

# Map Intelligence Server

Installation Guide



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## GETTING STARTED

This is a guide for installing Spectrum Spatial for BI (Map Intelligence SP) on both Microsoft Windows and Linux systems.

### BEFORE BEGINNING THE INSTALLATION

Ensure that the following are setup and available before installing Map Intelligence SP:

- Verify that there is ample local disk space present.



Note

The disk space required for installing this software is approximately 500 Mb.

In addition, you will need to make a prudent allowance for log files. Map Intelligence log files are located in “\$Mi\_HOME/tomcat/webapps/mapIntelligence/WEB-INF/logs” and are named ‘mapIntelligence-trace.log’ and ‘mapIntelligence-trace.log.1’ The log file size will depend on the rate of usage, the level of tracing, and how often these files are archived or purged. By default, Map Intelligence limits the size of each log file to approximately 10Mb. When this limit is reached the file is copied to “mapIntelligence.trace.log.1” potentially overwriting the old contents and a new ‘mapIntelligence-trace.log’ file is created and used.

Also, with layer and feature caching the amount of disk space is variable and will depend on the number of layers and features accessed. It is advised that the System Administrator should monitor the size of the 'jcs' folder under the \$MI\_WEBAPP location.

- Make sure that the following Pitney Bowes products are already installed: Spectrum Spatial version 9. If you wish to geocode you should have the Spectrum Geocoding Module installed or another suitable geocoder.
- Confirm that a JDK version is installed. Check the *Compatibility* section in the [MI Server SP Readme](#) for JDK version to be used.

To determine the Java version that will be used by default in your environment

**For Microsoft Windows;** select Run from the Windows menu and open a cmd window. Run the command “java -version” in the window and the java version will be displayed

**For Linux;** run the command ‘java -version’ from the command- line.

- Confirm that you have access to a machine with a browser that can connect to the server. It is used to check the installation was successful. For compatible browsers, refer to the Compatibility section of the [MI Server SP Readme](#)
- The Map Intelligence Data Provider jar, must be installed into the Spectrum Server before Map Intelligence SP can work with Spectrum. This jar must be copied into the 'lib' directory within the spatial module. The path will be **server/modules/spatial/lib** within the Spectrum installation. The Data Provider jar can be found in Map Intelligence software package.
- Using MapInfo Professional, ensure your default map is correctly prepared by creating an appropriately designed .mws file (map) that has all default map layers you require (turned off) and each layer in projection EPSG:3857 (natively) and ensure the map file is saved in projection EPSG: 3857.

Load the .mws file directly into Spectrum via the add **Named Map** feature in the Management Console and overwrite named tables. Note: After load, select modify on your map to ensure the tables have a green tick box and have loaded successfully.

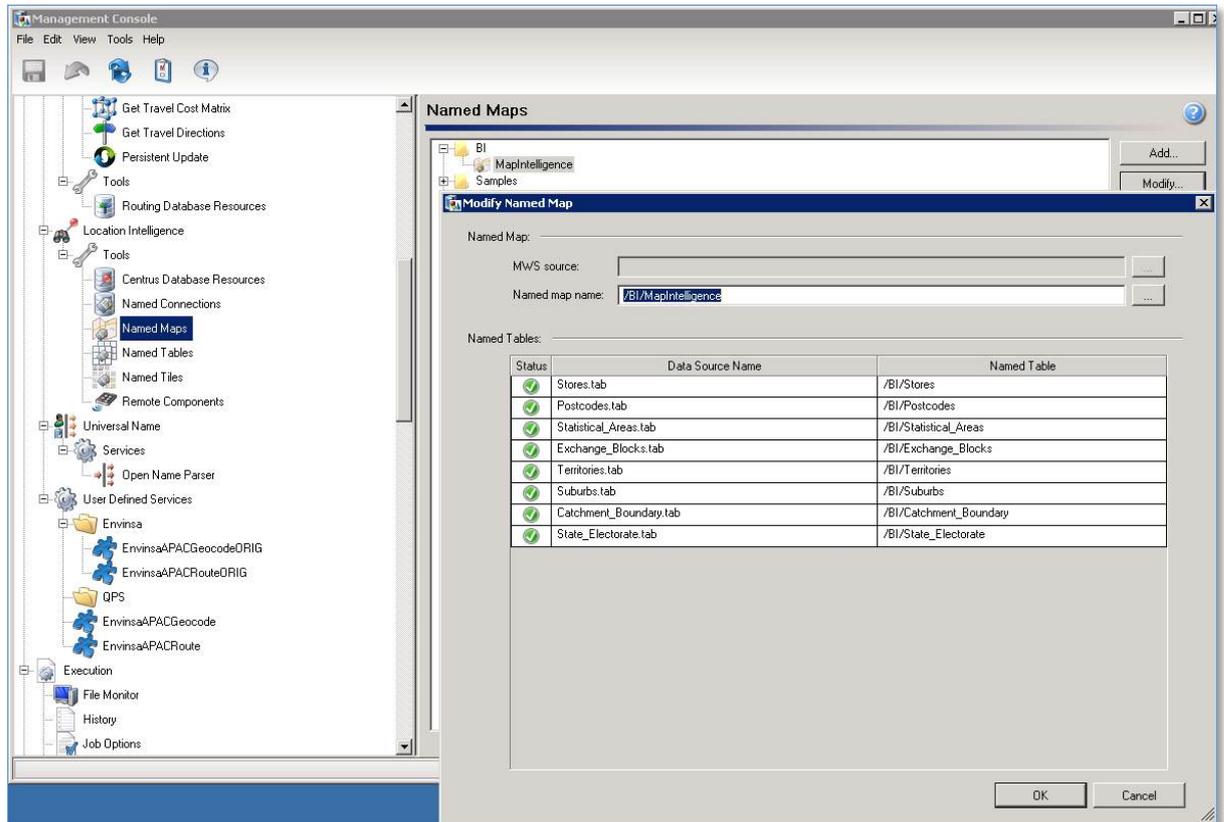


Figure 1. Loading the .mws file directly into Spectrum via the add Named Map feature

## DATABASE CONNECTIVITY

This version of the Map Intelligence Server may require a database connection. Due to licensing issues, the required JDBC drivers are not installed with this Map Intelligence Server but must be added later.

The following databases have been tested and are known to work with Map Intelligence. Download the driver for whichever database you wish to use, and place it in the *WEB-INF/lib* directory of your installed Map Intelligence Web Application. The JDBC-ODBC Bridge, which is included in the Java Development Kit, may also be used if you are using Windows and have an ODBC connection to your database.

### MYSQL

<http://dev.mysql.com/downloads/connector/j/3.1.html>

Except for Database Point Layers.

### ORACLE

[http://www.oracle.com/technology/software/tech/java/sqlj\\_jdbc/index.html](http://www.oracle.com/technology/software/tech/java/sqlj_jdbc/index.html)

### MICROSOFT SQL SERVER

[http://sourceforge.net/project/showfiles.php?group\\_id=33291](http://sourceforge.net/project/showfiles.php?group_id=33291)

## NETWORK SETTINGS

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In order to add support for HTTP Proxy types which use NTLM authentication, all the properties affecting this behavior have been moved from the “Access to External Sources” section of the Map Intelligence Tools - Settings page to a new file named “network.properties”, found under the *.../Map Intelligence/WEB-INF/properties*. This file is found under *.../Map Intelligence/WEB-INF/properties*.

**IMPORTANT:** When upgrading from a previous installation of a Map Intelligence Server, care must be taken to manually edit the “network” properties to reflect pre-set values which are found in both the “mapsettings” and “user.preferences” properties files.

For further information refer to *Technical Note: Map Intelligence Network Settings* (see [Appendix D – Map Intelligence Manuals and Guides](#) on page 34).

## MAP AND SERVER SETTINGS FOR GOOGLE MAPS

1. When using a tiled map service like Google Maps the map file, save the Spectrum map as EPSG 3857 or EPSG:900913 for correct alignment.
2. Any point layers sent across from the client MUST have their coordinate system included in the settings page. Additionally, the "wms.use.client.bbox=" property in wms.properties must be un-commented and set to true.

## INSTALLING MAP INTELLIGENCE SP

To install Map Intelligence SP, follow the instructions below:



Note

- Once you have downloaded Map Intelligence SP, you will need to extract the contents of the zip file into a location of choice. Then change directory to that location. There you will see the Map Intelligence files and directories.

1. From the directory containing the Map Intelligence downloaded software:

- For windows, double click the .jar file or run the command: `java -jar <full map intelligence installer jar name>`
- For Linux, run the command: `./install.sh`.



Note

- It is advisable not to use "Program Files" as a root directory for the installation. Instead, a suggested location is the root of the system, but this is not necessary.
- If you are not running Map Intelligence as a service then you will need to start and stop it as Administrator.

The Welcome dialog box will appear.



Note

Example Screenshots in this guide may show an earlier version number to the version you are installing.

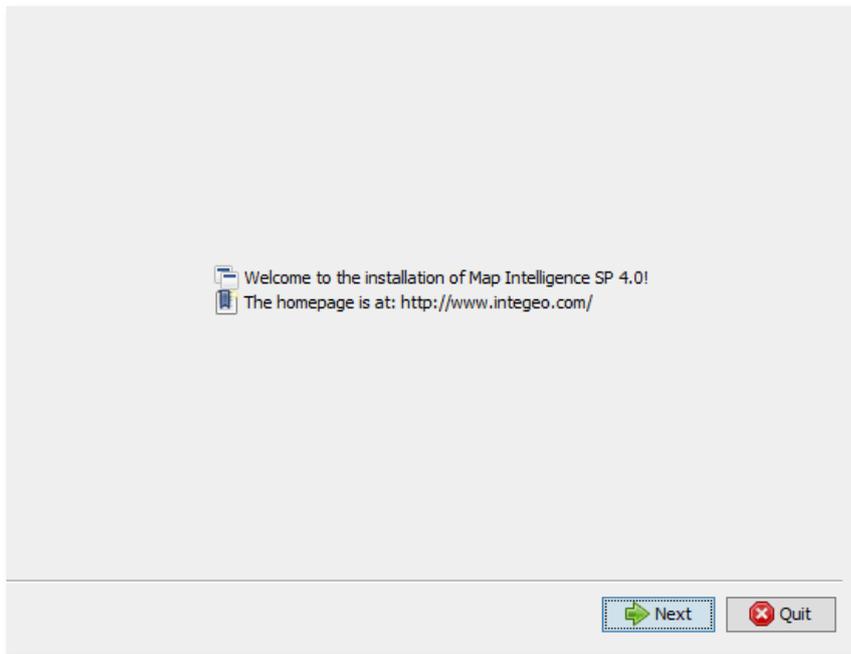


Figure 2. Welcome dialog box.

1. Click the **Next** button to continue.
2. An **Information** dialog box will appear. Read this thoroughly and ensure that you have the necessary items.

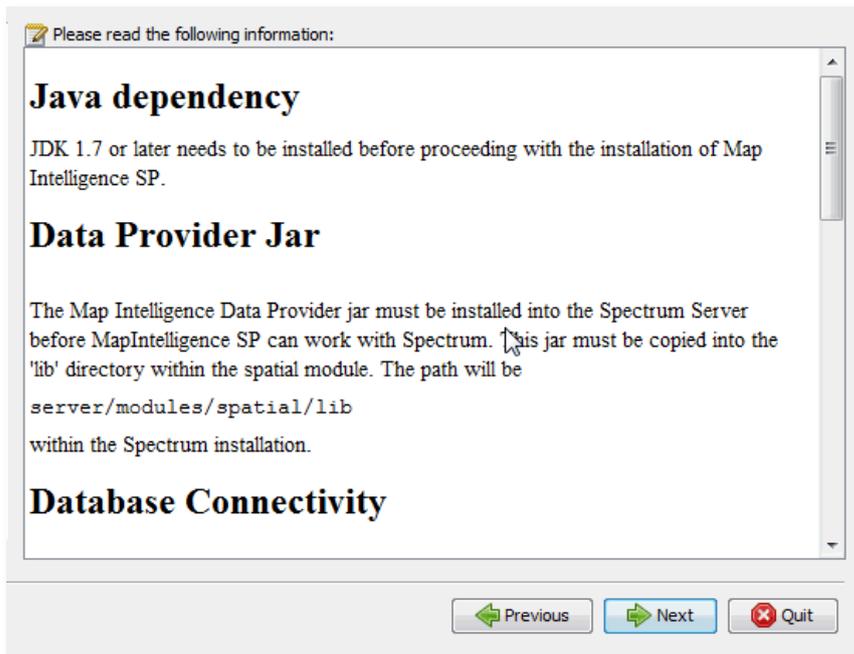


Figure 3. Information dialog box.

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.

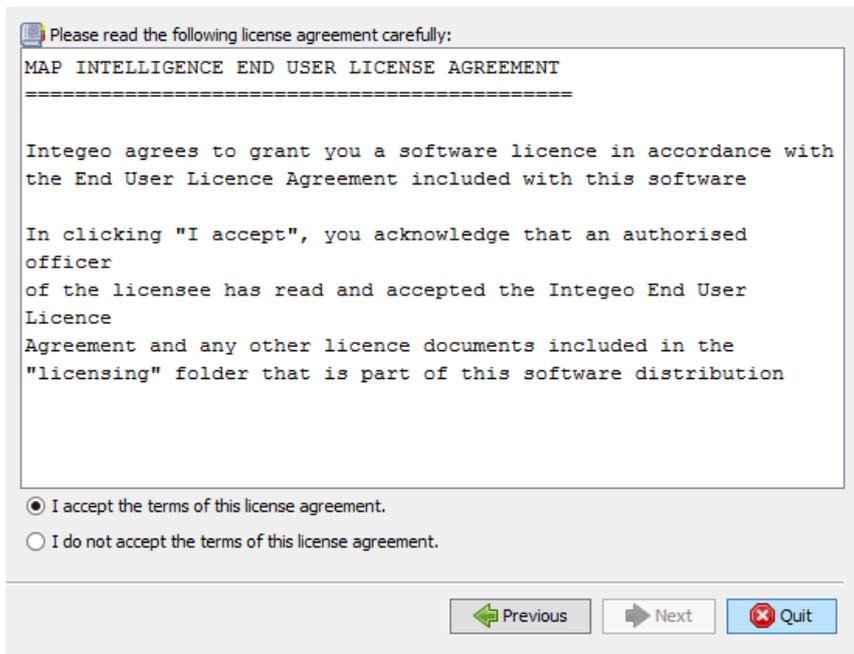


Figure 4. Map Intelligence End User License Agreement dialog box.

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.
7. The **Select the installation path** dialog box will appear. Click the **Browse** button if you want to navigate to a path other than the one specified on the screen.



**Microsoft Windows:** If you change the default installation path, ensure that the path entered does not contain trailing spaces. This can cause problems in a Windows environment, where such names are invalid.

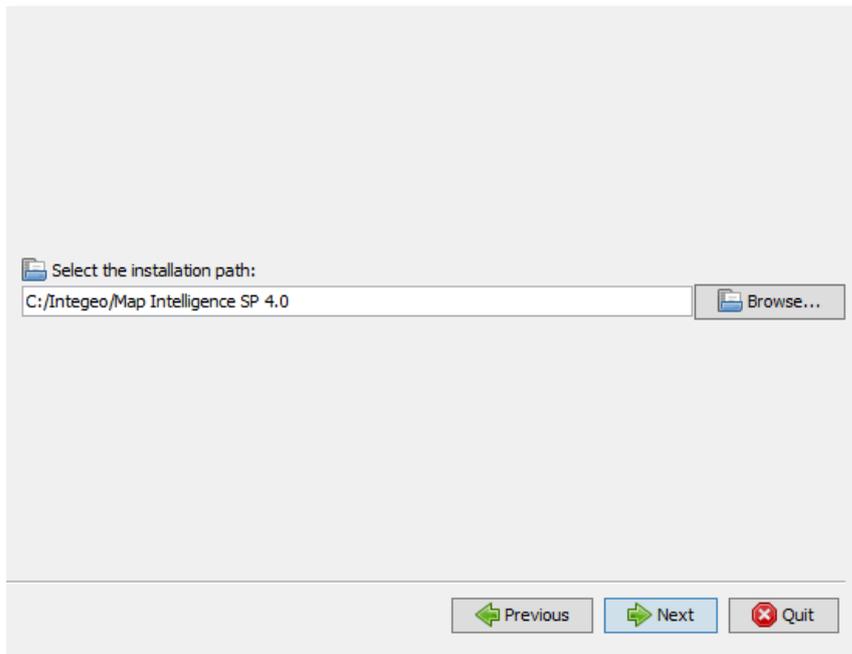


Figure 5. Select the installation path dialog box.

8. Click the **Next** button to continue.
9. A message box will appear stating the target directory will be created. Click the **OK** button to create the directory.

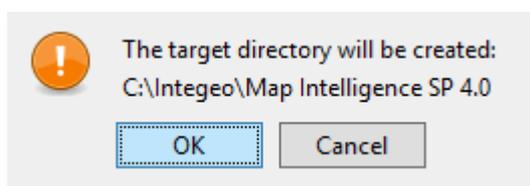


Figure 6. Target directory Message box.



If a Message box appears stating the directory already exists, you should select another directory.

The **Copy data from a previous version** dialog box will appear.

10. If you want to copy data from a previously installed version of Map Intelligence SP, select the **Yes** radio button.



This will ensure that the new version uses the same properties where applicable, and that the old data is readily available for use with the new version.

11. If you are not copying data from a previous version, select the **No** radio button.

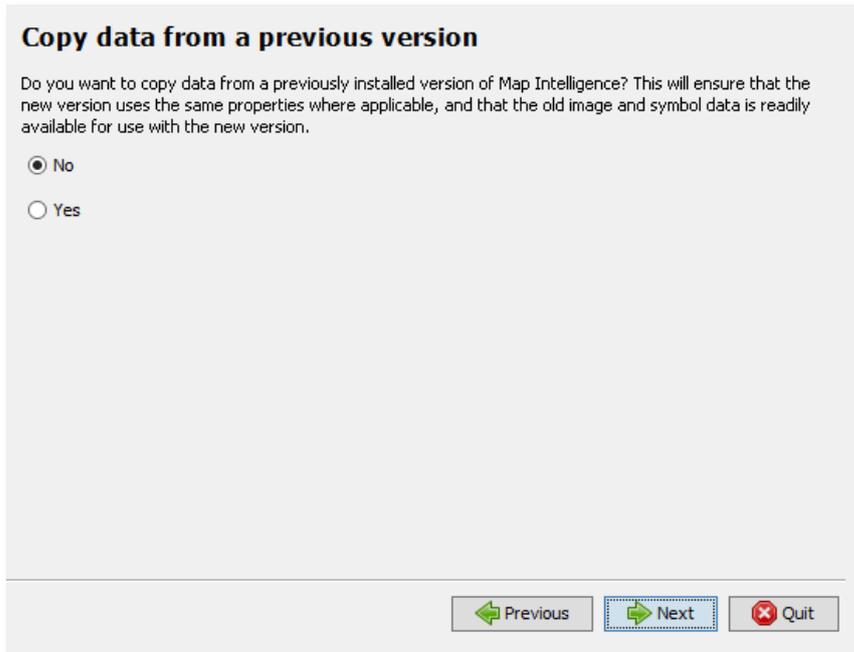


Figure 7. Copy data from a previous version dialog box.

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

If you are copying data from a previous version, the **Select the location of the previous installation of Map Intelligence SP** dialog box will appear.

13. Click the **Browse** button and select the location of your previous installation.

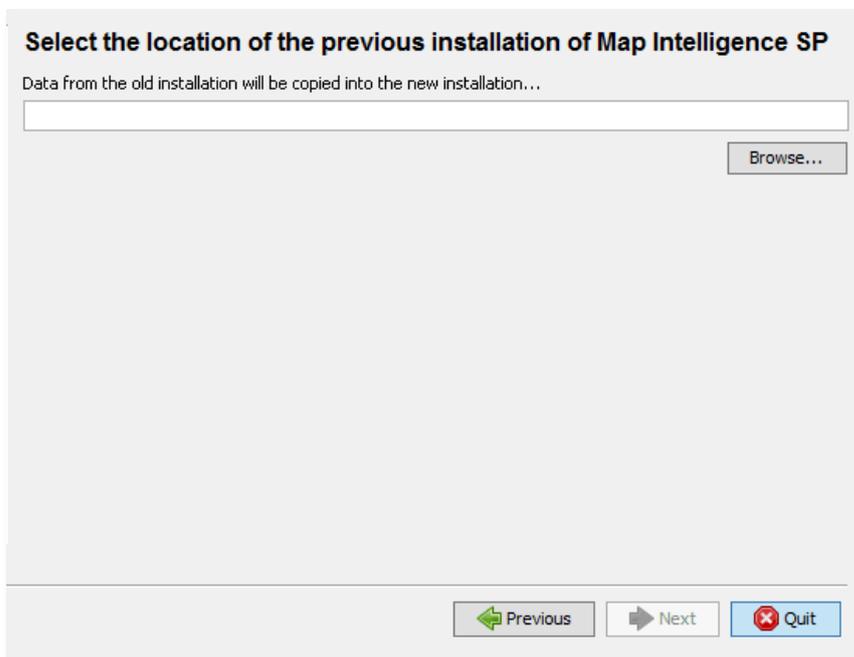


Figure 8. Select the location of the previous installation of Map Intelligence SP dialog box.

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

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

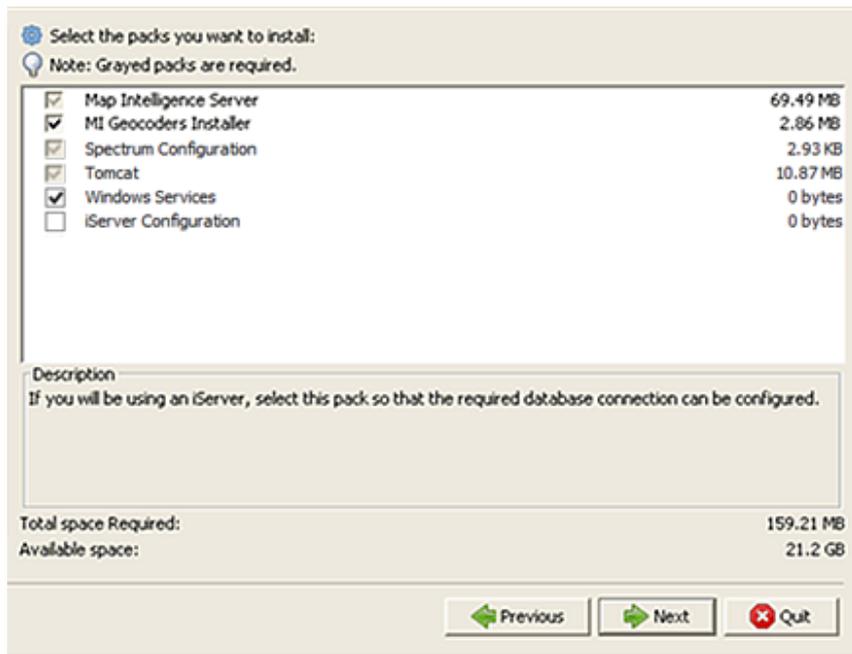


Figure 9. Select packs dialog box.



The Map Intelligence Server, Spectrum Configuration, and Tomcat check boxes are mandatory selections and cannot be deselected.

15. If you want to add Map Intelligence Geocoders, click the **MI Geocoder Installer** checkbox.



For an in-depth description of the MI Geocoders Installer refer to the [Geocoders Installation Guide](#) ([Appendix D – Map Intelligence Manuals and Guides](#) on page 34).

16. If you are installing Map Intelligence on a Microsoft Windows server, you are able to install Map Intelligence as a Windows service. Select the **Windows service** checkbox.

17. If you are using the Hyperion iServer, select the **iServer Configuration** checkbox.

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

19. The **Select JDK path** dialog will appear. Click the **Browse** button if you want to navigate to a path other than the one specified on the screen. As stated previously, consult the *Compatibility Matrix* in the [MI Server SP Readme](#) for up-to-date information on tested/recommended JDKs (see [Appendix D – Map Intelligence Manuals and Guides](#) on page 34). A Java Runtime Environment (JRE) will not be sufficient.

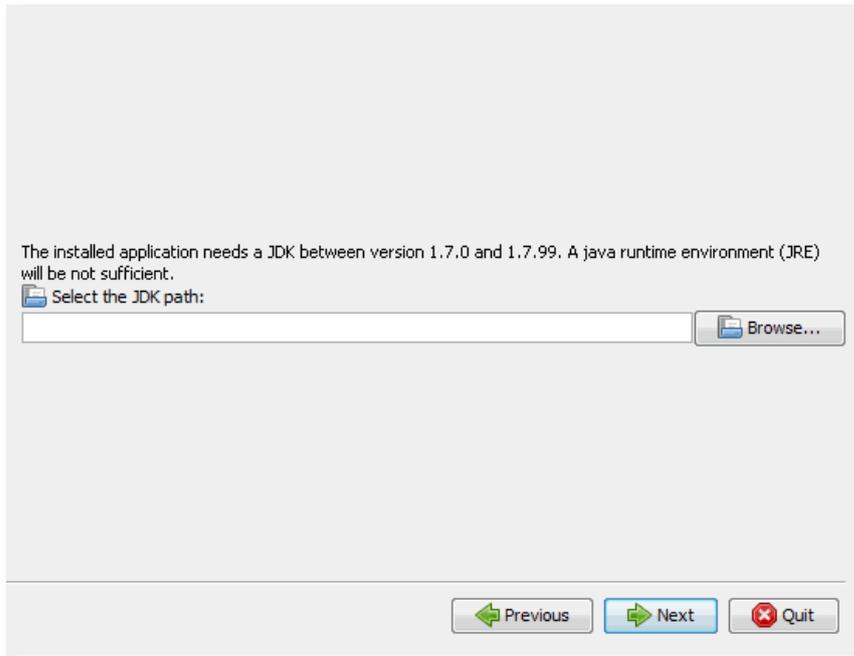


Figure 10. Select the JDK path dialog box.

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

The **Port Settings** dialog box will appear.

21. Enter the main Map Intelligence port number. All ports used will be calculated from this base. If a required port is in use, you will be notified. Ensure that the ports mentioned can be made available, or change the main port number. Ports used will, by default, be in the range of 9005 – 9443.



Note

- A summary of exact ports will be displayed on the installation Summary screen.
- The required ports are shown in [Appendix C– Ports Used by Map Intelligence SP](#) on page 33

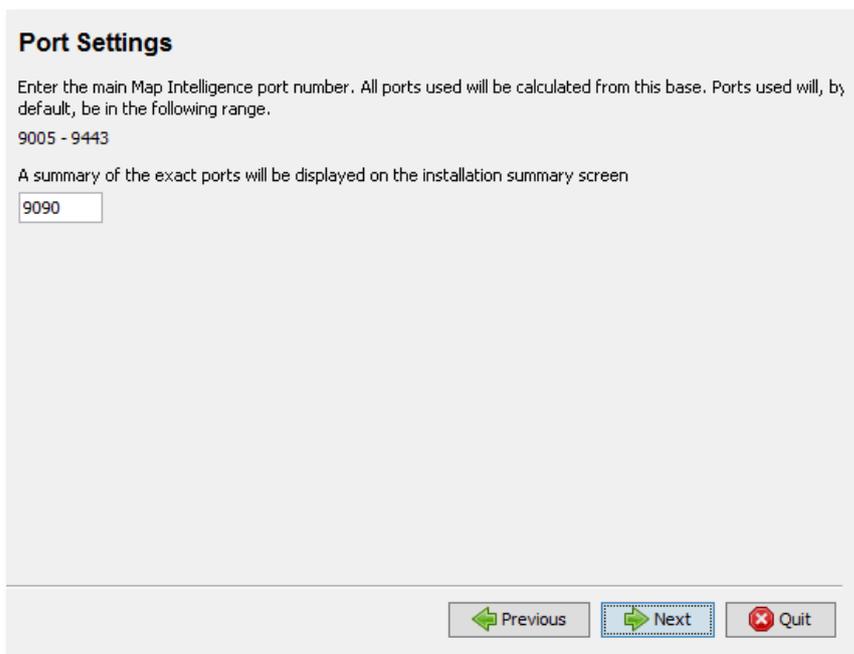


Figure 11. Port Settings dialog box.

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

The **Memory Allocation** dialog box will appear.

23. Enter the amount of memory that should be allocated to the Map Intelligence SP Server (in Megabytes). The value specified should not exceed the available physical memory

 These memory allocations are used as the basis for calculating the java memory settings so that the server can be tailored to run more efficiently.

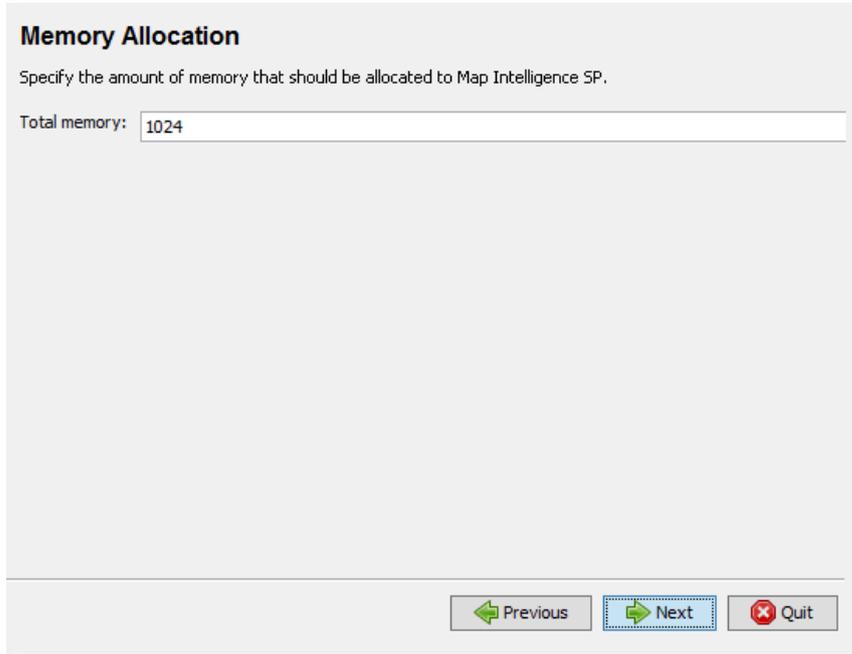


Figure 12. Memory Allocation dialog box.

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

The iServer JDBC Database Settings panel will appear.

 The **iServer Database JDBC Settings** panel will not appear if you did not select **iServer Configuration** radio button on the **Select Packs** dialog box. (See [Step 17](#) **Error! Reference source not found.**.)

Map Intelligence needs to know the JDBC connection details so that the database properties for the iServer can be correctly set. See [Database Connectivity](#) on page 6 for details on supported drivers.

 The settings may be left blank. However, this will require a later manual change to edit the properties file `WEB-INF\properties\mapintelligencechannel.properties` to use the iServer. Refer to the [Map Intelligence - Hyperion iServer Usage Guide](#) (see [Appendix D – Map Intelligence Manuals and Guides](#) on page 34).

25. In the **Classname** field, enter the classname of the database driver that will be used to access the iServer database.
26. In the **URL** field, enter the URL of the database to be used.
27. In the **Username** field, enter a valid database username to access the data to be used.
28. In the **Password** field, enter the password corresponding to the username that was used in the Username field.

**iServer Database JDBC Settings**

Enter the JDBC settings for the iServer database connection, if known.  
 These may be left blank, but you will then have to edit  
 mapintelligencechannel.properties later to use the iserver  
 Check the Hyperion iServer Usage Guide for examples, if this is the case.

The classname of the Driver to use.  
 Classname:

The JDBC URL used to connect to the database  
 URL:

The username which will be used to access the database  
 Username:

The password of the user  
 Password:

Figure 13. iServer Database JDBC Settings.

29. Click the **Next** button to continue.
30. The **Administrator credentials** dialog box will appear. The Tomcat Manager, as well as the included application require authentication to access certain sensitive data. Enter your preferred username and a strong password. Avoid obvious values like 'tomcat', 'root' or 'admin'.
31. In the **Username** field, enter the Administrator username.
32. In the **Password** field, enter the Administrator password. Then re-enter the password in the following field.

**Administrator credentials**

The Tomcat Manager, as well as the included Integeoo application, require  
 authentication to access certain sensitive data.  
 Please enter your preferred username and a strong password. Avoid obvious values  
 like 'tomcat', 'root' or 'admin'.

Enter the Administrator username  
 Username:

Enter the Administrator password  
 Password:

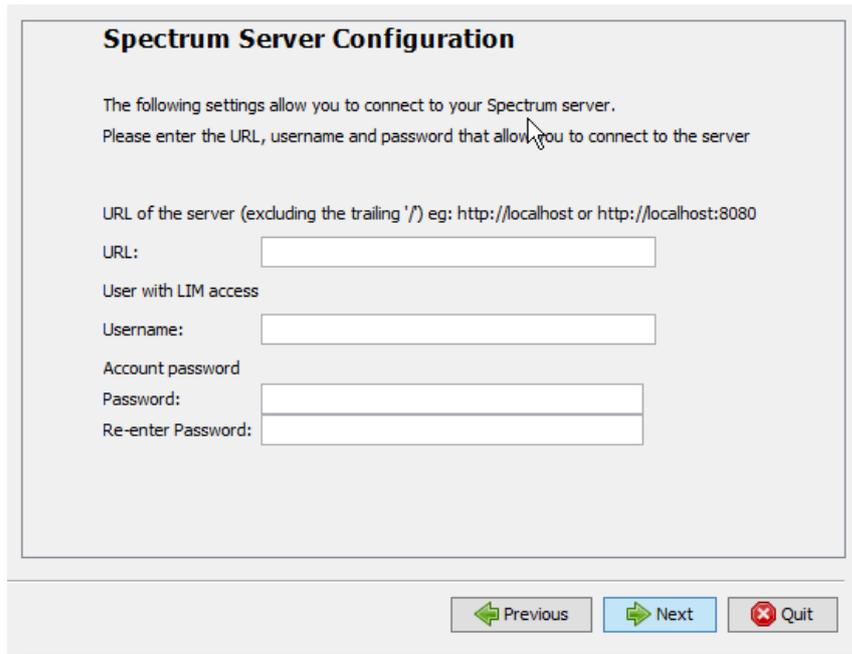
Re-enter Password:

Figure 14. Administrator credentials dialog box.

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

The **Spectrum Server Configuration** dialog box will appear. The following settings allow you to connect to your Spectrum server.

34. In the **URL** field, enter the URL to your Spectrum server installation (excluding the trailing '/') e.g. `http://localhost` or `http://localhost:8080`
35. Enter the Username of the user with LIM access.
36. Enter the password of the user with LIM access.
37. Enter the Account password, then re-enter the password in the next field.



**Spectrum Server Configuration**

The following settings allow you to connect to your Spectrum server.  
Please enter the URL, username and password that allow you to connect to the server

URL of the server (excluding the trailing '/') eg: `http://localhost` or `http://localhost:8080`

URL:

User with LIM access

Username:

Account password

Password:

Re-enter Password:

Figure 15. Spectrum Server Configuration dialog box.

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

The **Spectrum Default Map** dialog box will appear.

39. From the drop-down list, select the default map to be used when contacting the Spectrum server.



**Note**

- You must select a map, the map displayed initially in the drop-down list still requires selection.
- If no maps are shown, check your server authentication settings are correct.

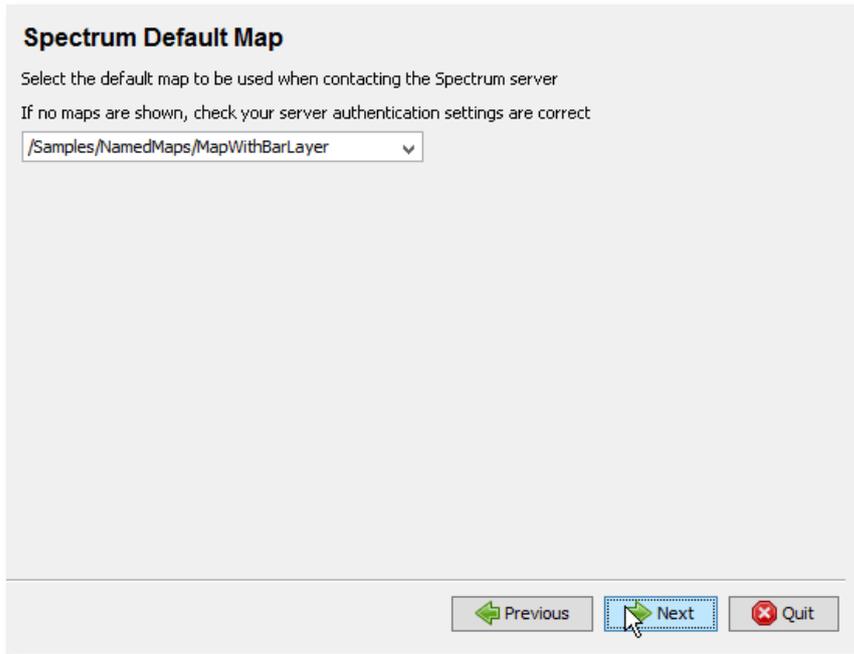


Figure 16. Spectrum Default map dialog box.

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

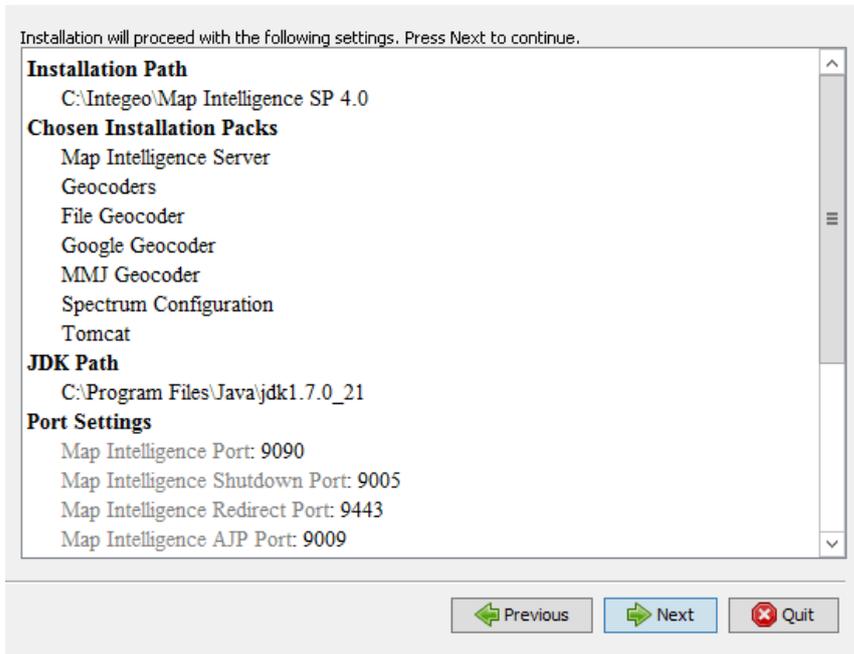


Figure 17. Ready to install dialog box.

42. 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.

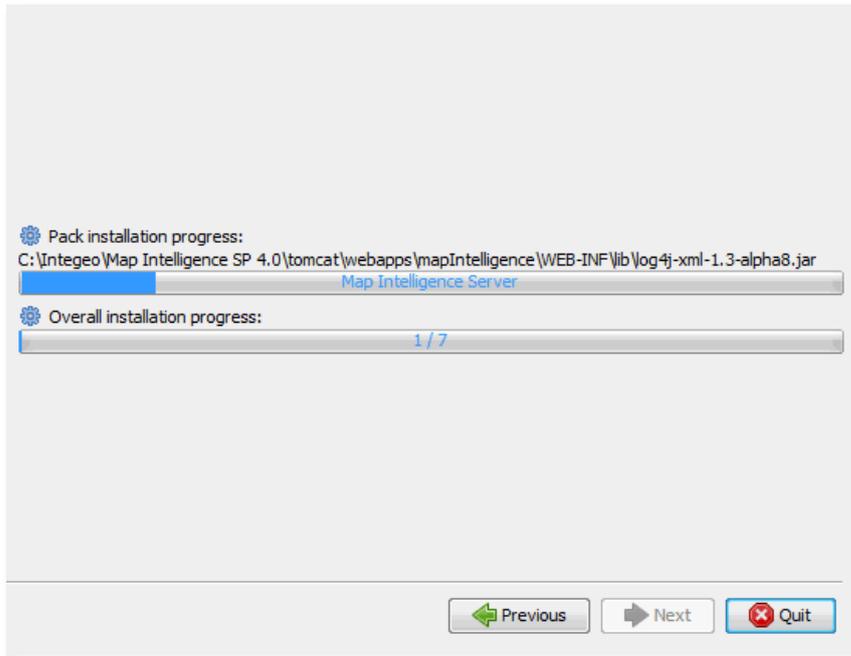


Figure 18. Installation Progress dialog box.

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

The **Shortcuts** dialog screen will appear.

#### ***For Microsoft Windows***

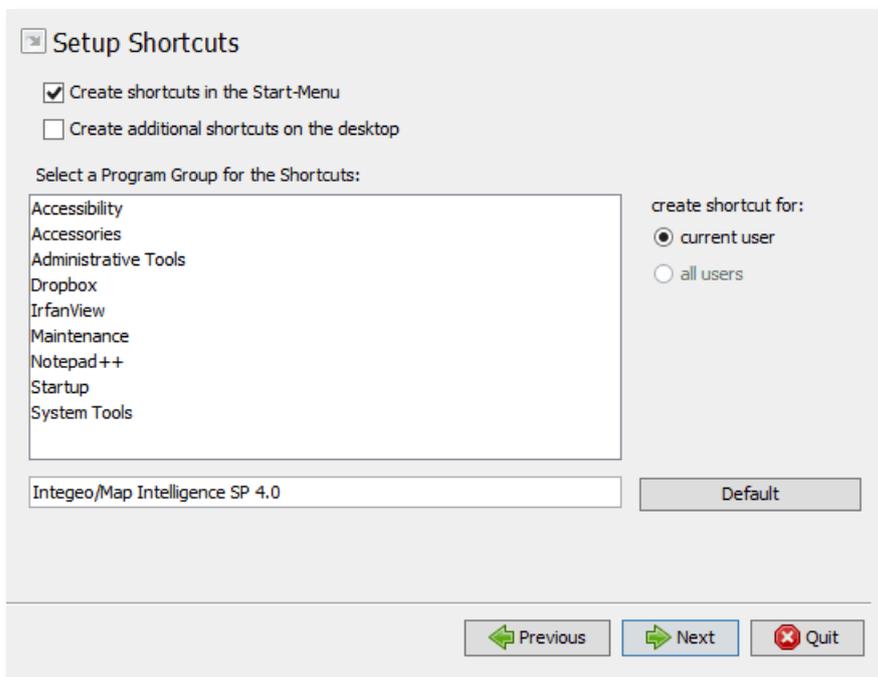


Figure 19. Shortcuts dialog box

44. The **Create Shortcuts** checkbox should be checked to create the Program Group Shortcut.
45. The **Create shortcut on the desktop** check box should be checked to create a shortcut that appears on your desktop.

46. Select a **Program Group for the Shortcuts**, by clicking on a program group in the Program Group menu. The selected Program Group will be highlighted. Clicking the **Reset** button resets the Program Group to the default **Map Intelligence SP**.
47. You can specify whether to create the shortcut for the **current user** or **all users** by clicking the appropriate radio button.

**For Linux**

48. Click the relevant checkboxes to:
  - Create shortcuts in the XDG-Menu
  - Create additional shortcuts on the desktop.
49. You can specify whether to create the shortcut for the current user or all users by clicking the appropriate radio button.
50. The **Default** button resets the Program Group to the default setting.
51. 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 Map Intelligence SP uninstaller program is also given.

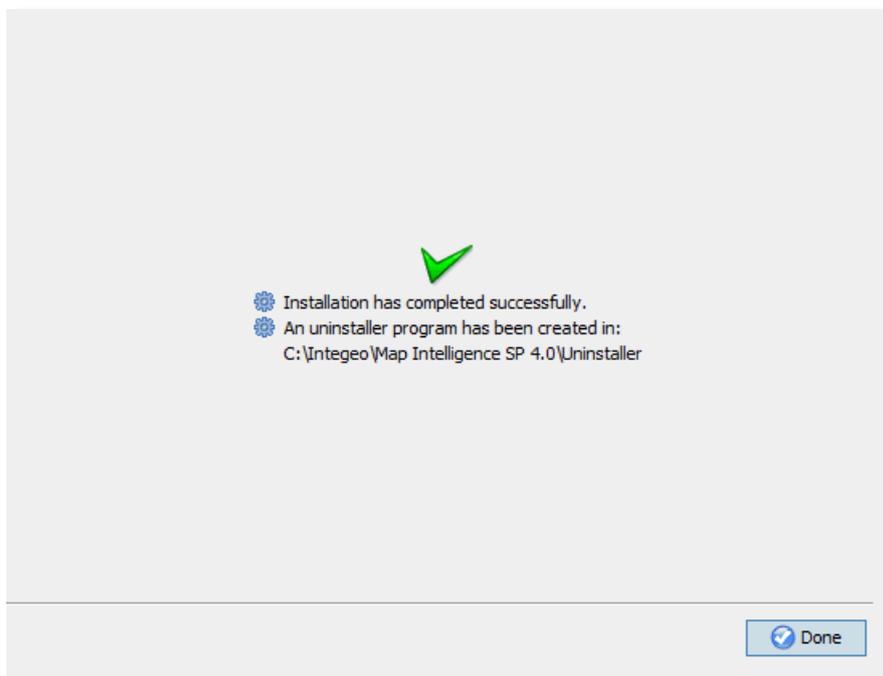


Figure 20. Installation Confirmation dialog box

## VERIFYING A SUCCESSFUL INSTALLATION

### STARTING AND STOPPING THE SERVER



**Microsoft Windows Users:** How the Map Intelligence server is started and stopped depends on whether or not it has been installed as a Windows service. If it has been made into a Windows service then please refer to the standard Windows documentation on this subject.

When the Map Intelligence server is installed either a program group is created or, if it exists, is augmented with the Map Intelligence server commands. These include a “Run” and an “Uninstall” command. The correct way to stop Map Intelligence running in a console window is to use “CTRL-C”.

## TESTING MAP INTELLIGENCE

To test that Map Intelligence has been correctly installed, you need to start the servers. Follow the steps below.

### **Microsoft Windows:**

1. Start the Spectrum server.
2. If you specified a MapMarker server during installation, then ensure that the MapMarker Server is running.
3. Depending upon where Map Intelligence SP was installed, go to **Start > Programs >(containing folder)> Map Intelligence SP** and select **Run Server**.



For Windows 8: From **Apps by Category** screen, select **Run Map Intelligence SP**.

### **Linux**

1. Start the Spectrum server.
2. If you specified a MapMarker server during installation, then ensure that the MapMarker Server is running..
3. From the window manager menu, go to **(containing folder)> Map Intelligence SP** and select **Start Server** . .

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## OPENING THE MAP INTELLIGENCE TOOLS PAGE

1. Once the servers are running successfully, open your web browser and navigate to the following address.

`http://localhost:<Server_Port_Number>/mapIntelligence/`



- <Server\_Port\_Number> being the port number you stated during in the Server Settings dialog box during installation.
- It is necessary to type mapIntelligence with a small 'm' and a capital 'I' when entering the address into your web browser.

The browser can be opened on any machine on the network with access to the Map Intelligence server.

The **Map Intelligence Tools** page will now be visible.

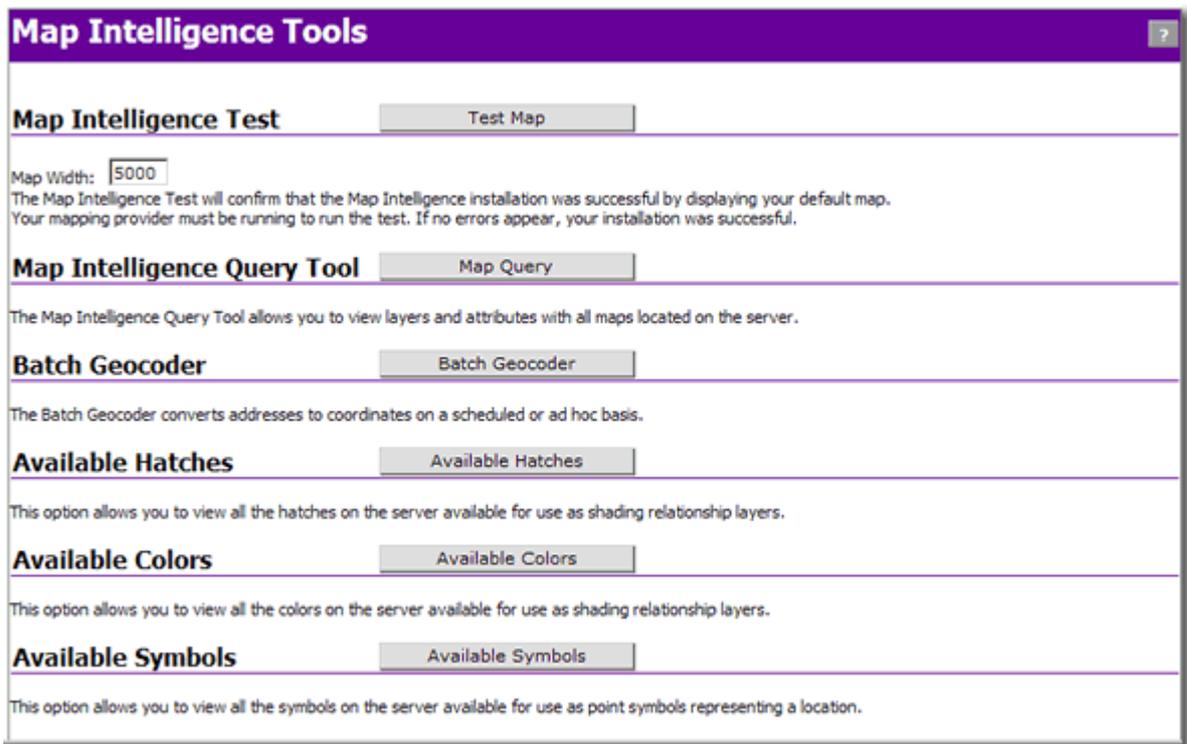


Figure 21. Map Intelligence Tools page.

## LICENSES

### OBTAINING LICENSES

As a prerequisite for this part of the installation, you will need to have licenses for the products that you intend to use. One license is for the License Manager and the others are as follows:

- The Map Intelligence Server
- The Batch Geocoder
- The Map Intelligence Client

Which licenses you have and install depend on which of these products you have purchased. You must have at least a License Manager and server license for Map Intelligence to function properly

1. To obtain these licenses, you will need to email the following information to the Pitney Bowes Support. When issuing a Map Intelligence server license, Pitney Bowes will offer the opportunity to designate a License Watermark, see Settings section of the *Server Tools & Administration Guide* (see [Appendix D – Map Intelligence Manuals and Guides](#) on page 34).
  - the host id (See [How to obtain your host](#) below)
  - the number of CPUs on the machine you will installing the Map Intelligence Server. (See [How to locate the number of CPUs](#) below).
4. The Pitney Bowes Support will then return the licenses to you.
5. Once you have the licenses, put them in a location that is accessible to the Map Intelligence server.

## HOW TO OBTAIN YOUR HOST ID

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1. **For Windows:** Under the Tomcat webapps\mapIntelligence directory, locate the batch file called `hostid.bat`, which will reside in the `bin` directory. Double-click on the bat file to open a command prompt window. You will see 1 or more host IDs.

**For Linux:** Under the Tomcat webapps/mapIntelligence directory, locate the executable shell script called `hostid.sh`, which will reside in the `bin` directory. Execute the script. You will see 1 or more host IDs.



**Important:** If you have more than one network interface on your machine, you will have multiple host IDs displayed. If this is the case then you must determine which is your primary network interface (usually your local area ethernet connection) and use that ID.

To determine this:

**For Windows;** from a command prompt window, enter `ipconfig /all`

**For Linux;** from a command prompt window, enter `ifconfig -a`

You should choose the **Physical Address** of your primary network as described above.

2. From the command prompt window, copy the `hostid`, which will look similar to `xx-xx-xx-xx-xx-xx`, and put into the email.

## HOW TO LOCATE THE NUMBER OF CPUS

---

The following will assist you to locate the number of CPUs cores on your machine.

1. **For Windows 7**, the number can be deduced from the number of **CPU Usage History** windows in the **Performance** tab in the **Task Manager**.

**For Windows 8**, the number of Logical Processors is used, open the **Task Manager > Performance** tab, click on **CPU** in the left pane, the number of **Logical Processors** is shown in the right hand pane.



In a Windows 8 Virtual Machine the term "Virtual Processors" is used instead of "Logical Processors".

2. **For Linux**, this number can be deduced from the number of "processor" block(s) output to the console when, as `root`, you run the command:

```
#cat /proc/cpuinfo
```

## INSTALLING LICENSES

1. From the **Map Intelligence Tools Page**, click the **Administer Licenses** button. A **login page** will appear. You will need to enter your user name and password.



Note

The Username and the Password are the **Administrator username** and **Administrator password** entered in the Administrator credentials dialog during installation (see [Step 30](#) on page 14). These values can be changed in the **mapsettings.properties** file if you need to. This file is found under `...\\Map Intelligence\\WEB-INF\\properties`. Change the user name and password in the following lines of text (the example username and password used here is 'admin'):

```
# Password used for access to map configuration page.  
admin-password=admin  
# User name used for access to map configuration page.  
admin-user-name=admin
```

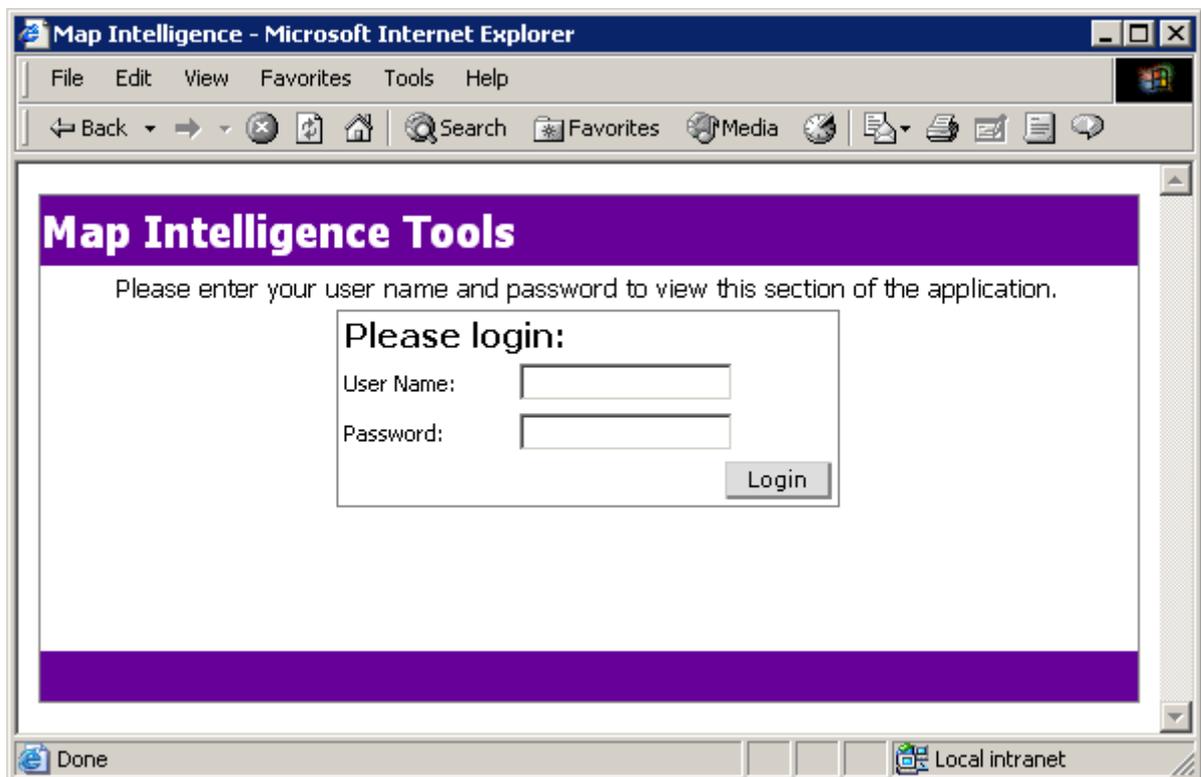


Figure 22. Login page.

2. Click the **login** button. The License Administration page will open.

The License Administration page provides the following facilities:

- Installing licenses; and
- Removing machines from the list of machines that can run the Map Intelligence Client - Excel.



Figure 23. License Administration page.



Note

- The Remove Excel Machine button will only appear if the you have a Map Intelligence Excel Client licensed AND you have already have at least one physical address of a machine with an Excel client registered with the server.
- See [Problems in Licensing](#), on problems that may occur with licensing and how to deal with them.

3. Click the **Install License** button, the **Install License** page will now be displayed.

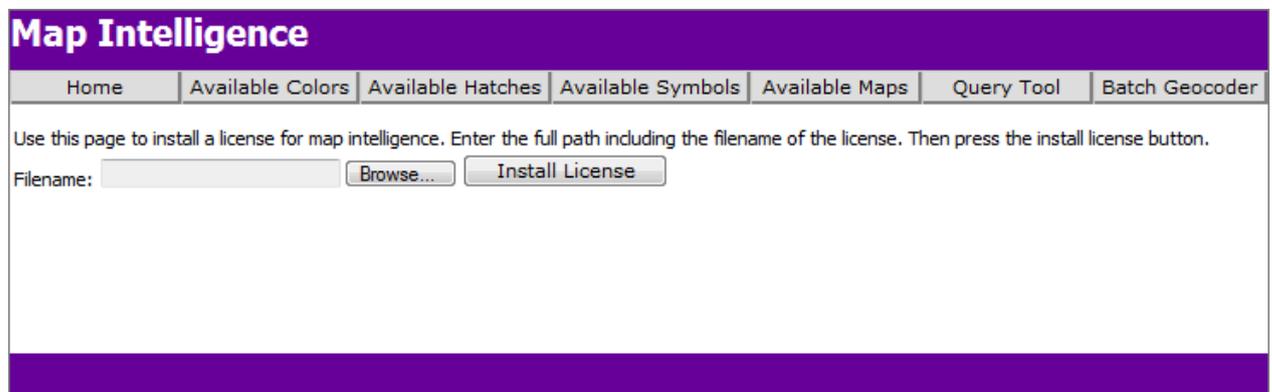


Figure 24. Install License page.



Note

You will need the licenses you purchased to continue with this installation. If you do not have them, please see Section Obtaining Licenses.

4. Click the **Browse** button and navigate to the location of the licenses. Select the first license file (.dat) and click **Open**.
5. Click the **Install License** button. A message will be displayed that will say the license or certificate was successfully installed.
6. Repeat the steps above to install all the license files you have been provided with.
7. Click the **Home** button on the web page to return to the **Map Intelligence Tools** page.
8. Click the **Test Map** button.



Note

#### MI Viewer Quick Tips

The first time you use the MI Viewer, a few tips on how to interact with the viewer are displayed.

You can browse these tips using the screen navigation   buttons. To close these Quick Tips, click the **Close** button .

On closing the MI Viewer Quick Tips, the browser window will display the default map or the map specified during the installation. Below is an example of a map in the MI Viewer.

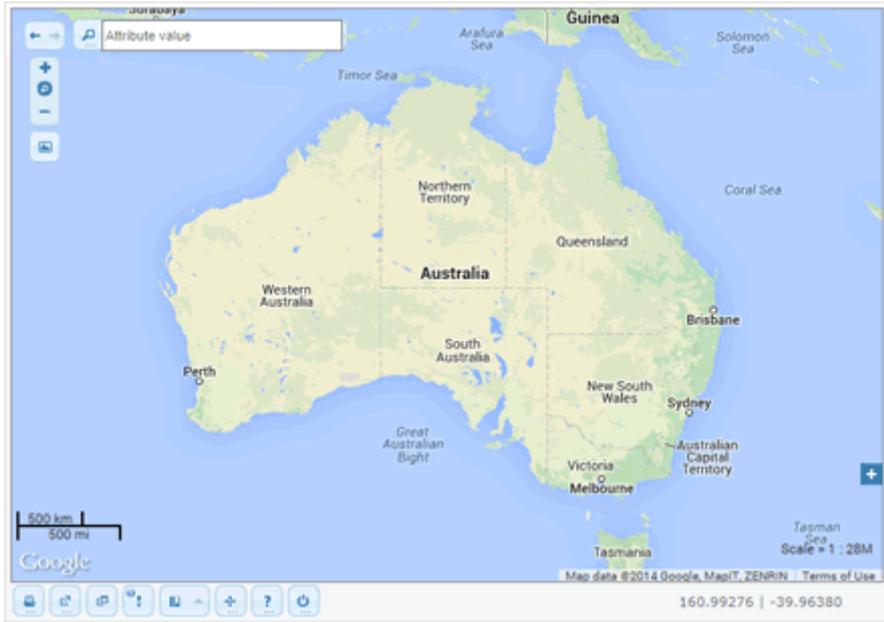


Figure 25. An example of a map in the MI Viewer.

Map Intelligence has been successfully installed and is functioning correctly.

---

## IMPORTANT NOTE AFTER FINISHING INSTALLATION

For Spectrum Spatial version 9, it is necessary to ensure that the setting **Ignore Case for Area Groups** is set to false.

1. From the **Map Intelligence Tools** page, click the **Settings** button on the Map Intelligence Tools page. A login page will appear, enter the **Administrator username** and **Administrator password** entered in the Administrator credentials dialog during installation (refer to the [Map Intelligence Server Installation Guide](#) see [Appendix D – Map Intelligence Manuals and Guides](#) on page 34). These credentials can be changed in the mapsettings.properties file.



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

- Scroll down to the **Ignore Case for Area Groups** and set to **False**.

---

## RE-INSTALLING LICENSES

If you are required to re-install licenses for any reason (e.g. you have been given new licenses for the products) then it is advisable to run the **removeCertificates.bat** (*Windows*) or the **removeCertificates.sh** (*Linux*) command that is located in the bin directory under the Map Intelligence home directory. You do this as follows:

1. Before attempting to remove certificates, ensure the Map Intelligence server is not running. See [Starting and Stopping the Server](#) on page 19.
2. **For Windows;** Under the Tomcat webapps\mapIntelligence directory, locate the file called **removeCertificates.bat**, which will reside in the bin directory. Double-click on the **bat** file and the command will run.



**For Windows Servers 2008 and 2012:** The "removeCertificates.bat" script must be run as Administrator to ensure that the license certificates are removed and backed up.

**For Linux;** Under the Tomcat webapps\mapIntelligence directory, locate the file called **removeCertificates.sh**, which will reside in the bin directory. Execute the script file and the command will run.

3. The removed certificates are placed in a directory called **certificates.removed** under the *WEB-INF* directory of the installed Map Intelligence Web Application.



If you remove the certificates manually, take care not to remove the **excelClientNamedMachines.mc** and **excelClientNamedMachines.mh** files as these are necessary for the Map Intelligence Excel Client to function.

---

## REMOVE EXCEL MACHINE

The Map Intelligence Excel Client is licensed on the basis of a certain number of named machines. The machines are named by their MAC (physical) address (the unique address given to their Ethernet adapter cards). If you need to make room for new machines because you have filled your quota of named machines then you use this function. To fill in the required field you will need to obtain the MAC address of the machine to be removed. In a Windows environment on the machine to be removed do as follows:

1. Open a command prompt from **Start > Run**, the **Run** dialog box will open.
2. Type **cmd** in the **Run** dialog box and click **OK**. A command prompt window will appear.
3. In the **Open** text box, enter **ipconfig /all**
4. Look for the **Ethernet adapter local area connection** section
5. Find the **Physical Address** line and the 6 alphanumeric sequence is the MAC address.



If the machine connects via a wireless net, or some other scheme then do steps 3 and 4 for that adapter.

6. Click on the **Remove Excel Machine** button, the Remove Machine page will appear.



The **Remove Excel Machine** button will only appear if the Map Intelligence Excel Client has been licensed.

7. Enter the **MAC address** of the machine to remove and click **Remove Machine**.

If the machine is known to Map Intelligence then it will be removed.

---

## PROBLEMS IN LICENSING

Please refer to this section if you have problems with the licensing of Map Intelligence products.

---

### LICENSE SERVER

The only problem you should encounter is that the License Server complains that it is not licensed. If you have a time limited certificate then it may have expired.

#### SOLUTION

The only way to rectify this is to obtain a valid license certificate from Pitney Bowes.

---

## ADDING SUBSEQUENT LICENSES

When adding subsequent licenses where the license manager certificate (the one starting with "lc.3") has either

- the host ID wrong; or
- an expired time limited license

the License Administration tool will inform you of the problem, even though the certificates have been uploaded successfully.

Certificates with this problem will be those starting with "lc.4".

### SOLUTION

The only way to rectify this is to obtain a valid license certificate from Pitney Bowes.

- Ensure the correct host ID was emailed to Pitney Bowes, see [Obtaining Licenses - How to obtain your host ID](#) on page 22.
- Ensure the license has not expired by running the "mapIntelligence/bin/listCertificates.bat" tool that shows the properties of the installed certificates including their expiry dates.

---

## MAP INTELLIGENCE SERVER

The following problems may occur:

---

### CERTIFICATE NOT VALID

If you have a time limited certificate then it may have expired.

### SOLUTION

The only way to rectify this is to obtain a valid license certificate from Pitney Bowes.

---

### NOT ENOUGH CPUS AVAILABLE

The "licensed units" of the server are the number of CPUs it is valid for. Server licenses are only valid for a certain number of CPUs. If you exceed that number then the license system will complain and the instance of Map Intelligence will not be usable. An example of a problem like this is if you try to run on a machine with 4 CPUs and you only have a 2 CPU license.

### SOLUTIONS

1. You can use a machine that has only the number of CPUs you have been licensed for or fewer.
2. Obtain a license that has more CPUs available from Pitney Bowes.

---

## MAP INTELLIGENCE BATCH GEOCODER

The only problem you should encounter is that the Batch Geocoder complains that it is not licensed. If you have a time limited certificate then it may have expired.

### SOLUTION

The only way to rectify this is to obtain a valid license certificate from Pitney Bowes.

---

## MAP INTELLIGENCE EXCEL CLIENT

The Map Intelligence Excel Client is licensed on the basis of a certain number of named machines. The machines are named by their MAC address (the unique address given to their Ethernet adapter cards). It makes use of two files that are located in the certificates directory. They are called **excelClientNamedMachines.mc** and **excelClientNamedMachines.mh**. They must **NOT** be edited by hand nor removed, as either of these activities will cause all Map Intelligence Excel client instances contacting this server to fail.

### EXCEED THE NUMBER OF NAMED MACHINES

---

You will get this problem if you exceed the number of named machines for which you have been licensed.

#### SOLUTIONS

1. Remove one or more named machines using the procedure as described in *Section 5.8.2 –Remove Excel Machine*.
2. If you find that you must keep all the named machines then you need to request a new license with more Excel clients from Pitney Bowes.

### MAP INTELLIGENCE EXCEL CLIENT NOT LICENSED

---

If the Map Intelligence Excel Client complains that it is not licensed but you are sure that you have a certificate and you are under the number of named machines that you are allowed then follow these steps:

1. You need to check the server logs to see whether or not the **excelClientNamedMachines.mc** and **excelClientNamedMachines.mh** are mutilated. If they are then the only solution is to obtain a new license certificate for the Map Intelligence Excel Client from Pitney Bowes.
2. If this is not the case then check that the certificate files called **lc.4.1.3.X.dat** and **lc.4.1.3.X.dat.cri** (where X is the serial number of your certificate) are still located in the **certificates** directory.
3. If they are not, then re-install them. Otherwise you will need to contact Pitney Bowes support.
4. If, when you re-install the certificate, the Map Intelligence Excel Client still does not work then you will need to contact Pitney Bowes support.

## ACTIVATING A GEOCODER

To activate a Geocoder installed during the Map Intelligence installation

1. Go to the **Map Intelligence Tools** page

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

1. Click the **Settings** button on the Map Intelligence Tools page. A login page will appear, enter the **Administrator username** and **Administrator password** entered in the Administrator credentials dialog during installation (see [Step 30](#) on page 14). These credentials can be changed in the mapsettings.properties file.



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

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



The Geocoder drop-down list will initially display the first MI Geocoder Provider ID in the list, this however does not mean this Geocoder has been activated, you are still required to select the Geocoder and save.

3. Click the **Save Changes** button.



- To add a Geocoder or additional Geocoders after installation refer to the [Geocoder Installation Guide](#) (see [Appendix D – Map Intelligence Manuals and Guides](#) on page 34).

## USE OF APACHE HTTP SERVER AS A FRONT-END TO TOMCAT

If Apache is to be used as a front-end to Tomcat using the "mod\_jk" with Tomcat exposing an AJP interface (for instance), the following setting, if it exists in the Apache httpd.conf (or equivalent configuration file), must be commented out as shown:

```
#AddDefaultCharset UTF-8
```

Or whatever this may be set to in the configuration file. The reason is that Apache must not interpret the text, but pass it straight on to Tomcat unmodified. If this setting is not present in the configuration file then all is good because the default is for there to be no default character set.

## UNINSTALLING MAP INTELLIGENCE

To uninstall Map Intelligence,

**For Windows;** by going to the **Add/Remove Programs** option in your computer's Control Panel. The Map Intelligence installer will then guide you through the uninstall process.

**For Linux;** by running the uninstaller located in '\$Mi\_HOME/Uninstaller' that was created during the install process as follows:

```
java -jar  
uninstaller.jar
```

The Map Intelligence uninstaller will then guide you through the uninstall process.

### APPENDIX A - CONFIGURING SPECTRUM PROPERTIES

Map Intelligence requires some information about how to access Spectrum and its maps. This information is set in the `\tomcat\webapps\mapIntelligence\WEB-INF\properties` directory. The installer should properly initialize these properties. However, you may want to change the **map\_dir** and **defaultMap** parameters. You would also need to change the URL parameter if you changed the name of your Spectrum server or the port it used.

There are four properties that can be modified, these are stored in `implementation.spectrum.properties`

```
serverUrl=http://spectrum.com:8080/
```

```
userName=userFooBar
```

```
password=XXXXXXXXXXXXXXXX
```

```
defaultMap=/Samples/NamedMaps/WorldMap
```

## APPENDIX B – LIBRARY REQUIREMENTS FOR MAPMARKER

To support MapMarker, Map Intelligence requires certain libraries to be copied from a MapMarker installation. The following table details the JAR files that must be available under the MapMarker-X.Y.Z directory, where X.Y.Z is the SDK version of the MapMarker installation.

SDK 2.0.0	lib\client\mmjclient.jar lib\common\mmjcommon.jar
SDK 3.0.0	lib\client\mmjclient.jar
SDK 4.0.0	lib\client\mmjclient.jar

## APPENDIX C– PORTS USED BY MAP INTELLIGENCE SP

Assuming a base port of 9090 (the default) is used in the installation of Map Intelligence SP, the following ports are used.

Port Offset	Actual Default Port	Description
-85	9005	Server Shutdown Port
-81	9009	Tomcat AJP Port
0	9090	Main Server Port
353	9443	Server Redirect Port

## APPENDIX D – 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.