

Connector and uAchieve Audits



The Connector depends on a uAchieve Server to provide degree audits

Two database connections are required to successfully produce degree audits through the Connector via uAchieve:

1. uAchieve Server
2. Connector

Keep the following points in mind to minimize degree audit troubleshooting when setting up database access and installing the Connector:

- The Transferology Connector **must** interact with the **same JOB_QUEUE_xxx tables** as the uAchieve server.
- For Transferology degree audits, the Transferology Connector only needs access to the **JOB_QUEUE_xxx tables**. It doesn't need access to any other uAchieve tables.
- For Transferology degree audits, the uAchieve STU_ACADREC table must be accessible to the uAchieve Server, however no other STU_xxx tables are necessary.
- Specify **daversion=uachieve** in the Connector's **cas4.properties** file.
- A second uAchieve server specific to Transferology can be used for Transferology degree audits, see the [Isolating the Connector From Your School's Existing uAchieve JOB_QUEUE_xxx tables](#) section below.

uAchieve Server Minimum Database Access

This section is important when **the database user used by the uAchieve server is different than the schema owner of the uachieve tables**. If the database user used by the uAchieve server is the same as the database owner of the uAchieve tables, the points in this section aren't necessary.

When the database user used by the uAchieve server is different than the schema owner of the uachieve tables, the **database user** for the **uAchieve server** must have the following **minimum** access (synonyms and privileges).

JOB Tables

Private synonyms, as well as select, insert, update, and delete privileges on the **CURRENT_JOBS** and **JOB_QUEUE_xxx** tables.

Other Tables

Private synonyms and select privilege on the following uAchieve tables.

```
CHART_CATEGORIES
COM
CRS_CONVERT
DPROG
DPROG_REQ
GMASTER
MASTREF
MASTREF_ADDRESS
MASTREF_SEG
REPEAT
REQ_MAIN
REQ_TEXT
REQ_XY
STRING
STRING_CRSE
SUB_REQ
SUB_REQ_AR
SUB_REQ_TEXT
STU_ACADREC
TCA_MASTER
TCA_RULE
TCA_SOURCE
TCA_TARGET
```

Isolating the Connector From Your School's Existing uAchieve JOB_QUEUE_xxx tables

Some schools want to prevent the Connector from accessing the enrolled student's audit data contained in the JOB_QUEUE_XXX tables used by the school's existing uAchieve Server.

The two alternatives below assume this initial setup, **prior to performing the isolation steps**:

1. Db user/schema UACHIEVE owns all UACHIEVE tables.
2. The uAchieve server connects to the database as the UACHIEVE database user.
3. Db user/schema TFO_CONNECTOR has select, insert, update and delete privileges and private synonyms on/for the UACHIEVE schema JOB_QUEUE_XXX tables.
4. The Transferology Connector connects to the database as the TFO_CONNECTOR database user.

The following sections identify the important points for the two alternatives.

Isolation via 3 Database Users

This isolation requires three database users and is the most secure.

Database user specifics:

- Db user/schema UACHIEVE owns all UACHIEVE tables.
- Db user/schema TFO_UACH_SRVR will be used by the new uAchieve server.
- Db user/schema TFO_CONNECTOR will be used by the Connector.

It is accomplished with the following tasks:

- Create JOB_QUEUE_XXX, CURRENT_JOBS and STU_ACADREC tables, in the TFO_UACH_SRVR schema/user.
- From the UACHIEVE schema/owner grant select privilege on the tables, except *STU_ACADREC* listed in the **Other Tables** section to the TFO_UACH_SRVR schema/user.
- From the UACHIEVE schema/owner revoke select, insert, update and delete privileges on the JOB_QUEUE_XXX tables from the TFO_CONNECTOR schema/user.
- In the TFO_UACH_SRVR schema/user create private synonyms to the UACHIEVE schema/owner tables, except *STU_ACADREC* listed in **Other Tables** section.
- Install the uAchieve server into a different directory, edit the config files, creating the new uAchieve daemon.
- Specify the TFO_UACH_SRVR schema/user as the database user for the uAchieve server.
- In the TFO_UACH_SRVR schema/user grant select, insert, update, and delete privileges on the newly created JOB_QUEUE_XXX tables to the TFO_CONNECTOR schema/user.
- In the TFO_CONNECTOR schema/user create private synonyms to the TFO_UACH_SRVR schema/owner JOB_QUEUE_XXX tables.

Isolation via 2 Database Users

This isolation only requires two database users. It is slightly less secure than the above 3 Database User alternative.

Database user specifics:

- Db user/schema UACHIEVE owns all UACHIEVE tables.
- Db user/schema TFO_CONNECTOR will be used by the new uAchieve server and Connector.

It is accomplished with the following tasks:

- Create JOB_QUEUE_XXX, CURRENT_JOBS and STU_ACADREC tables, in the TFO_CONNECTOR schema/user.
- From the UACHIEVE schema/owner grant select privilege on the tables listed in the above **Other Tables** section to the TFO_CONNECTOR schema/user.
- In the TFO_CONNECTOR schema/user create private synonyms to the UACHIEVE schema/owner tables listed in **Other Tables** section.
- Install the uAchieve server into a different directory, edit the config files, creating the new uAchieve daemon.
- Specify the TFO_CONNECTOR schema/user as the database user for the uAchieve server.