

# The Open Archives Initiative Sheetmusic Harvester and Service Provider

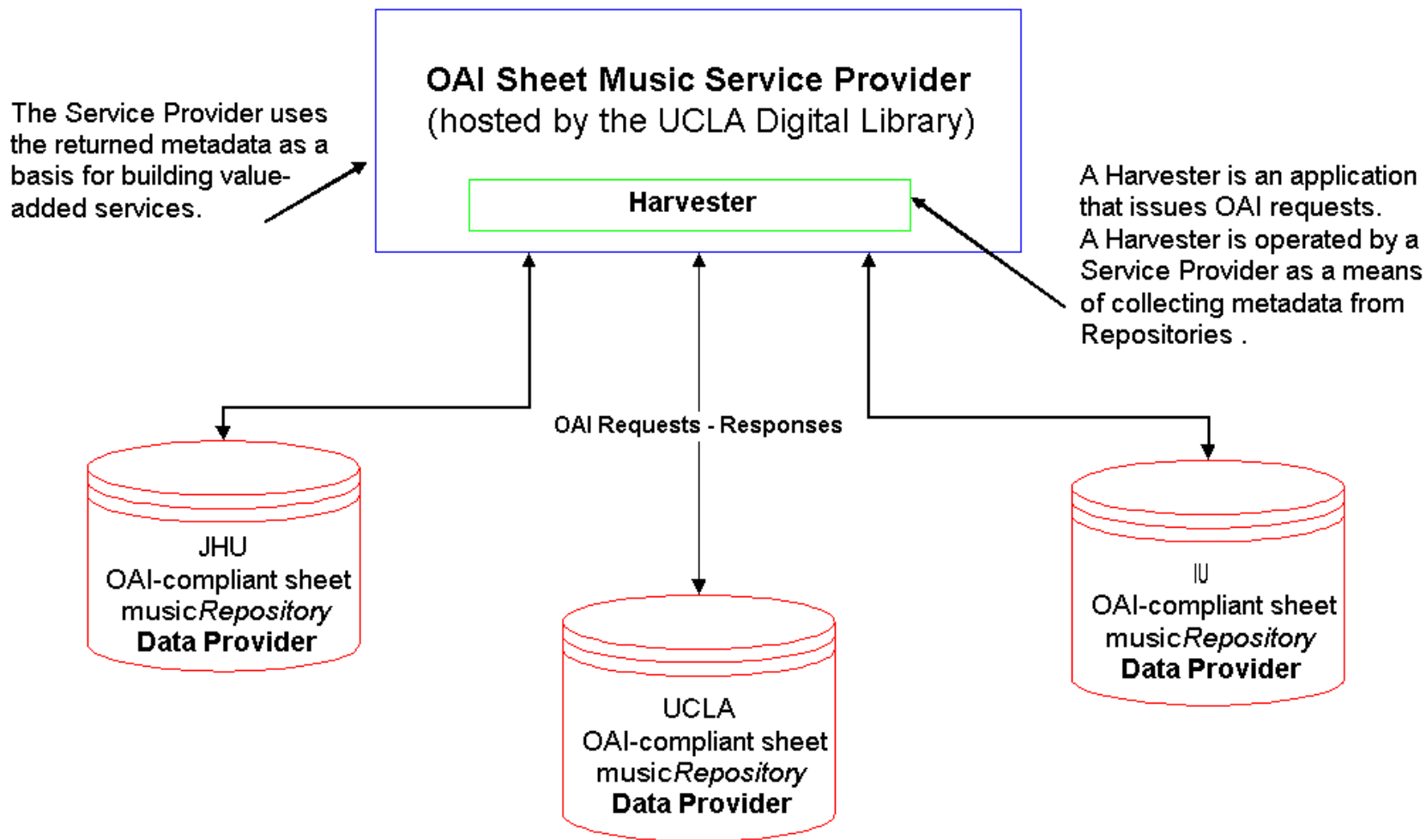
**UCLA Digital Library**  
<http://digital.library.ucla.edu>

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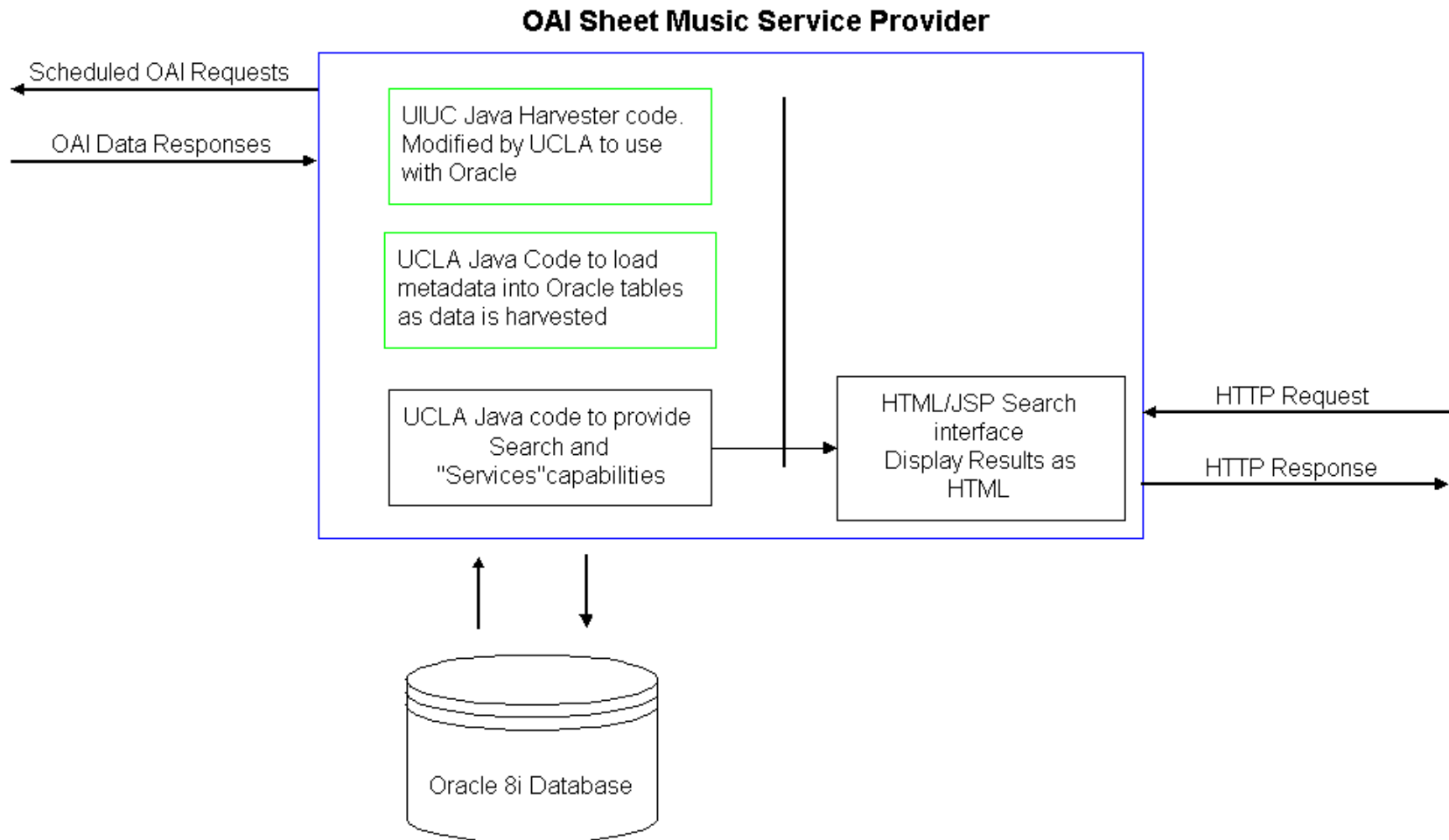
# UCLA Digital Library OAI Software Tools

- Java 2 Enterprise Edition (J2EE) (v1.4)
- Oracle 8i (9i Fall 2002–Winter 2003)
- Oracle Intermedia Tool Kit
- Apache Web Server
- JRun Application Server (v4.0)
- XML, XSLT
- Microsoft Win 2000



A Repository is managed by a Data Provider to expose metadata to Harvesters.

# High Level Design of OAI Sheet Music Service Provider



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## Harvester

The **OAIManager** keeps track of which data provider sites are being harvested and when. This information is maintained in the database.

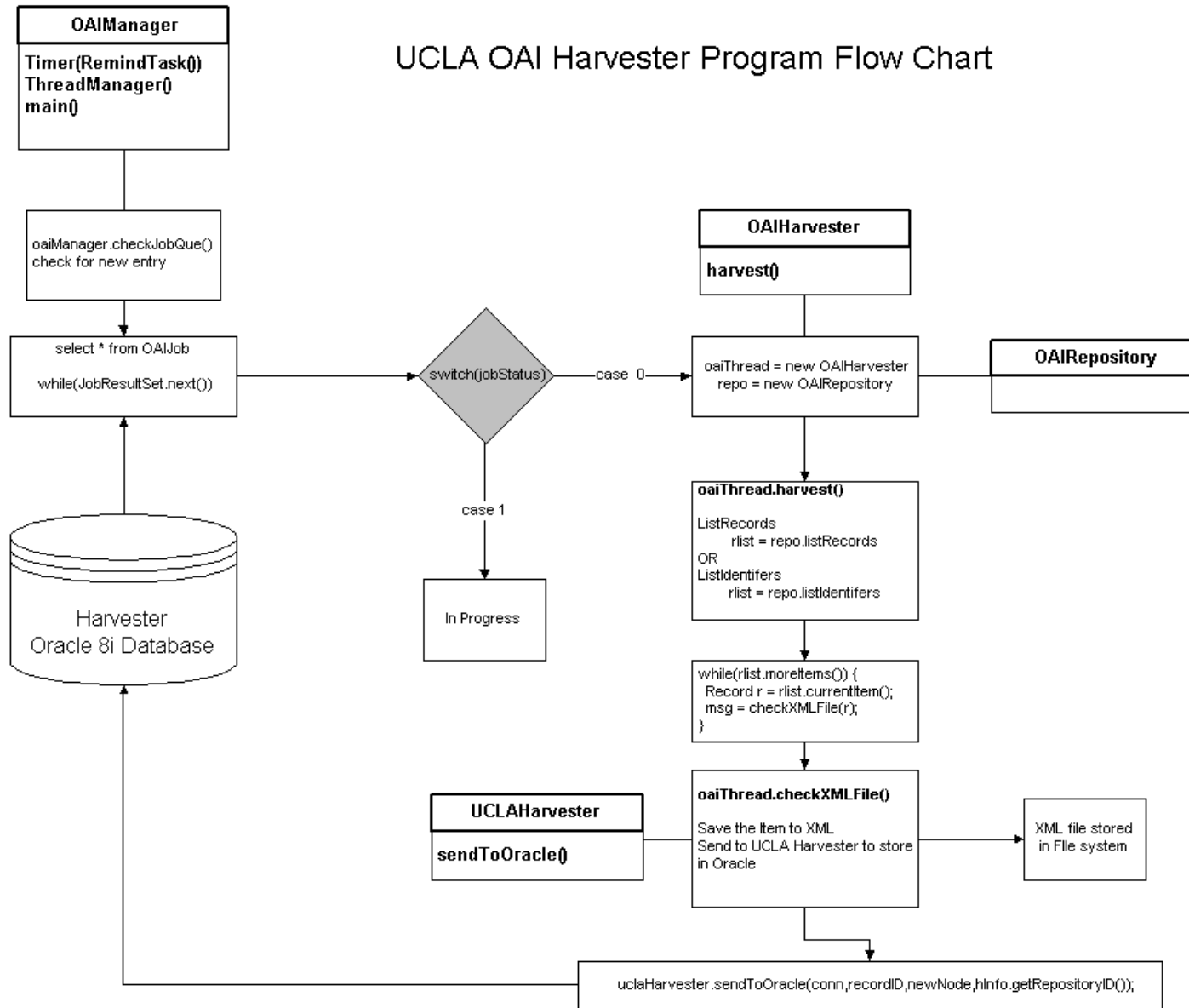
The **OAIHarvester** is a Java thread created by OAIManager that visits Data Provider sites, snagging metadata from their databases and putting into our database.

The **Web Interface (OAICONfig)** is a web-based java applet program. This interface allows you to manage the schedule which the OAIManager will follow when sending the OAIHarvester off on its journey to gather data.

The **UCLAHarvester** is a Java program to handle data mapping and loading the data into Oracle. It works with **OAIHarvester**

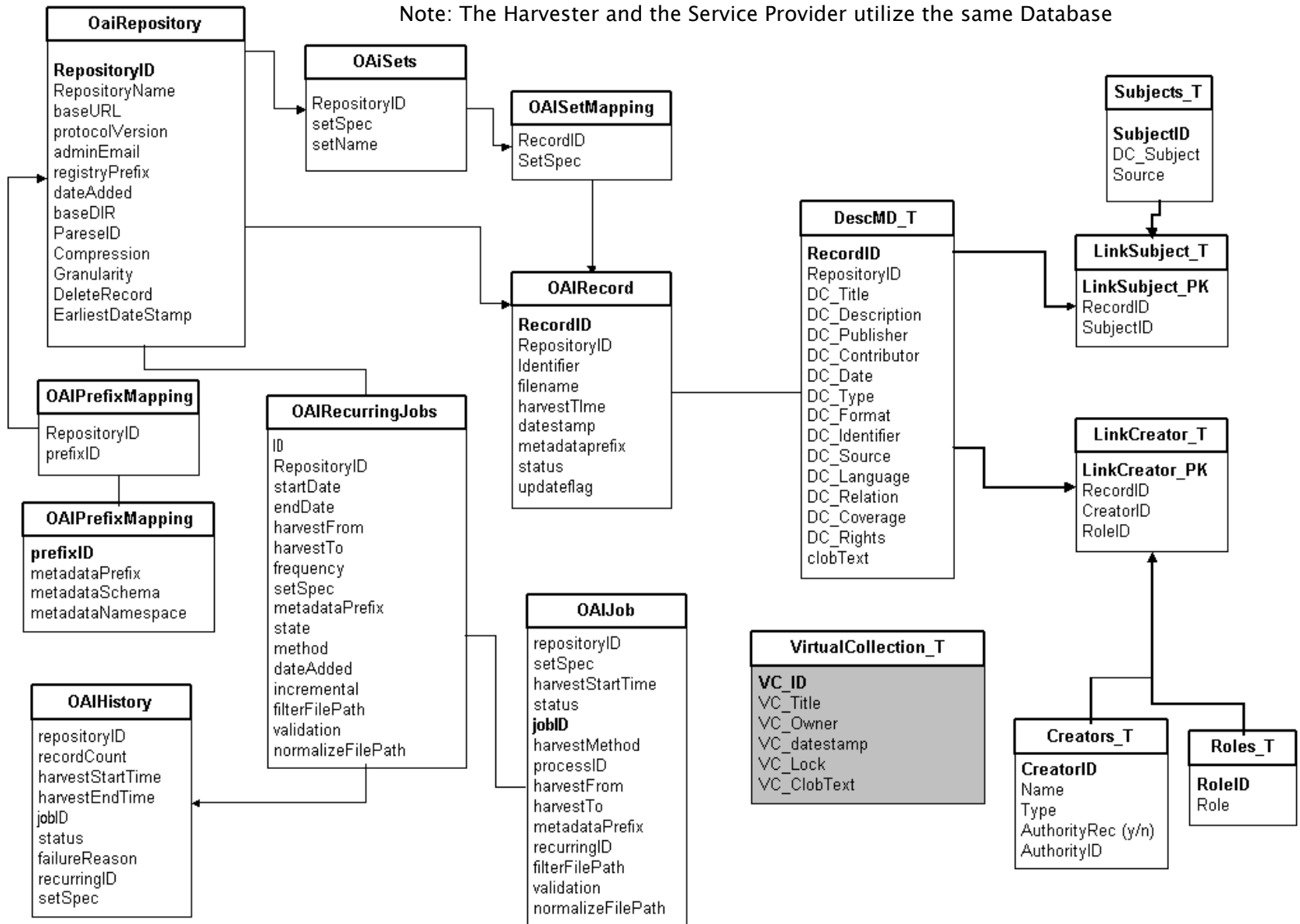
**Service Provider** – A collection of Java classes including, Servlets and JSP, for providing user interface and services. This is UCLA Code.

# UCLA OAI Harvester Program Flow Chart



# UCLA OAI Sheet Music Harvester Database Schema

Note: The Harvester and the Service Provider utilize the same Database



## Virtual Collections: “The Killer App”

Virtual Collections are persistent sessions that allow any user to save records under a name they choose.

- By default all VC’s are saved “unlocked” and can be expired at a decision interval based on the data stamp.
- Locked VC’s can be saved indefinitely
- Users can attach notes to any item in their VC. All this is saved as XML in a full text field. This DOES NOT modify the original record
- A search of VC note fields would allow for another level of metadata development and search.

```
<?xml version="1.0" encoding="UTF-8"?>
<VirtualCollection>
  <header>
    <identifier>VC001 </identifier>
    <timestamp>2002-08-12</timestamp>
    <title>The Selections for Class 123</title>
    <owner>Prof. Plum</owner>
    <description>The items in this Virtual Collection will be on the final</description>
    <lock>true</lock>
  </header>
  <records>
    <record>
      <recordID>29036</recordID>
      <note>This is a lovely tune</note>
    </record>
    <record>
      <recordID>3102</recordID>
      <note>Note the key</note>
    </record>
    <record>
      <recordID>67</recordID>
      <note>compare this with the results of a search on "cows"</note>
    </record>
  </records>
</VirtualCollection>
```