

Running it all on Tomcat : Geonetwork & Geoserver

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Introduction

This article is written with the intention of it acting as a way to reproduce the results I achieved in getting Geonetwork and Geoserver running on my PC (A Windows device) using their web archive (*WAR*) files on a tomcat server. I will provide a brief on the steps involved and the versions of the involved software, and the hardware I have used to get it all up and running.

Hardware

The hardware specifications of my PC:

- AMD Ryzen 7 5800H with Radeon Graphics 3.20 GHz
- A dedicated RTX 3060 GPU
- 16 GB RAM
- 1 TB SSD (with roughly 260 GB Free space)
- Windows 11 v23H2

Versions of softwares used

- Java 8
- Tomcat 9.0.89 (Supports running GeoNetwork 4.2.6)
- GeoNetwork 4.2.6 (Stable version)
- Geoserver 2.22.5 (Supports Java 8 SDK)
- Elasticsearch 7.17.15 (Supported by GeoNetwork 4.2.6)

The above versions were chosen after consulting the [documentation](#) of GeoNetwork.

Steps

Downloading the files and their placements

1. Download [Java 8](#) and install it. Make sure that `JAVA_HOME` has been added to the Environment as a variable pointing to the installed JDK.
2. Download the [zip file](#) for Tomcat 9.0.89. Extract it to some location in your PC.
3. Download the [GeoNetwork.war](#) file for version 4.2.6. Add this file to the `webapps` folder in the extracted Apache folder.
4. Download the ElasticSearch [zip file](#). Extract it somewhere in your PC, preferably somewhere near your previously extracted Apache folder to make navigation easier.
5. Download GeoServer 2.22.5 [WAR file](#). It will be a zip file, extract and add the WAR file to webapps folder in the Apache directory.

Running the server

1. Open a CMD or Terminal window in the `bin` directory of Apache directory.
2. Run the command `startup.bat`
3. Open another CMD or Terminal window in the `bin` directory of the ElasticSearch directory.
4. Run the command `elasticsearch.bat`

Troubleshooting

- If after doing the above steps, nothing happens, please ensure that the versions are the same as that which I have used.
- If the search bar does not work in GeoNetwork, Edit the `elasticsearch.yml` file the config directory of ElasticSearch, disable the security. (Usually the first uncommented line, make it false instead of true).
- If there are too many errors, just use WSL or spin up an Ubuntu virtual machine in Oracle VirtualBox.