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# GLEIF PARSER and Visualizer

Deployment Guide

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**Revision History****AUTHORS**

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## Contents

Introduction .....	3
Software pre-requirements .....	3
Framework and software Installations .....	3
JAVA and JDK Installation:.....	3
Spring boot Installation:.....	6
Working in Spring Boot: .....	7
SAP-HANA Database .....	7
Thymeleaf front-end template engine: .....	8

## Introduction

This document describes the Deployment procedure, system implementation pre-requirements and Installation steps for the GLEIF Parser and Visualizer software. The main goal of the document is to describe the procedure related with respect to the application deployments for the related business stake-holders. The audience for this document is the development team and Technical support team who are responsible to implement the application. This also helps as a quick guide for the user to go through the pre-requisites for the application.

## Software pre-requirements

The system should meet the following hardware and software requirements for the successful project deployments.

ID	Components	Description
1	Hardware Components	Operating System, Windows 7/8/10/LINUX, Network Bandwidth
2	Memory Requirements	RAM: 2GB
3	System Requirements	SAP-HANA Database server, JDK8 and above
4	Language and Frameworks	Language: JAVA JDK Version: 8 and above / Spring 5.0, Spring Boot version: 2.1+, JPA (Java Persistent API), Gradle 5+ (Build Management), Web socket Programming
5	Others dependency	Parallel processing, Optimization techniques using multi-threading

## Framework and software Installations

JAVA and JDK Installation:

**Java Standard Edition: JDK 8 or higher**

The Java Spring Boot Project can be created in the workspace by using Java to represent objects, related methods internally in order to compile and execute Java classes.

**Java Installation:**

1. Install Java Standard Edition Development Kit from official java website (<https://www.oracle.com/technetwork/java/javase/downloads/index.html>).



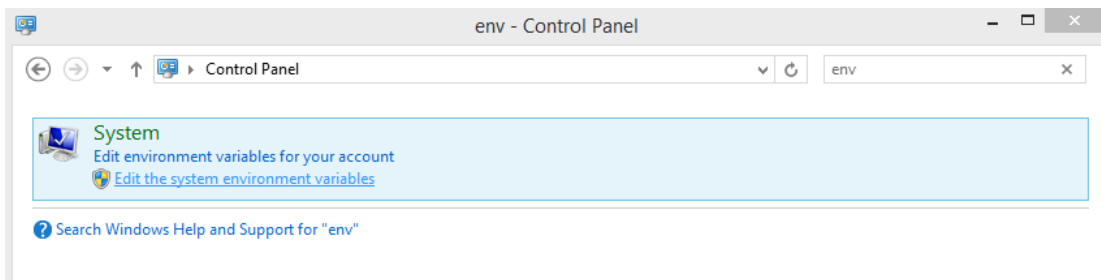
2. The JDK will be installed once all defaults are accepted at c:\Program Files\Java\jdk 8 or a similar directory in C drive based on latest version selected.

### Set Environment Variables:

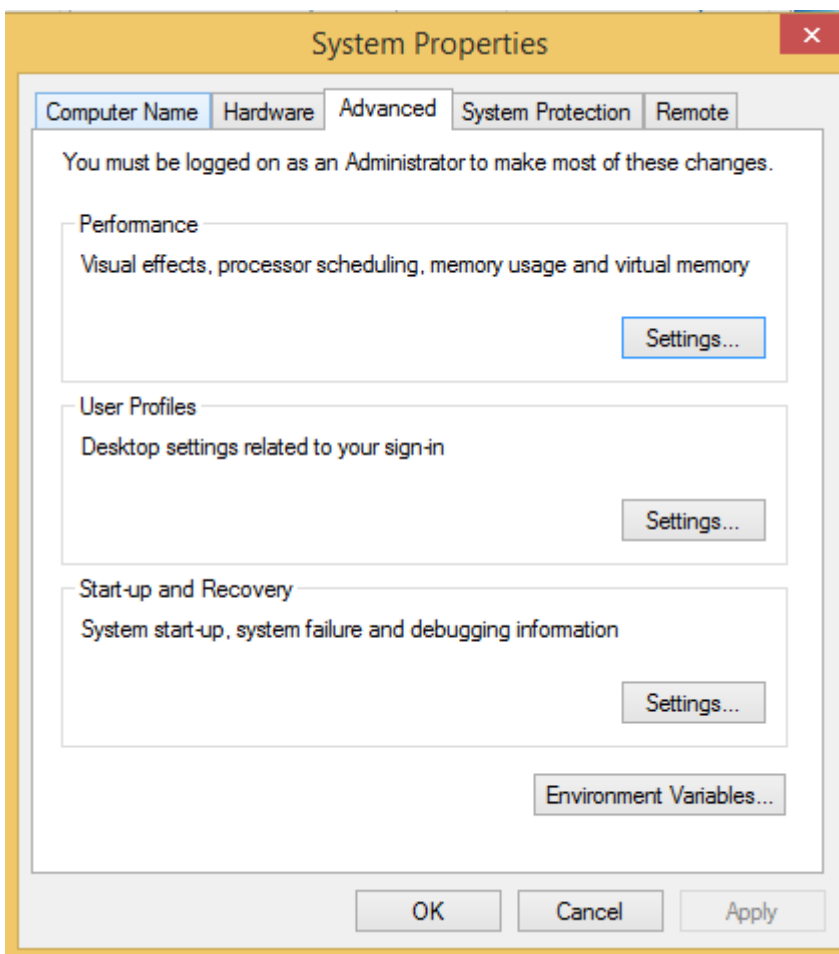
The Environment variables need to be set to avoid providing complete java command path while compiling or executing the .java files.

The Below Steps are to be followed to set the environment variables:

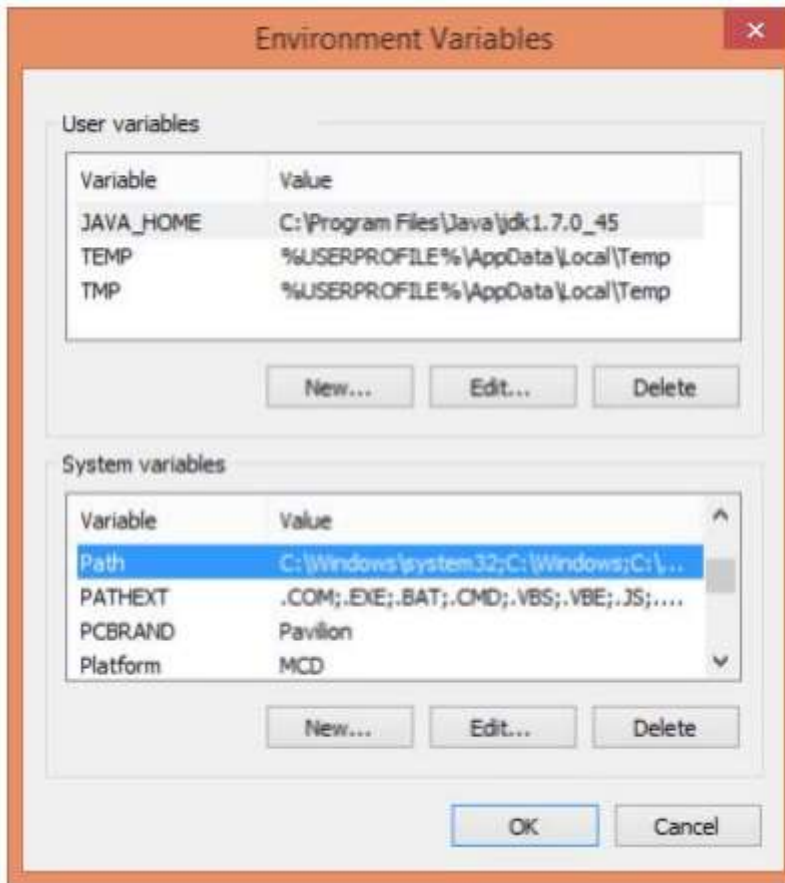
1. Go to Control Panel and search for “Env” in the search box as shown in the screenshot



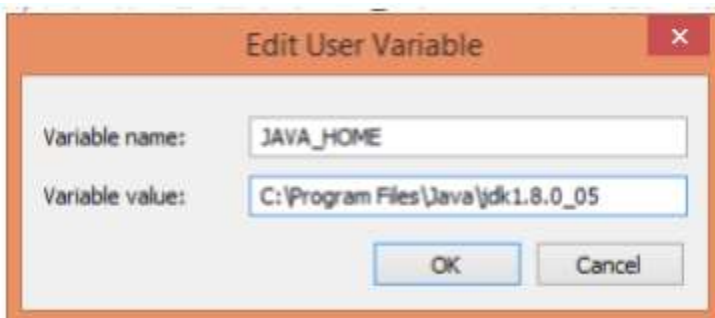
2. Select the “Edit the system variables” and then select “Environment Variables” from the Dialog box.



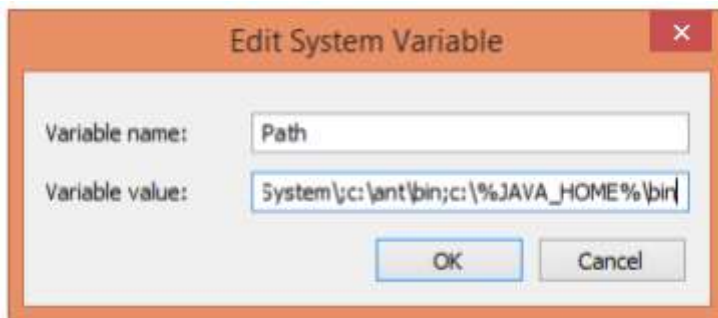
3. Now, select the JAVA\_HOME in the “User variables” list and use the version of Java based on the installer downloaded



4. Describe the variable value based on the installation location and click “OK”.



5. Now, click on the path in the list “System variables”, by Clicking on the “Edit” and go to the end of the “Variable Value” and add a semicolon following paths to the folders “bin” for the Ant and Java:  
C:\%JAVA\_HOME%\bin

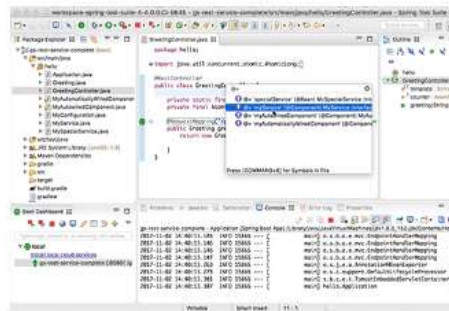


**NOTE:** We can verify the Installation of Java version by entering the below command “java -version” in the command prompt.

The Output should be correct versions of JDK, else modify the variable setting.

## Spring boot Installation:

1. Install the current version of Java Spring Boot from official website (<https://spring.io/tools>).



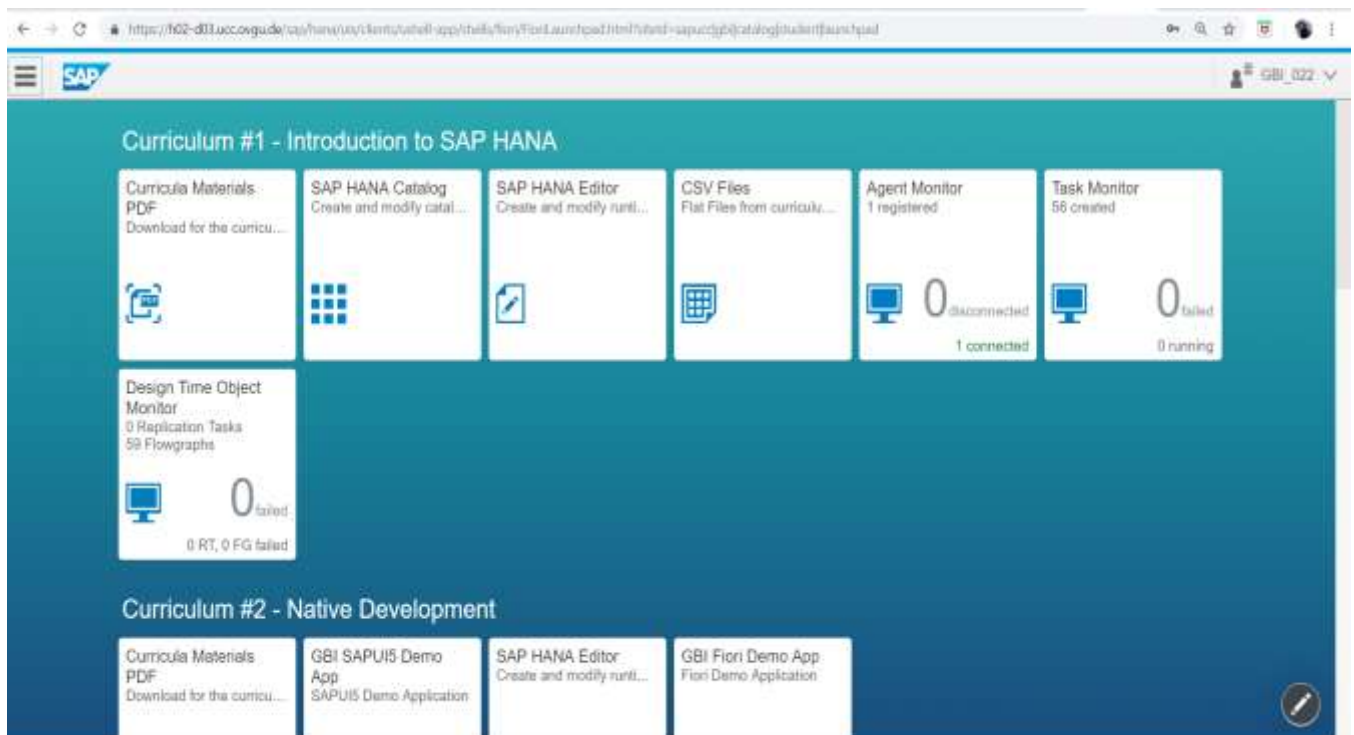
2. Extract the downloaded zip file into one of the directories to create a Spring Boot project.
3. Build management tool - Gradle: <https://start.spring.io/>
4. Framework used - Hibernate

## Working in Spring Boot:

1. Open the Spring Boot Eclipse application downloaded. Now, click on File Menu and import the existing Gradle project to select the GLEIF Parsing Application file.
2. This Application opens up the code to perform XML Parsing into HANA Database.
3. The code can be run by doing a right click on Project Name and Run as Spring Boot Application. This starts the GLEIF Parser and Visualizer application server on local system running it.
4. Now, go to the <http://localhost:8080/> to start XML Parsing procedure.
5. Once the application is open, upload the required file into the GLEIF application and also, can view the search results through the finder tab.

## SAP-HANA Database

1. Log In to SAP\_HANA Dashboard using user credentials
2. Go to > SAP HANA Catalog for table creation





## Thymeleaf front-end template engine:

1. Thymeleaf library used to create web application.
2. Following dependency is added in the build.gradle file:

```
compile group: 'org.springframework.boot', name: 'spring-boot-starter-thymeleaf'
```

