

# Map Intelligence Server

Geocoder Installation Guide



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## INTRODUCTION

Geocoding is the process of finding associated geographic coordinates (often expressed as latitude and longitude) from other geographic data, such as street addresses, or zip codes (postal codes). With geographic coordinates the features can be mapped and entered into Geographic Information Systems. A geocoder is a piece of software or a (web) service that helps in this process.

A geocoder is required to use the Map Intelligence **Batch Geocoder** and the **Search** tool is also able to query the configured Geocoder.

When using Map Intelligence Clients, a Geocoder is required if you are:

- using the **Address** option to specify a valid street address to set as the center point for the map;
- using the **Street Address** option to specify the location of points when creating a Point Layer.

## GEOCODING PROVIDERS

Currently there are five implementations of MI Geocoding Providers which potentially can be installed during the Map Intelligence Server Installation or added later using the Map Intelligence Geocoders Installer.

The table below describes in some detail the main characteristics of these Geocoders, along with the compatible MI Server type.

Geocoder		MI Server			
Name	Description	IMS	IGP	MX	SP
File Geocoder	Uses a local textual file accessible from the File System	Yes	Yes	Yes	Yes
Google Geocoder	Uses the public Google Geocoding Service	Yes	Yes	Yes	Yes
MMJ Geocoder	Uses the Pitney Bowes MapInfo Map Marker Java Edition API.  Important: The MapMarker Server must be accessible from the MI Server host.	Yes	Yes	Yes	Yes
Spectrum Geocoder	Uses the Pitney Bowes Spectrum Technology platform.	Yes	Yes	Yes	Yes
WIGeoGIS Geocoder	Uses the online JoinAddress geocoder provided by WIGeoGIS via web services.	Yes	Yes	Yes	Yes

For information on the additional jar files needed by the MapMarker installation see [Appendix B – Additional jar files needed by the MapMarker installation](#) on page 15.

## INSTALLING GEOCODERS

### BEFORE BEGINNING THE INSTALLATION

- Ensure a Map Intelligence Server (3.2.2 or later) is installed
- If installing the MMJ Geocoder ensure MapMarker 2 or MapMarker 3 has been installed.

### INSTALLING



Example Screenshots in this guide in some instances the may show an earlier version number to the version you are installing, this means that there have been no changes to the screen since the release shown.

To install one or more Map Intelligence Geocoders, follow the instructions below:

1. From the directory containing the Map Intelligence downloaded software:
  - For windows, double click the **mi-installer-geocoders-xx.jar** file
  - For Linux, run the command: **./install.sh**.

The Welcome dialog box will appear.



Figure 1 Welcome dialog box.

1. Click the **Next** button to continue.
2. An **Information** dialog box will appear. Read this information thoroughly.

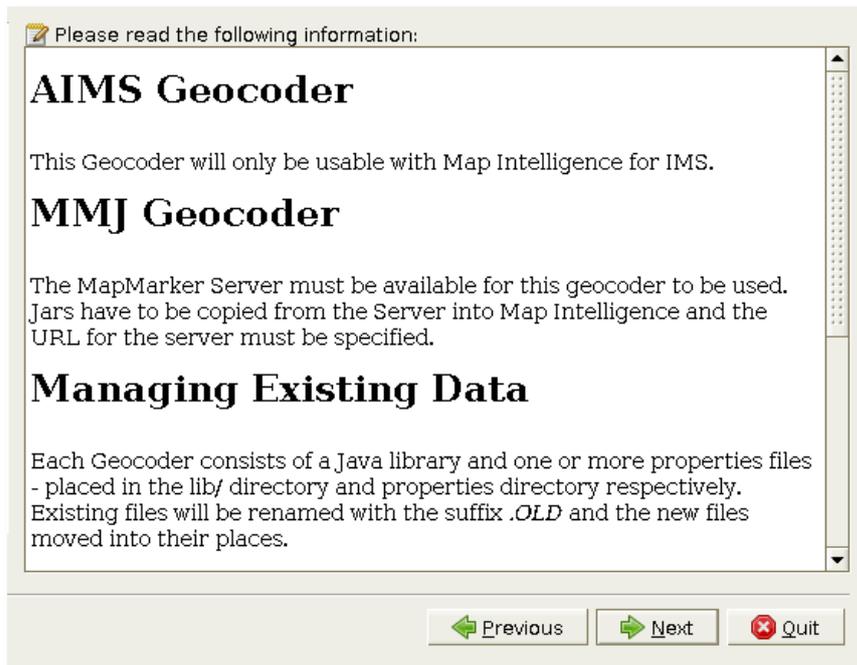


Figure 2. Information dialog box.

3. Click the **Next** button to continue.
4. The **Map Intelligence End User License Agreement** dialog box will appear. It is important that you read and understand the terms and conditions of the license agreement and that you are suitably authorized to accept its terms.

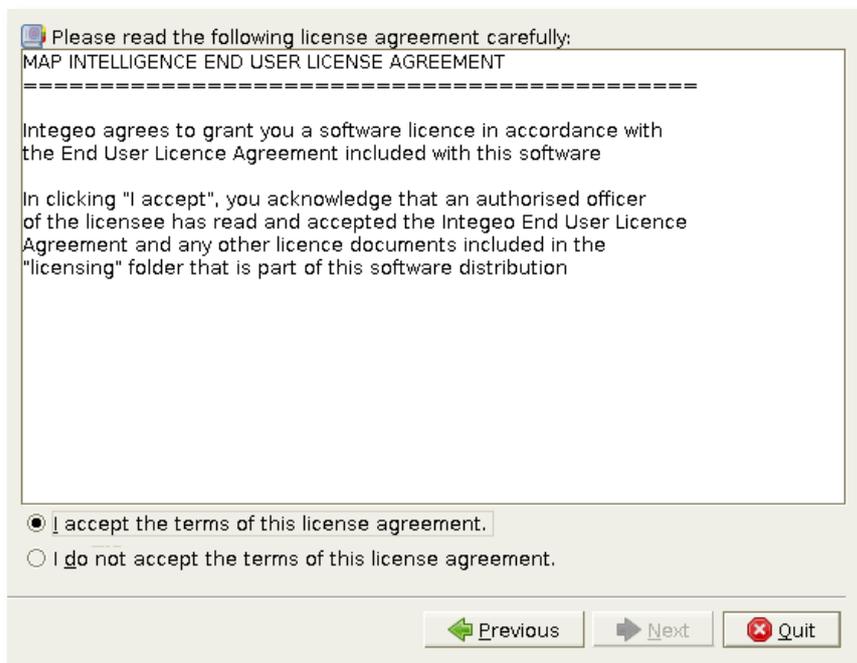


Figure 3. Map Intelligence End User License Agreement dialog box.

5. Click the **I accept the terms of this license agreement** radio button to accept the terms of the license agreement.
6. Click the **Next** button to continue.

The **Select packs** dialog box will appear.

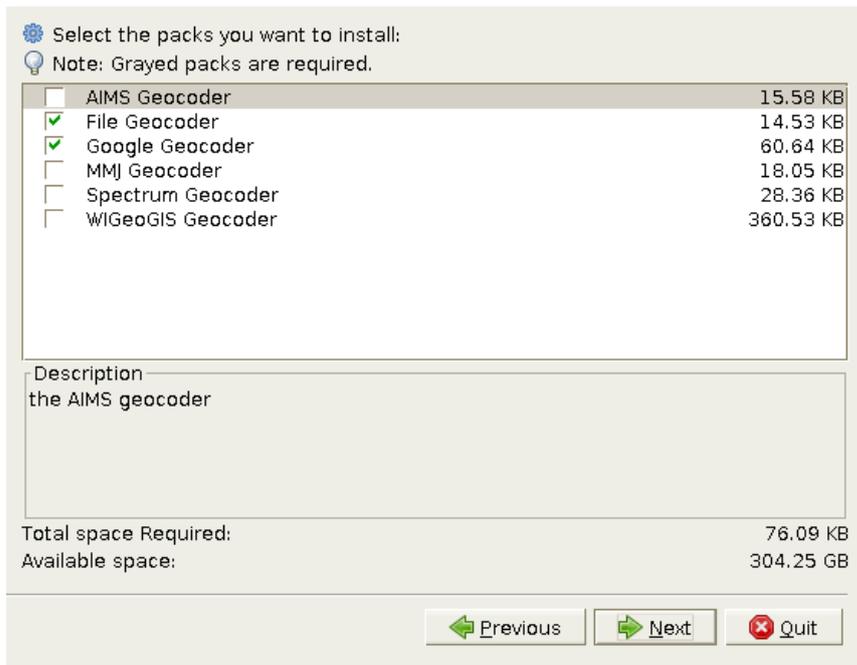


Figure 4. Select packs dialog box.

7. If the AIMS Geocoder is to be installed, click the **AIMS Geocoder** checkbox.
8. If the Flatfile Geocoder is to be installed, click the **File Geocoder** check box. For a description of the flat file geocoder, refer to [Appendix A – Flat File Geocoder](#) on page 14.
9. If the Google Geocoder is to be installed, click the **Google Geocoder** check box.
10. If the MapMarker Geocoder is to be installed, click the **MMJ Geocoder** check box.
11. If the Spectrum Geocoder is to be installed, click the **Spectrum Geocoder** checkbox.
12. If the WIGeoGIS Geocoder is to be installed, click the **WIGeoGIS Geocoder** checkbox.
13. Click the **Next** button to continue.

The **Map Intelligence Location** dialog box will appear.

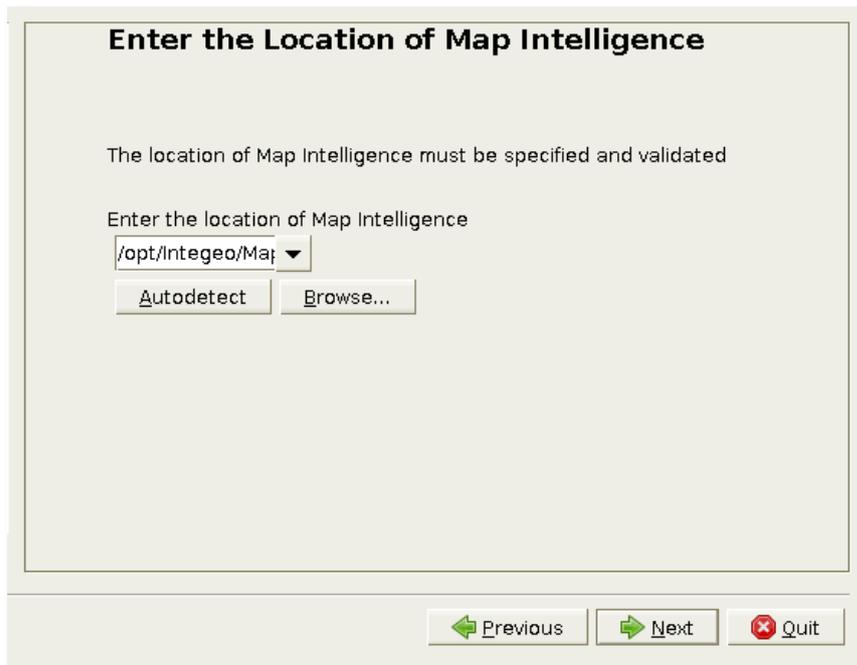


Figure 5 Map Intelligence Location dialog box.

14. The Map Intelligence Location panel attempts to auto-guess your Map Intelligence Server location. If the system is unable to find a valid installation, a blank location field is displayed. If on the other hand the 'default' installation location (under Program Files on Microsoft Windows or opt on GNU/Linux) contains more than one valid Map Intelligence Server installation, these locations will be available in a drop-down list, and one (arbitrary) location will be displayed in the input field (see Figure 5 above). Make sure that your desired target location is not already mentioned/detected in that list before manually selecting it by clicking the **Browse** button and browsing to your Map Intelligence Server Installation.
15. Click the **Next** button to continue.

The **MapMarker Location** dialog box will appear.



The **MapMarker Location** dialog box will not appear if you did not select the *MMJ Geocoder* check box on the *Select Packs* dialog box. (See [Step 10](#)).

16. Click the browse button and navigate to the directory contain the MapMarker API. This is named MapMarker – 3.0.0 or similar within your MapMarker installation. The files required vary depending on the API version, but the minimum requirement is `lib\client\mmjclient.jar`.



Figure 6 MapMarker Location dialog box.

17. Click the **Next** button to continue.

The **MapMarker Geocoder Settings** dialog box will appear.

18. In the **Geocoder URL** fields, enter the URL to your geocoder.



If MapMarker is not running on the host on which you are installing Map Intelligence, the hostname **MUST** be changed to reflect the actual server on which MapMarker is running.

19. In the **Three Letter Country Code** field, enter the country code your geocoder uses (e.g. USA for United States or AUS for Australia).

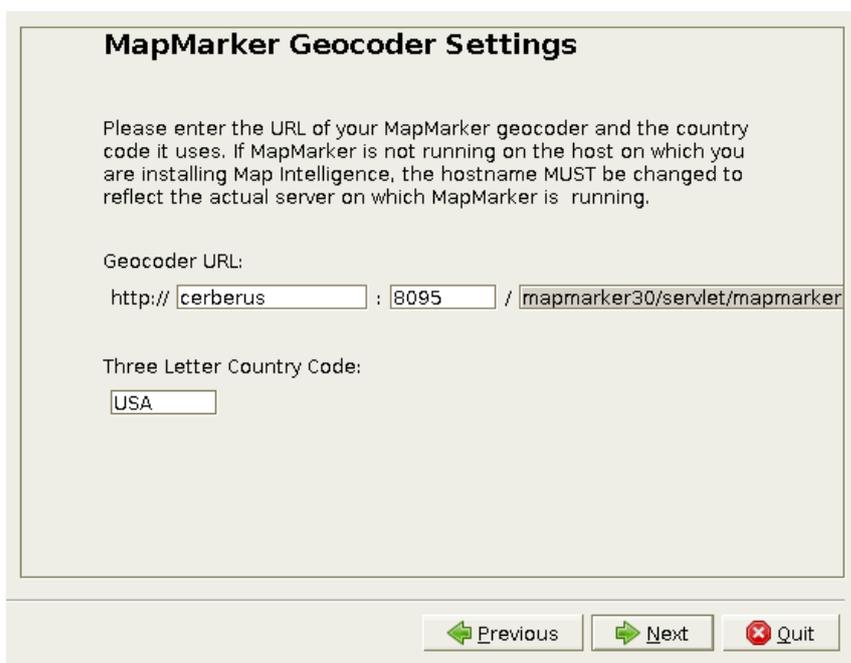


Figure 7. MapMarker Geocoder Settings dialog box.

20. Click the **Next** button to continue.
21. The **Ready to install** dialog box will appear detailing the items to be installed. Ensure that these are correct before proceeding.



Figure 8. Ready to install dialog box.

22. Click the **Next** button to begin the installation.

The **Installation progress** dialog box will appear, showing the Pack installation progress and the overall installation progress.

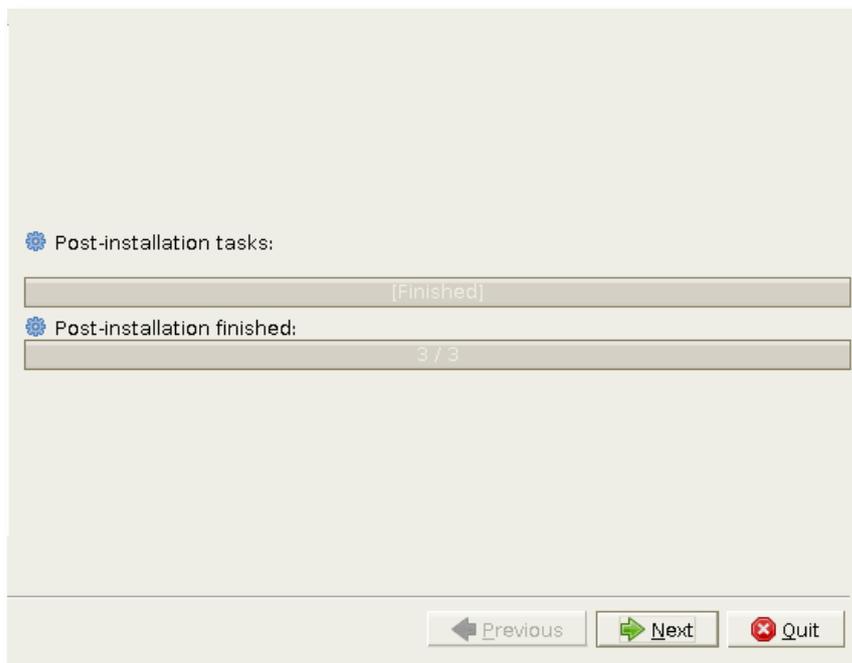


Figure 9. Installation progress dialog box.

23. After the Installation is complete, click the **Next** button.

The next dialog box will show the MapMarker library files being copied to your Map Intelligence MX installation. A green tick will be by each file as it is copied.

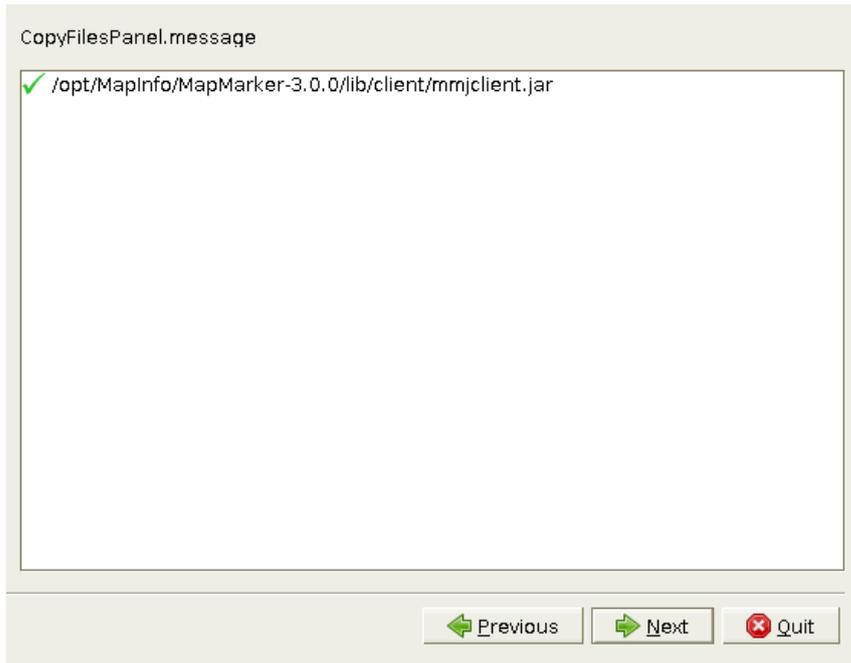


Figure 10. Dialog box showing the MapMarker library files copied to the Map Intelligence MX installation.

24. Click the **Next** button to continue.

The **Installation Confirmation** dialog box will appear, confirming your installation has completed successfully.



Information on where to find the uninstaller program is also given.

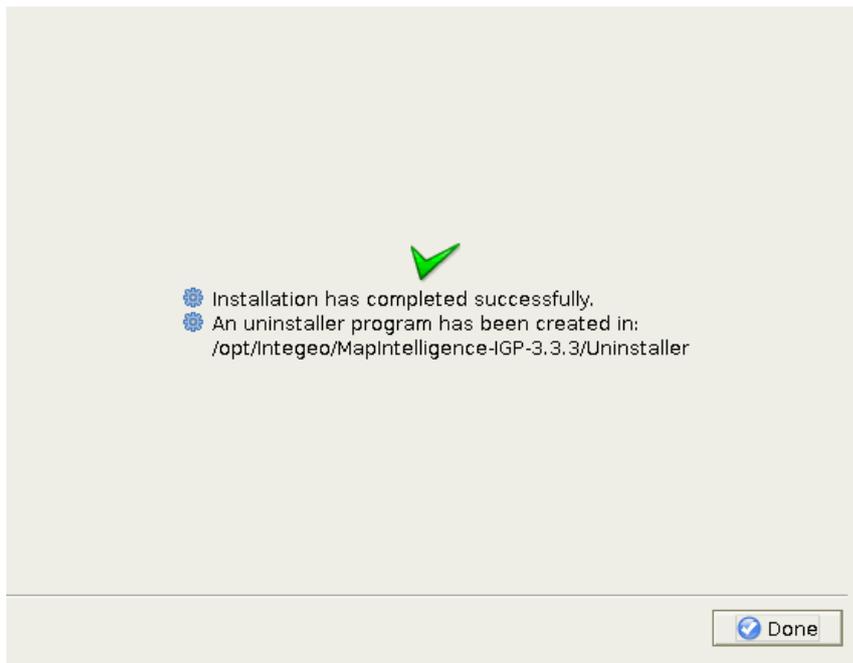


Figure 11. Installation Confirmation dialog box

25. Once the installation is complete, restart your MI Server.

The simplest way to do that is to go to the MI's Tomcat Web Application Manager page (usually at <http://localhost:9090/>), and after authenticating yourself using the same Tomcat manager credentials<sup>1</sup>, click the **Reload** button.

Path	Display Name	Running	Sessions	Commands
/	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/docs	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/host-manager	Tomcat Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/manager	Tomcat Manager Application	true	1	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/mapIntelligence	Map Intelligence	true	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes

Figure 12. Tomcat Web Application Manager page.

26. Finally, go to the **Map Intelligence Tools** page

<http://localhost:<Server Port Number>/mapIntelligence/>

27. Click the **Settings** button on the Map Intelligence Tools page. A login page will appear, and if you have not changed the user name and password in the `mapsettings.properties` file, enter the default values, user name 'admin' and password, 'admin'.



**Note** If you have previously entered a password protected area during the current Map Intelligence session you will not be prompted for a User Name and Password.

28. From the **Geocoder** drop-down list, select the desired MI Geocoding Provider whose ID should now appear in the drop-down list.

Once the geocoders you selected have been installed, property files are inserted into the <installation directory>\tomcat\webapps\mapIntelligence\WEB-INF\properties directory. They are all named similarly, viz "geocoder.<type>.properties", for example "geocoder.flatfile.properties". These properties files allow the user to modify the behaviour of the geocoders. Instructions for modifying/enabling each property are included in the comments in the properties files themselves. Note that the Map Marker geocoder files are filled in by the installer based on the information given to it by the installing user. After any modifications to the properties files, the server must be restarted.

29. Click the **Save** button.

<sup>1</sup> By default these are admin/admin as user name/password.



### APPENDIX A – FLAT FILE GEOCODER

The flat file Geocoder expects a file containing address and coordinates. Each entry must be on a single line with values delimited by the designated delimiter. It uses the data stored in the street field from the client and matches it with the value assigned in this file as the street column. Note that city and postcode are ignored so if these are required they will need to be included as part of the street column.

Here is an example of address lines in the flat file with a “,” delimiter:

151.20503,-33.86359,1 York Street Sydney NSW Australia

144.97125,-37.81644,29 Flinders Street Melbourne Victoria Australia

The flat file geocoder does a simple match of the address string and the input address must match the address in the file exactly.

## APPENDIX B – ADDITIONAL JAR FILES NEEDED BY THE MAPMARKER INSTALLATION

### FOR MAPMARKER 3

JARS	Location
mmjclient.jar	This JAR is usually located in the MapMarker-3.x.x/lib/client folder inside the MapMarker Java Edition installation directory.
miutil.jar micsys.jar	These JARs are usually located in the MapMarker-3.x.x/lib/common folder inside a MapMarker Java Edition installation directory.

### FOR MAPMARKER 2

JARS	Location
mmjclient.jar mmjcommon.jar	This and the following JARs are usually located in the MapMarker-2.x.x/lib/client folder inside a MapMarker Java Edition installation directory.
miutil.jar micsys.jar	This and the following JARs are usually located in the MapMarker-2.x.x/lib/common folder inside a MapMarker Java Edition installation directory.

## APPENDIX C – MAP INTELLIGENCE MANUALS AND GUIDES

Product documentation for Spectrum Spatial for Business Intelligence, including Map Intelligence SP and the clients are located here:

[support.pb.com/spectrum](https://support.pb.com/spectrum)

All documentation can be found under the Solution Guides section of the Product Documentation.