**System Documentation for QESS Project (No. T01/QESS/2013)**

Z39.50 CopyCAT Program Technical Details

Dated: 3 Nov 2016

**Revision Table:**

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| --- | --- | --- | --- |
| **Date** | **Author** | **Content** | **Section** |
| 15 Sep 2016 | William NG | First version | - |
| 3 Nov 2016 | William NG | Minor Updates | II.2, III.1.i, & III.3 |

**General Remark:**

This document partly describes program details, the setup, and the configuration of CopyCAT (using Z39.50) program. The program queries other ILSs’ Z39.50 services online and fetches MARC records back for importing into an ILS. This program extends the program “ILL Locate Program for Aleph”, therefore, the basic tech details, the setup, and configurations of Z39.50 parts of this program are mostly the same as of “ILL Locate Program for Aleph”. Please refer to the document “ILL Locate Program for Aleph Tech Details” for details. This document only describes the setup and uses of the CopyCAT part.

1. **The Program Sources**
   1. The most updated version of the program sources can be found at <https://github.com/HKSFILS/Library-Record-Locate>.
2. **The Main Structure of the Programs**
   1. The program divides into two parts:
      1. Front-end interface (written in JSP)
      2. Back-end querying and MARC fetching modules (written in Java)
   2. (i) is written in JSP and works as an front-end interface . The files:

<https://github.com/HKSFILS/Library-Record-Locate/tree/master/webapps/ROOT/cat/>

* 1. (ii) are written in Java and work as a query agent and a MARCs fetching agent. The files are under the folder:

<https://github.com/HKSFILS/Library-Record-Locate/tree/master/src/hk/edu/csids/cat>

* 1. For the front-end interface, each file/folder is described as below:
     1. index.jsp: the main page of the interface, providing a box for uploading an Excel for invoking MARCs fetching.
     2. request.jsp: past requests log, including the source Excel uploaded.
     3. report.jsp: the report page, including summary report and MARC records obtained.
     4. miscconfig.jsp: for configuring the CopyCat Program
     5. help.jsp: A guide for using the CopyCat Program
     6. conf/: a folder storing CopyCat Program configurations files
     7. requests/: a folder storing requests for MARC fetching
     8. reports/: a folder storing reports of MARC records
  2. For the back-end querying and MARC fetching, mainly the following classes are involved:
     1. “CopyCat.java”: for invoking Z39.50 queries. Source codes:

<https://github.com/HKSFILS/Library-Record-Locate/blob/master/src/hk/edu/csids/cat/CopyCat.java>

* + 1. “MarcConversion.java”: for MARCs tags post-processing. Source codes :

<https://github.com/HKSFILS/Library-Record-Locate/blob/master/src/hk/edu/csids/cat/MarcConversion.java>

* + 1. “Marc.java”: for converting MARCs to/from raw from/to tag format, with Chinese character sets handling. Source codes:

<https://github.com/HKSFILS/Library-Record-Locate/blob/master/src/hk/edu/csids/MARC.java>

* 1. The structure of (ii) is recorded in its Javadoc:

<https://github.com/HKSFILS/Library-Record-Locate/tree/master/doc>

1. **The Setup, Configuration and Use**
   1. Tomcat Server Setup:
      1. The JSPs, configuration files, and folders mentioned in section II.4 of this document are also to be copied to the Tomcat application folder (e.g. webapps/ROOT/cat).
      2. All compiled related classes of the CopyCat Program (ie. All classes and sub-classes under the package hk.edu.csids: <https://github.com/HKSFILS/Library-Record-Locate/tree/master/bin/hk>) are to be copied to the Tomcat application class folder (e.g weapps/ROOT/WEB-INF/classes)
      3. All related Java libraries (ie. All Jar files in <https://github.com/HKSFILS/Library-Record-Locate/tree/master/jar>) are to be copied to the Tomcat application Java library folder (e.g. webapps/ROOT/WEB-INF/lib)
   2. Z395.50 Client Library Setup:

Refer to the “ILL Locate Program for Aleph Tech Details”

* 1. Configuration and Use:

Refer to the help file:

“help.jsp” <https://github.com/HKSFILS/Library-Record-Locate/blob/master/webapps/ROOT/cat/help.jsp>