```
Alias /openlayers "<path to OpenLayers directory>"
```

```
<Directory "<path to OpenLayers directory>">
```

```
    AllowOverride All
```

```
    Options Indexes FollowSymLinks MultiViews
```

```
    Order allow,deny
```

```
    Allow from all
```

```
</Directory>
```

* To confirm OpenLayers is installed open browser on server and go to
http://localhost/openlayers/. The contents of the OpenLayers directory should be
displayed

8. Install MapFish

* Download MapFish 1.1 from the website

* Unzip it in ms4w\Apache\htdocs\ or Keep it in a different location and add
this configuration in httpd.conf

```
Alias /MapFish "<path to MapFish directory>"
```

```
<Directory "<path to MapFish directory>">
```

```
    AllowOverride All
```

```
    Options Indexes FollowSymLinks MultiViews
```

```
    Order allow,deny
```

```
    Allow from all
```

```
</Directory>
```

* To confirm MapFish is installed open browser on server and go to
http://localhost/MapFish/. The contents of the MapFish directory should be
displayed

10. Allow access to cgi-bin from apache

```
<Directory "D:/ms4w/Apache/cgi-bin/">
```

```
    AllowOverride None
```

```
    Options +ExecCGI +Indexes
```

```
    Order allow,deny
```

```
    Allow from all
```

```
</Directory>
```

11. Add projection for Google Maps to projection file.

* Append the following line to ms4w\proj\nad\epsg

#added for google

```
<900913> +proj=merc +a=6378137 +b=6378137 +lat_ts=0.0 +lon_0=0.0 +x_0=0.0  
+y_0=0 +k=1.0 +units=m +nadgrids=@null +no_defs <>
```

* After making changes in the configuration files of Apache or php, to see the
impacts, we need to restart the Apache web server.

Deployment, checking out source from GIT:

1. Checkout code from GIT repository

* In order to checkout code from GIT, install a GIT client

* Command to run in GIT client

* git clone git@github.com:strandls/augmentedmaps.git

2. Configuration

* Inside the augmentedmaps directory, Open the 'Makefile' in a text editor
and change the following parameters:

SOURCE_PATH = location of downloaded augmentedmaps directory

DEPLOY_PATH = location where to install augmented maps

BACKUP_PATH = location where backup of the old installation will be made

DB_USERNAME = database user name

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DB_PASSWORD = database password
DATABASE_NAME = database name

- * Save the 'Makefile' after making the changes. Use '\\' as path separator.
- 3. Install.
 - * Make sure that make utility is available for command prompt
 - * After making the appropriate configuration changes as specified above. Run the following commands from command prompt.
 - * To make backup of older installation.
 - make backup
 - * This will create backup of existing installation in the BACKUP_PATH specified in the 'Makefile'
 - * To setup and populate database for Augmented Maps. This should not be required if the database is already setup for Augmented Maps.
 - make setupdb
 - * To deploy the files,
 - make deploy
 - * Current configuration in Makefile tries to set the Permissions, assuming Linux machine
 - * Either those command can be modified in the Make file, before running make deploy, or Permissions can be set explicitly
 - * After all the troops have been deployed successfully, generate maps.
 - make generate_maps
 - * This will generate map files and place them in MAP_DATA directory (specified in Makefile)
- 4. Modifying Google maps API key
 - * Get google Maps API key from google, depending on the website. For localhost, register for http://localhost
 - * Get the key and replace the existing key in includemap.js
 - * Instances of the URL of the website also needs to be replaced in includemap.js
- 5. Allow overriding by configuring in apache.
 - * Adding the following lines in httpd.conf, enables .htaccess to override the configurations specified in Apache configuration.

```
<Directory "D:\ms4w\Apache\htdocs\augmentedmaps">
    AllowOverride All
    Options Indexes FollowSymLinks MultiViews
    Order allow,deny
    Allow from all
</Directory>
```
- 6. Edit the .htaccess file inside the deployed folder
 - * Edit the .htaccess, uncomment and change the following line

```
# RewriteBase /
To
RewriteBase /augmentedmaps
```
 - * This allows access to the pages stored in database.
- 7. Path Changes for windows
 - * Open <deployment directory>/sites/all/modules/map/map.js
 - * Path's specified in map.js file should be modified to use \\ as path separator,
 - * Mapserver URL needs to be modified to mapserver.exe.
- 8. Ensure that the db_url in sites/default/settings.php is pointing to the right database.