



Setting up Authority Control

User Guide

August 2008

About this document

- ◆ This document describes how to set up Authority Control on your Talis LMS.
- ◆ It is intended for System Administrators or senior Library Staff responsible for maintaining the Talis LMS.
- ◆ Knowledge of the Talis System, UNIX, and authority control principles is assumed.
- ◆ You must be running Talis Alto 4.1 or greater. If you need to upgrade, please contact Talis Support.

Related documentation

- ◆ For more information about the scripts included in this guide, please refer to the [Talis Scripts Online Help](http://www.talis.com/scripts). This can be viewed at <http://www.talis.com/scripts> , where you can also download a PDF or Microsoft Word version of the document.
- ◆ For more information about setting up Authority Tags and Authority Types, please refer to the context sensitive help provided with the **Configure Talis Alto** application. This can be accessed at any time by pressing the F1 button.

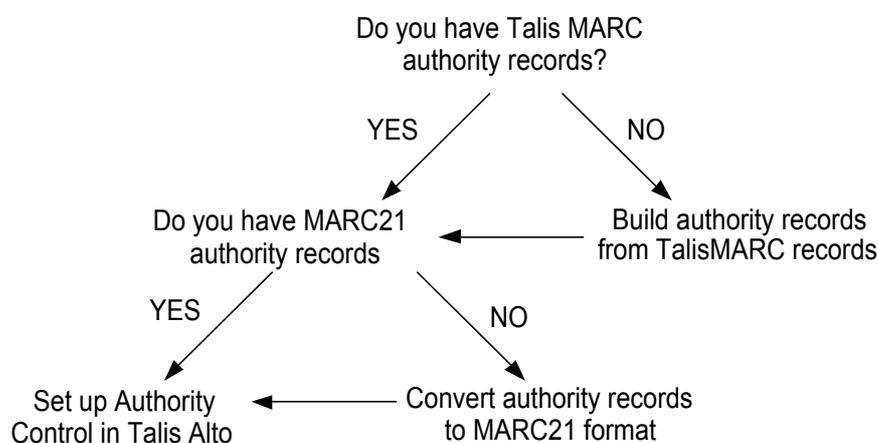
Contents

1. Introduction.....	4
2. Establishing the presence of TalisMARC authority records.....	4
3. Building authority records from TalisMARC records	5
3.1 Authority types and authority tags.....	6
3.2 About authority_build and authority_load.....	7
3.3 Running the authority_build script.....	8
3.4 Running the authority load script.....	9
3.5 Report files	9
4. Establishing the presence of MARC 21 authority records.....	10
5. Converting TalisMARC authority records to MARC 21 authority records.....	10
6. Setting up authority control in Talis Alto.....	11

1. Introduction

The following flowchart describes the steps required to set up tables for Authority Control. This process involves:

- ◆ Establishing the presence of **TalisMARC authority records** on the system
- ◆ If required, building authority records from TalisMARC records
- ◆ Establishing the presence of **MARC 21 authority records** on the system
- ◆ If required, converting TalisMARC authority records to MARC 21 format
- ◆ Setting up Authority Control in Talis Alto



A summary of the steps required to set up tables for authority control



Note: Any customers requiring bespoke conversion rules, or wishing to *re-convert* MARC 21 authority records (for example, on discovering incorrect conversion rules) should contact Talis Support before proceeding.

2. Establishing the presence of TalisMARC authority records

If there are **no** TalisMARC authority records on your system, you need to build them from your TalisMARC bibliographic records, as described in the next section. If you have already built the TalisMARC authority records you require on your system, you can proceed to step 4, '[Establishing the presence of MARC 21 authority records](#)'.

To establish the presence of TalisMARC authority records

1. Log on as **talis**.
2. Start an ISQL session by entering the command:

```
isql -Usa -P
```

3. Enter the following commands:

```
use prod_talis  
go
```

```
select count(*) as NUM_RECORDS, AUTHORITY_TYPE_ID  
from AUTHORITY  
group by AUTHORITY_TYPE_ID  
go
```

```
select CODE, NAME, AUTHORITY_TYPE_ID from AUTHORITY_TYPE  
go
```

4. The SQL will show you how many records you have for each authority type, and then give you the names of the types.
 - ♦ If the count for a type is greater than 0, there are TalisMARC authority records of that type on your system, and you can proceed to step 4.
 - ♦ If the count is 0, then it may be that the authority type has not previously been used on your system; proceed to the next section.

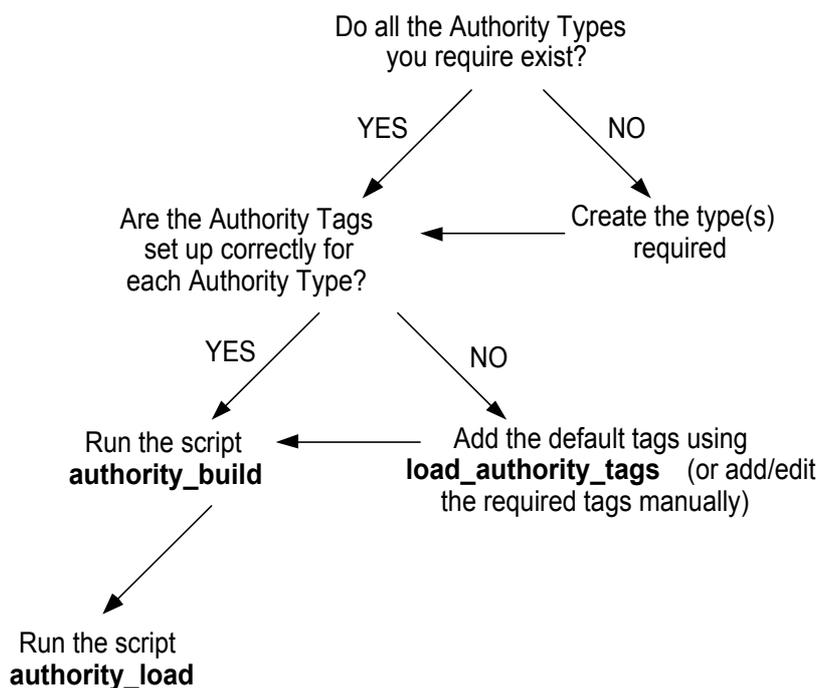
3. Building authority records from TalisMARC records

If there are no TalisMARC authority records on your system, you will need to build them from your TalisMARC bibliographic records. Alternatively, you may need to re-build existing authority records to change the fields/subfields that are authorised, or if you want to start authorising something not previously authorised (e.g. series or titles).

Talis authority records are built using the **authority_build** and **authority_load** scripts.

The flowchart below describes the steps required to build TalisMARC authority records. This process involves:

- ♦ Setting up the required Authority Types
- ♦ Setting up the required Authority Tags (MARC fields and subfields) for each Authority Type
- ♦ Running the **authority_build** script to extract data from the bibliographic records
- ♦ Running the **authority_load** script to load the new authority records into the database



A summary of the steps required to build authority records from TalisMARC records

3.1 Authority types and authority tags

Talis Alto allows any number of authority types to be set up. Each authority type has an authority **format** which controls how the headings are constructed. See the context sensitive Help in Configure Talis Alto for more information.

However, in MARC 21, the authority format dictates which fields in the bibliographic record can be authorised. Therefore, it only makes sense at this stage to set up TalisMARC authority records for **Names, Uniform Titles, Series Titles** and **Subjects**.

In MARC 21, combined Name/Title authorities are used to authorise records containing a Name and Uniform Title. Therefore, it is advisable to create TalisMARC authority records for Uniform Titles. The conversion then uses these to create Name/Title authority records.

Authority types are set up through the Configure Talis Alto application. This is only available in version 4.2 onwards, so if you are running version 4.1 and you need to amend the types or tags, please contact Talis Support.

- ◆ To access the Authority types screen from within the Configure Talis Alto application, click the **Parameter Management** tab, then the **Names** tab, and then **Authority Types**.
- ◆ Refer to the context sensitive help for more information, which you can access by pressing F1.

Each Authority type must then be associated with the MARC fields and subfields in bibliographic records. This is done by setting up Authority tags. A default set of tags for Name, Title and Subject format authority types can be loaded using the script **load_authority_tags**. Changes can then be made through the Configure Talis Alto application.

1. If authority tags are already set up as required, proceed to section 4. Otherwise, log on as the operator used to run the Authoriser daemon (usually **ops**) and enter the following commands:

```
cd $TALIS_HOME/database/scripts
load_authority_tags -d{dbase} -n{type}
```

- for example:

```
load_authority_tags -dprod_talis -nNAME
```

The **-n** switch must be the CODE value corresponding to the authority type.

For more information about the script, please refer to the [load_authority_tags](#) page from within the [Talis Scripts Online Help](#).

2. Check that tags have loaded correctly and set up tags for any extra fields.
 - ♦ To access the Authority tags screen from within the Configure Talis Alto application, click the **Parameter Management** tab, then the **Rules** tab, and then **Authority Tags**.
 - ♦ Refer to the context sensitive help for more information, which you can access by pressing F1.

3.2 About authority_build and authority_load

The **authority_build** script runs the subordinate script **authority_build.pl**. It performs a number of functions, specifically:

- ♦ It extracts and retains existing authority data for authority types which are not being rebuilt
- ♦ It retains existing references, notes and code data for authorities of the type(s) specified (if required)
- ♦ It generates BACK_INDEX keys for any "See" references retained
- ♦ It creates the command line for the second script (effectively, the **authority_load.pl** script is created automatically by running **authority_build**)
- ♦ It runs the authoriser daemon (**authoriser_dae**) in batch mode to extract data from WORK_SUBFIELD and creates a data file to be used by the **authority_load** script.

The **authority_load** script estimates the amount of space required for running **authority_load**, based on the size of the files produced by **authority_build**. It then checks the amount of space available and writes the figures to the report file.

The **authority_load** script runs a subordinate script **authority_load.pl** with switches derived from values used for running **authority_build**. The possibility of operator error (i.e. specifying different, incompatible switches for the two scripts) has been reduced by constructing the command line for the second script automatically. As there is a possibility that, for example, environment variables may be reset in between the running of the two scripts, most of the (hidden) mandatory switches for **authority_load** take the values used by **authority_build** without operator intervention.

3.3 Running the authority_build script

For more information about this script, please refer to the [authority_build](#) page from within the [Talis Scripts Online Help](#).

1. To check space, run the **authority_build** script without the **-u** argument:

```
authority_build -dprod_talis -n{type}
```

2. If you encounter the known defect 'illegal division by zero' error at `/usr/opt/blcmp/talis/perl_tools/`, the workaround is to enter the following command:

```
authority_build -dprod_talis -nALL_TYPES
```

- even if you were originally only intending to build against one authority type at a time. This will mean it is not possible to build *individual* authority types separately.

3. Check the file permissions of all authority files (authority*) in **\$BLCMP_HOME/data/authority**. They should be writeable by the user running the scripts (usually **ops**).
4. If you are **rebuilding** authority records (that is, if there are already rows in the AUTHORITY table of the type you are building), enter the command:

```
authority_build -dprod_talis -n{type} -u -toverwrite
```

otherwise enter the following command:

```
authority_build -dprod_talis -n{type} -u
```

5. If you encounter a 'permission denied' message, check that the files **authority*** in **\$BLCMP_HOME/data/authority** are writeable.
6. Check the script reports in **\$BLCMP_HOME/data/authority** to confirm the script has run successfully. The last line should resemble the following:

```
authority_build.pl      completed      20/06/08 11:04:06
```

If the report contains any errors, please contact Talis Support.

7. Continue by running the **authority_load** script (see section 3.4 below).

3.4 Running the authority load script

If the authority build was successful, you should run **authority_load** from **/users/ops**. This process could take some time to complete (especially on older, slower systems), so you may wish to schedule it in the cron to run overnight.

In addition, please note that:

- ♦ The **-u** argument is optional. Running the script without the argument simply performs a disk space check before terminating. Running with the **-u** argument causes the script to perform the processing after the free disk space check.
 - ♦ Unique Authority IDs are re-calculated and re-assigned. If **authority_build** is being run to build or rebuild some Authority Types while leaving other type(s) unaffected, the data for unaffected types is loaded back into the new tables.
 - ♦ Any retained data (codes, notes and references from the type(s) being rebuilt) is merged into the file of rebuilt Authorities, and the merged data loaded into **AUTHORITY**, **AUTHORITY_CODE**, **AUTHORITY_NOTE**, **AUTHORITY_AUTHORITY_LNK** and **AUTHORITY_WORK_LINK**.
 - ♦ If any of the re-linking process fails to find a match, the filename(s) holding the unmatched data will be written to the report file (see [‘Report files’](#) below).
1. Check that the user (usually **ops**) has write permission to all the **author*** files in **\$TALIS_HOME/control/**.
 2. Enter the command:
authority_load -u
or
authority_load.pl -d{dbase} -nALL_TYPES -tOVERWRITE -s/usr/opt/blcmp/data/authority -u
 3. Check the reports in **\$BLCMP_HOME/data/authority**. If the report contains any errors, please contact Talis Support.
 4. Finally, run **full_dbdump** or **dump2disk** to secure the database.

3.5 Report files

The report files are **authority_build.rep** and **authority_load.rep**. Each report indicates the times the script started and stopped, the command line used, and reports of the interim stages. These interim stage reports comprise a message indicating the stage being started, a progress report as each 10,000 rows are processed and counts of the number of rows processed at each stage.

A list of the files in the data directory available for use by the **authority_load** script appears at the end of the **authority_build.rep** report.

The **authorisor_dae** daemon, which is run by the **authority_load** script, generates the standard **.err**, **.log** and **.rep** files.

4. Establishing the presence of MARC 21 authority records

If there are **no** MARC 21 authority records on your system, you need to run the MARC conversion software as described in section 5, '[Converting TalisMARC authority records to MARC 21 authority records](#)'.

If there **are** MARC 21 authority records on your system, you can proceed to section 6, '[Setting up the authority web server](#)'.

To establish the presence of MARC 21 authority records

1. Log on as **tal**.
2. Start an ISQL session by entering the command:

```
isql -Usa -P
```
3. Enter the following commands:

```
use prod_talis
go

select count(*) from AUTHORITY_META
go
```
4. If the count is greater than 0, there are some MARC 21 authority records on your system, and you can proceed to step 6. If the count is 0, proceed to the next section.

5. Converting TalisMARC authority records to MARC 21 authority records

If there are no MARC 21 authority records on your system, you must convert your TalisMARC authority records using the Talis MARC Conversion software. Full instructions are given in the [MARC Conversion Software 2.0 Release Notice](#). When you start the conversion manager, ensure you specify 'authority' at the first screen.

When running the Talis MARC conversion software, you must specify the range of authority records to convert (e.g. 1-10000). To find the highest AUTHORITY_ID, start an ISQL session by entering the command:

```
isql -Usa -P
```

Proceed by entering the following commands:

```
use prod_talis
go
select max(AUTHORITY_ID) from AUTHORITY
go
```

6. Setting up authority control in Talis Alto

Provided you have MARC 21 authority records on your system, you can now configure authority control in Talis Alto. Talis Alto uses the Authority Control Web Service which is usually installed on an internal Talis Prism server.

To set up the authority control in Talis Alto

1. Ensure that the Authority Web Service is running. To do this:
 - a. On the prism server that has the Authority Web Service installed, enter the command:


```
ps -ef | grep mono
```

 This should show a mono process running.
 - b. Check that port **8082** is open to Alto PCs. In a windows command prompt, enter the following command:


```
telnet <prism IP Address> 8082
```

 If a black screen with a flashing curser is displayed, you have connected successfully.

If a 'connection refused' message is displayed, contact your network team and ask them to open port 8082, from Alto PCs to the Talis Prism server.
 - c. Check that the server is not blocking the port by using the same telnet command from the LMS server. If you cannot connect, there may be an issue with the **iptables** configuration on the Talis Prism server.
2. Make sure that **TAL_AUTHORITY_SERVICE_URL** environment variable is set for users who will need access to Authority control functionality.

You can set environment variables using the **Configure Talis Alto** application.
3. Make sure that users have the appropriate enablements set for Authority control. These can be set via **Configure Talis Alto | Permissions | Rules**. There are seven relevant enablements which are described in the following table, all within the Cataloguing section:

Enablement	If set to "Yes"
Authority	The Authority option on the Cataloguing menu is enabled, and the user can view authority records.
Delete authority headings	The user can delete authority records.
Edit authority headings	The user can create and edit authority records.
Limited authority edit	This enablement is obsolete in Talis Alto 4.1 and above.

Enablement	If set to “Yes”
Merge authority headings	The user can merge one authority record with another, updating the related bibliographic records.
Generate authority report	The Authority report option on the Cataloguing menu is enabled, and the user can generate a report on the headings found in bibliographic records that have been created or edited since the last report.
Authorise interactively (below Work Edit Work)	The user will see letters beside the authorisable fields in the bibliographic edit form showing the authorisation status of each heading, and will be able to check for authority records and create new ones while working with the bibliographic record.