

Tools Installation

2.1 Localhost Server (WAMP Server) Installation

To set up a local server, download and install WAMPP from the official website. WAMP Server is recommended due to its ability to handle multiple PHP versions.

IMIS requires PHP version 8 or higher, as this version is essential for compatibility. Any version changes will require modifications to the deployment process and source code.

Once WAMPP is installed, launch the Apache server, and check the PHP version by navigating to <http://localhost/dashboard/phpinfo.php>. Ensure the PHP version is at least 8; if not, update WAMP Server or manually configure PHP to use version 8 executable if available. Additionally, ensure that the following extensions are installed:

- ext-zip
- pdo_pgsql
- pgsql

2.2 Composer Installation

Composer is essential for managing dependencies in Laravel applications. Download and install Composer (V 2.2.7) globally from the <https://getcomposer.org/>, enabling system-wide access.

To confirm successful installation, open the command prompt and run:

```
Composer -v
```

This command verifies that Composer is installed correctly and ready for managing Laravel dependencies.

2.3 Database Installation

IMIS is designed and developed with PostgreSQL (V 14) database. For GIS data storage and processing, the PostGIS extension (V3) is used.

2.3.1 PostgreSQL Download and Installation

Download PostgreSQL (V14) from the official website

<https://www.postgresql.org/download/>

During installation, use default port 5432, or adjust it if needed to avoid conflicts.

Be sure to select essential tools like pgAdmin, which provides an intuitive interface for database management, query execution, and PostgreSQL configuration—making setup and ongoing management easier.

2.4 PostGIS Extension

PostGIS is required within PostgreSQL to enable GIS (Geographic Information System) data management for IMIS.

2.4.1 Enable PostGIS Extension

To install PostGIS,

Locate Your PostgreSQL Installation:

- Open File Explorer.
- Navigate to C:\Program Files\PostgreSQL.
- Identify the version of PostgreSQL you have installed (e.g., C:\Program Files\PostgreSQL\14).

Open Stack Builder:

- Inside the PostgreSQL installation folder, go to the bin subdirectory (C:\Program Files\PostgreSQL\14\bin).
- Run the StackBuilder.exe application.
- In Stack Builder, select your PostgreSQL version, then locate "Spatial Extensions" and choose PostGIS.

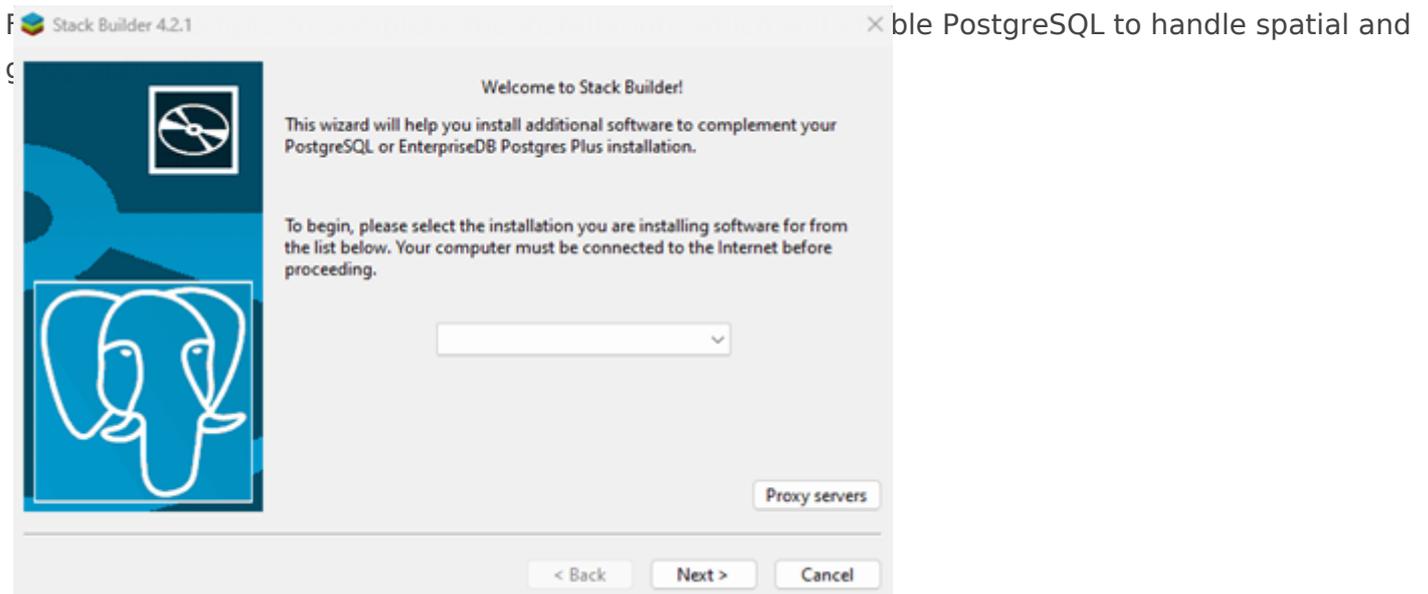


Figure 1 Stack Builder

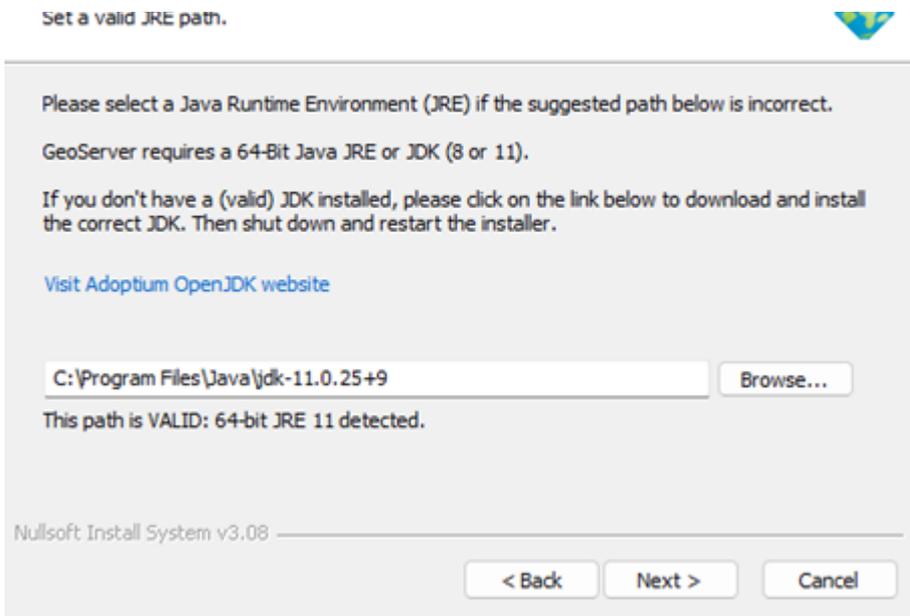


Figure 3 Installation of geo server(Browse the path to JDK)

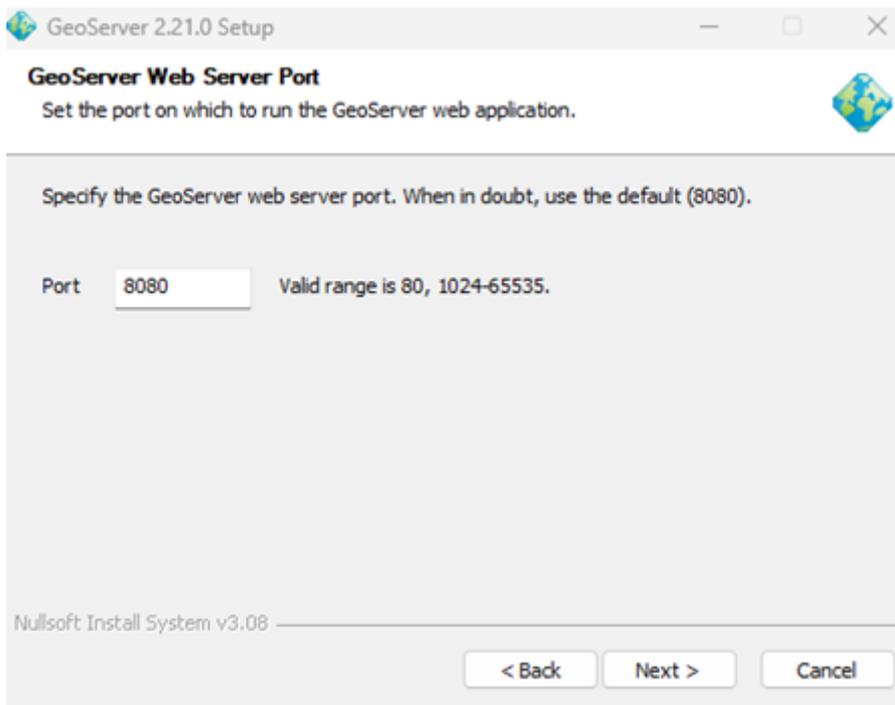


Figure 4 Add port 8080

2.5.2 Install Plugins for Geo Server

To enhance GeoServer functionality, certain plugins are essential.

a) CSS Plugin

Download the CSS Plugin using the following link:

<https://sourceforge.net/projects/geoserver/files/GeoServer/2.21.0/extensions/geoserver-2.21.0-css-plugin.zip/download>

b) Query Plugin

Download the Query Plugin using following link

<https://sourceforge.net/projects/geoserver/files/GeoServer/2.21.0/extensions/geoserver-2.21.0-querylayer-plugin.zip/download>

c) Printing Plugin

Download the Printing Plugin using following link

<https://sourceforge.net/projects/geoserver/files/GeoServer/2.21.0/extensions/geoserver-2.21.0-printing-plugin.zip/download>

d) Copying the Plugins

Once downloaded, unzip the files and copy all the files with jar extension and place it in following path:

C:\Program Files\GeoServer\webapps\geoserver\WEB-INF\lib

Once successfully added the plugins restart the GeoServer.

Revision #1

Created 3 March 2025 03:45:42 by Bookstack Editor

Updated 3 March 2025 03:49:14 by Bookstack Editor