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GLEIF PARSEr and Visualizer

User Manual

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Version 1.0

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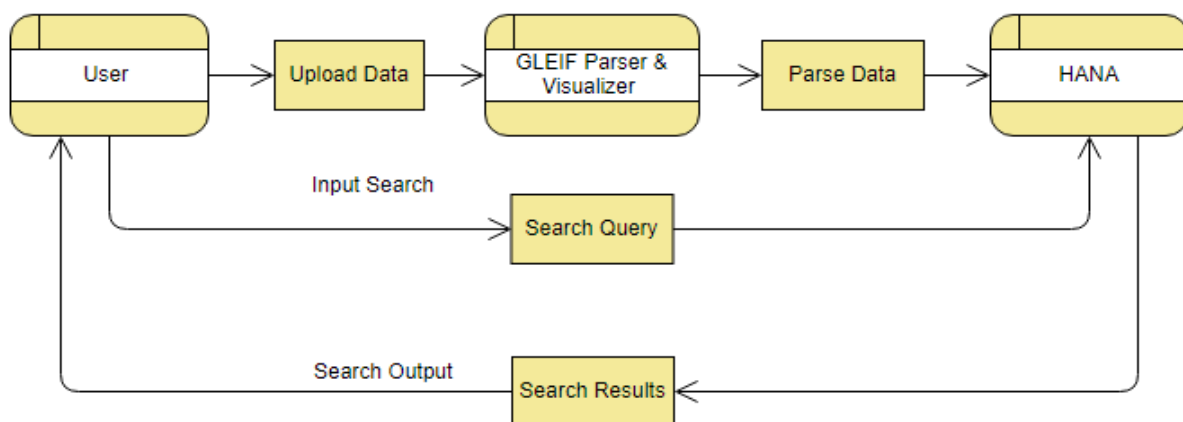
1. Purpose

This Document provides necessary information to effectively use the GLEIF Parser and Visualizer software Application for XML file parsing feature. An understanding about the GLEIF system components and the functionalities implemented in the application are explained briefly. The GLEIF Application is mainly intended to parse GLEIF golden copy files in XML format and store the parsed data into HANA database and also, retrieve the parsed data for data visualization purpose.

1.1 Features of the Application

The GLEIF Parser and Visualizer will load the GLEIF level 1 and level 2 data files based on end user requirements. The user Interface of the Application is provided with upload button through which GLEIF data files are uploaded into the system. The Application will then parse the XML file uploaded using JAVA Spring Boot and store into SAP HANA database. The Parsed result can be viewed in a structured format in the application through the Search tab, where the data can be filtered based on Legal Name, Country name, Registration Status and Active LEI.

2. Business Context Diagram



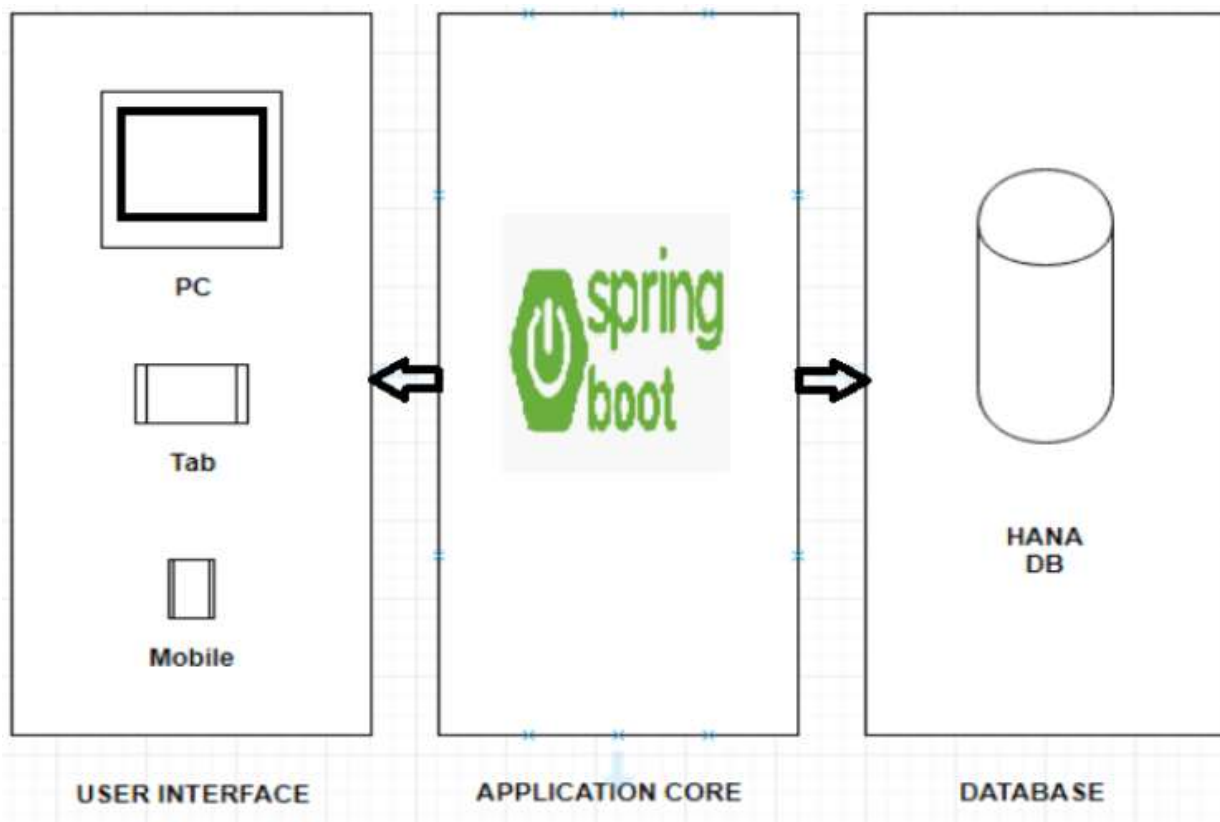
2.1 Process flow of GLEIF Parser and Visualizer:

Step 1: User uploads the Legal entity identifier data into the Gleif Application.

Step 2: The Application will parse the unstructured XML document into the HANA database, where all the data is stored.

Step 3: The user can then access the search results using the Finder page based on the search criteria provide by GLEIF Parser and Visualizer application.

3. Software Architecture



3.1 Application Architecture:

1. Front end design model of the GLEIF Parser and Visualizer provides the user with Graphical User Interface (GUI), where the GLEIF files are uploaded in home page and Search Filters can be applied according to user needs in the Search Tab.

2. Middleware handles the parsing of the uploaded GLEIF data files and converts the unstructured XML format into structured format, suitable to be stored in database.

3. Backend storage, which is HANA database used to store the parsed data and also, access the GLEIF data on user request based on the suitable search criteria.

4. System Requirements

It is recommended to ensure that computer has below requirements before running the GLEIF application.

ID	Components	Description
1	Hardware Dependency	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 Version: 8, Spring Boot version: 2.1+, JPA (Java Persistent API), Gradle 5+ (Build Management), Web socket Programming
5	Others dependency	Parallel processing, Optimizing

5. Application Setup

1. Install Java Spring Boot in the local system and import as a Gradle project.

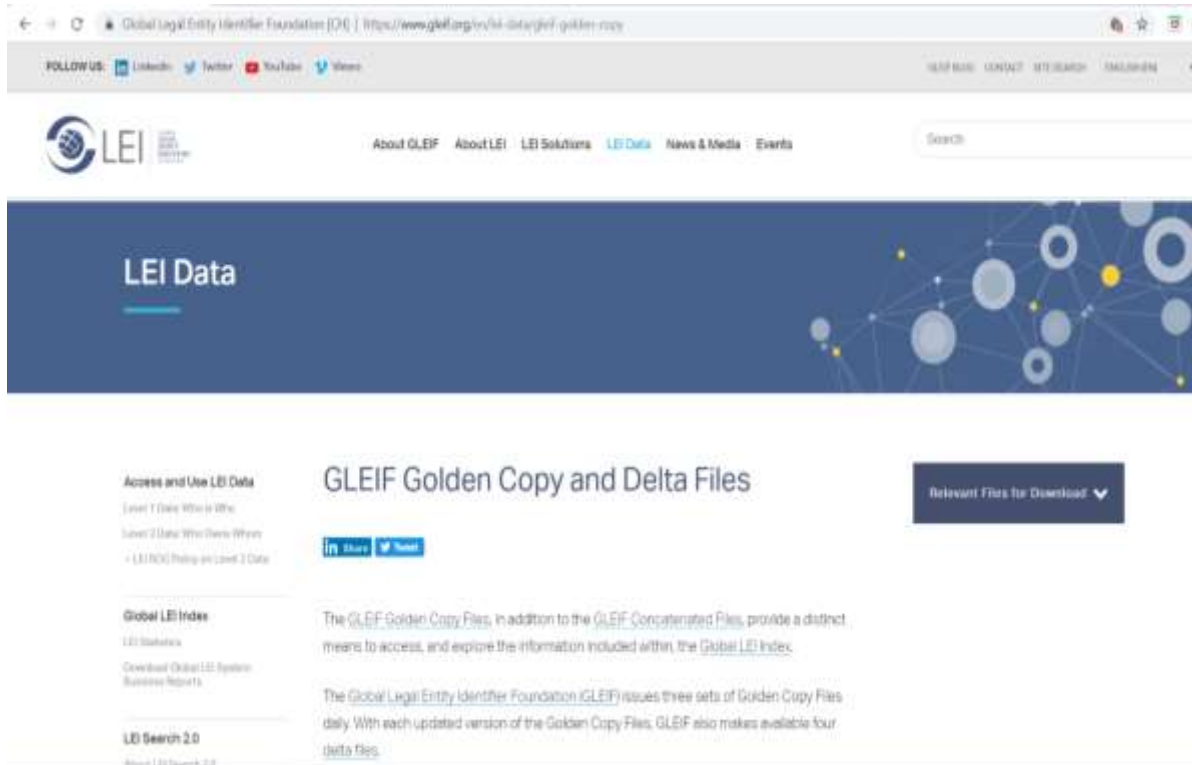
2. Run the application as Spring Boot and check if the application server has started.

3. Go to the local host(<http://localhost:8080/>) and run the application URL.

4. Now, the application opens up to the start page, where the user can upload the GLEIF file or search for Legal entity identifier results.

6. Working with Application

1. To begin the GLEIF file upload into the start page, user should access the GLEIF website for level1 and level 2 data files through the URL(<https://www.gleif.org/en/lei-data/access-and-use-lei-data/>).



2. GLEIF golden copies data files of level 1 and level 2 can be accessed through the GLEIF website.

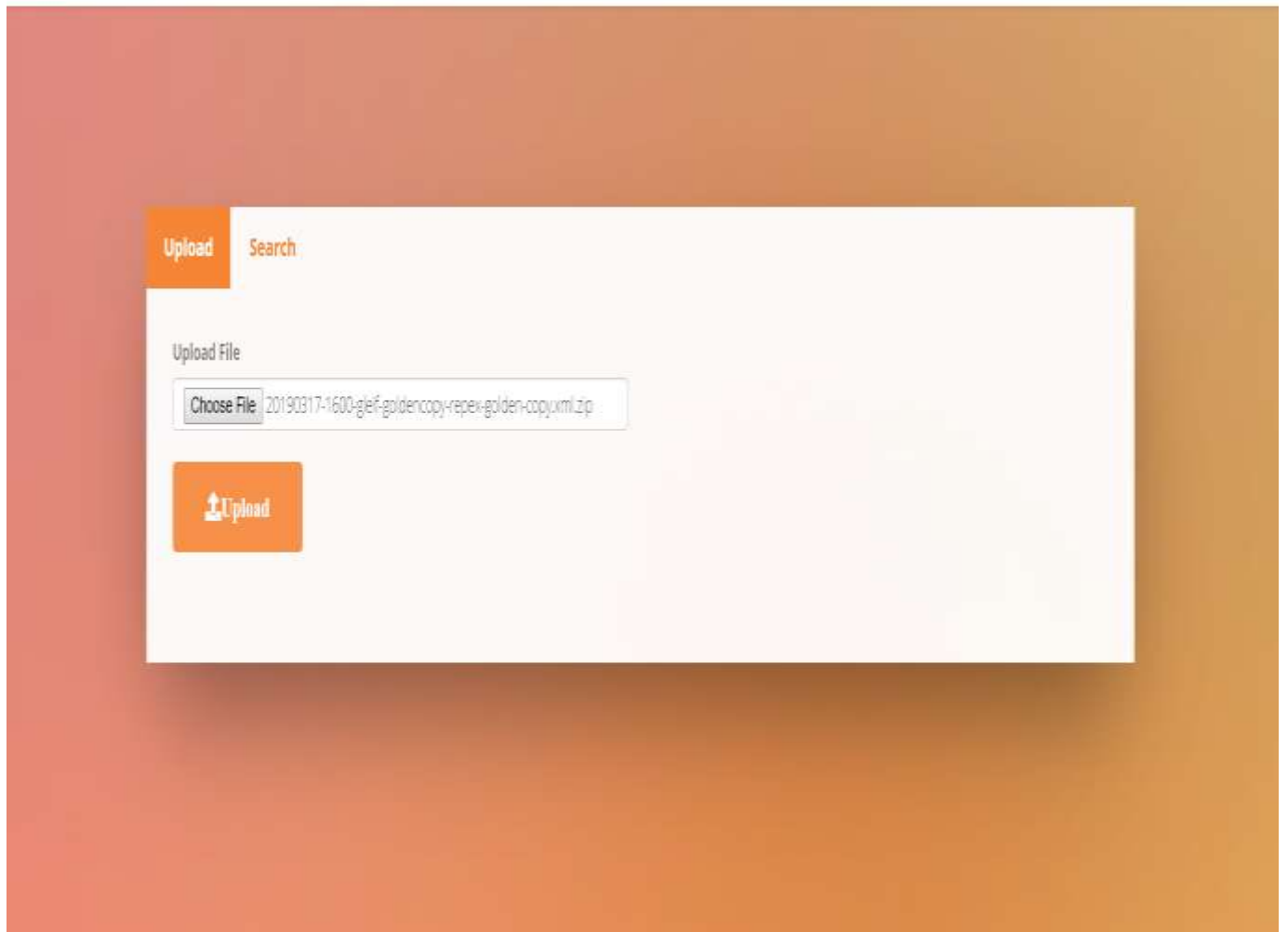
The screenshot shows the GLEIF website with the 'LEI Data' menu open. The 'LEI Search 2.0' option is highlighted with a red circle. The main content area is titled 'Access and Use LEI Data' and includes a description of the LEI system and a link to the LEI Search 2.0 tool.

3. Legal Entity Identifier Data files are available in multiple formats such as XML, JSON and CSV.


The screenshot shows the GLEIF website with the 'File History' section. It displays a table with columns for 'Content Date/Time', 'LEI-CDF v2.1', 'RR-CDF v1.1', and 'Reporting Exceptions v1.1'. The table lists various data files and their corresponding record counts.

Content Date/Time	LEI-CDF v2.1	RR-CDF v1.1	Reporting Exceptions v1.1
2019-04-20 16:00	1,407,770 Records	188,120 Records	2,457,478 Records
2019-04-20 08:00	1,407,767 Records	188,126 Records	2,457,469 Records
2019-04-20 00:00	1,407,801 Records	188,087 Records	2,457,185 Records
2019-04-19 16:00	1,407,590 Records	188,017 Records	2,457,157 Records
2019-04-19 08:00	1,407,525 Records	188,049 Records	2,457,069 Records
2019-04-19 00:00	1,407,163 Records	187,842 Records	2,456,425 Records
2019-04-18 16:00	1,406,858 Records	187,830 Records	2,456,009 Records
2019-04-18 08:00	1,406,874 Records	188,090 Records	2,455,782 Records
2019-04-18 00:00	1,406,304 Records	187,918 Records	2,454,378 Records
2019-04-17 16:00	1,406,088 Records	187,886 Records	2,454,347 Records

4. The downloaded XML files of level 1 or level 2 data are uploaded into start page of the application.



5. The uploaded data of files can be visualized in the Search tab based on multiple search filters.


LegalEntityFinder

Upload

Search

Legal Name:

Accenture

Country:

Enter country name or Country code

Q Search

LEI	Legal Name	Country	Registration Status	Entity Legal Form
549300PWESMGWJUTXU86	Accenture UK PLC	United Kingdom of Great Britain and Northern Ireland	LAPSED	PUBLIC LIMITED COMPANY
5299004F4VBT07RS4F20	Accenture GmbH	Austria	ISSUED	Gemeinnützige Gesellschaft mit beschränkter Haftung
529900ERANDS0X3PG071	Accenture Services AG	Switzerland	ISSUED	
549300B00P8RP6802683	Accenture Holding GmbH	Switzerland	LAPSED	GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG
549300QZ2GAA2229G619	Accenture Japan Ltd	Japan	ISSUED	KABUSHIKI KAISHA

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