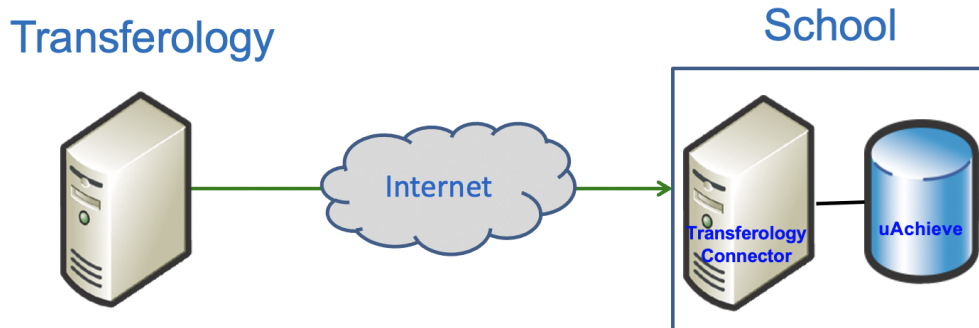


# Transferology Connector

The Transferology Connector provides degree audits and course equivalencies from uAchieve to Transferology. The Transferology Connector is a Java web application installed at your school.

The following diagram provides a high level view of the Transferology Connector and its relationship with Transferology.



**i** If you are unfamiliar with the Transferology Connector, please see [Getting Started With the Transferology Connector](#).

## ✓ Mandatory Requirements

The following requirements are mandatory to successfully install, configure, and operate the Transferology Connector:

- **Java SE 8** - If your institution is unfamiliar with java, please see [Free Java 8 Implementations](#).
- **TLSv1.2** - The Transferology web service which receives degree audits no longer supports TLSv1 or TLS v1.1. Java 8 and higher use TLSv1.2 by default.
- **Java Application Server** - CollegeSource recommends **Tomcat 8.5.x or 9.0.x**, which can be obtained from the following page: <http://omcat.apache.org/index.html>
- **Firewalls**
  - **School's External firewall must allow traffic to:**
    - Your production Transferology Connector from **www.transfer.org (18.207.24.42)**.
    - Your test/development Transferology Connector from **test.transfer.org (23.22.104.35)**.
    - *CollegeSource recommends restricting access to the Transferology Connector only after it is correctly installed and configured. Restricting access prior to this makes troubleshooting difficult.*
  - **Internal - TCP keepalive must be enabled between your Java Application Server and database when the JDBC connection traverses an internal firewall.**
- **OS access** - You need OS access to Java application server to perform functions such as copying and editing files
- **uachieve database tables** - minimum table definition version 4.4.
- **uachieve audit server** - When using degree audits, minimum version 4.2.2.
- **Database user and password** - Necessary for the Connector to access uachieve tables
- **JDBC Driver** - You need a JDBC Driver that is compatible with your specific database type. If you do not currently use a JDBC Driver, see one of the following pages:
  - Oracle - <http://www.oracle.com/technetwork/indexes/downloads/index.html>
  - SqlServer - [http://sourceforge.net/project/showfiles.php?group\\_id=33291](http://sourceforge.net/project/showfiles.php?group_id=33291)
  - DB2 - <http://publib.boulder.ibm.com/infocenter/db2luw/v8/index.jsp>
- **Specify the correct daverion in the cas4.properties:**
  - **daversion=uachieve**
- **uAchieve Degree Audits** - When using the degree audit functionality, define RequestHandler in uAchieve's **daemonContext.xml**.

## 5.0 Features

- Compatible with uachieve API 4.4.0, including the Long data type for the job\_queue\_xxx int\_seq\_no columns.
- Provides native uAchieve degree audit report types to Transferology (TXT, HTM and PDF).
- Provides web services to facilitate the next day equivalency refresh into Transferology.
- For uachieve degree audits, provides server name and directory location of the uachieve server which produced the degree audit.

For features provided in earlier versions, see [Connector Milestones](#).

## Additional Information

- The **Transferology Connector does NOT access a school's Student Information System**
- Transferology makes HTTP (or HTTPS when defined) connections to the Transferology Connector
- Transferology sends/requests data via POST
- Schools can use an SSL Certificate to secure the data exchange between Transferology and the Transferology Connector
- Schools can restrict access to Transferology Connector with their firewall by only allowing Transferology (18.207.24.42) traffic to reach the Transferology Connector

## Upgrade



### Upgrading to the 5.0.x Transferology Connector?

The uachieve database must have **JOB\_QUEUE** tables upgraded to uAchieve 4.4.

When upgrading to the 5.0.x version of the Connector, follow these steps:

1. Execute the Connector 5.0 sql database script for your particular database. The script adds the **last\_mod\_descendant\_utc** column to the **tca\_master** and **tca\_rule** tables.
  - a. Oracle - [connector-oracle-5\\_0.sql](#)
  - b. SQL Server - [connector-mssql-5\\_0.sql](#)
  - c. DB2 - [connector-db2-5\\_0.sql](#)
2. Execute the Connector 5.0 sql database trigger script for your particular database. The triggers maintain the **last\_mod\_descendant\_utc** columns of the **tca\_master** and **tca\_rule** tables.
  - a. Oracle - [connector-oracle-triggers-5\\_0.sql](#)
  - b. SQL Server - *coming soon*
  - c. DB2 - *coming soon*
3. Install the 5.0.x Connector version.
4. The configuration instructions for the **RequestHandler** defined in the **uAchieve daemonContext.xml** were revised due to the additional uachieve report types HTM and PDF.
5. Use the Transferology Lab's **Audit Setup** page to:
  - a. Change the **Audit request format** to: *Connector 5.x*
  - b. Change the **Audit Report type** to: *TXT, HTM or PDF*



### Transferology Connector 5.0.x, 4.4.x and 4.3.x Compatibility with uAchieve versions

- The above **Mandatory Requirements** section identifies the minimum **uAchieve audit server** and **uAchieve tables** which are compatible with the Transferology Connector versions 5.0.x, 4.4.x and 4.3.x.

## Install and Configure



### Install and Configure the Transferology Connector

When you are ready to install and configure the Transferology Connector, follow these steps:

1. [Database Access](#) by Transferology Connector into uAchieve tables.
2. [Install and Configure Transferology Connector](#)
3. If your school's uAchieve encoding specifies **default or reference only** tables in your equivalencies, keep in mind, **Transferology does NOT recognize all types of default or reference tables**. The following types of default or reference tables are recognized by Transferology:
  - Defaulting MSTREF Data - Reference Only
  - Defaulting TA Rules - Reference Only
  - Defaulting TA Rules - All Articulation Rules
  - Default TA Table With Additional Rules

Transferology doesn't recognize **Defaulting Unknown Institutions and Courses aka Super Default**.

Please review the following documentation for uAchieve default or reference tables encoding details: [Setting Up Default Tables](#)



#### NOTE:

You must have a Support Center account to view this page; [create one here](#).

## Troubleshooting

Several [troubleshooting](#) pages.