Using the D2L Extract Process (ZSRD2LX)

Georgia Enhanced Banner Student User Documentation

Version 8.22

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Using the D2L Extract Process

Introduction

Purpose

The D2L Extract process (ZSRD2LX) extracts data from Banner for loading into the Desire2Learn Learning Environment. Extract processing uses rules found in a number of structures and run-time parameters to determine which data to extract. The extracted data are saved in multiple data files in xml format.

Target Audience

Functional staff responsible for exporting data to files for loading into Desire2Learn.

Purpose and Scope of Document

This document explains how to use the D2L Extract process and outlines the expected results.

Graphics

Graphic cues used in this document assist with labeling steps and items that are particularly important.

Steps for recovery or support.

For additional information, see references.

Exercise caution.

Important information.

On target: steps completed successfully.

Support

For additional ITS resources and support, contact the ITS Helpdesk:

 • Web support request self-service: http://www.usg.edu/customer_services
 • E-mail: Helpdesk@usg.edu

For emergency, business interruptions, or production down situations, call the ITS Helpdesk immediately

 • 706-583-2001
 • Toll free within Georgia: 1-888-875-3697

D2L Extract: Forms and Processes Reference

Overview

Use the following forms to maintain data utilized by the D2L extract:

Descriptive Title	Name
Population Selection Extract Data (optional)	GLAEXTR
Population Selection Definition Rules Form (optional)	GLRSLCT
E-mail Address Form	GOAEMAL
Third Party Access Audit Form	GOATPAD
Basic Course Information Form	SCACRSE
Term Control Form	SOATERM
EDI Cross Reference Rules Form	SOAXREF
General Person Identification Form	SPAIDEN
Schedule Form	SSASECT

Use the following processes to execute the D2L extract:

Descriptive Title	Name
Population Selection Extract Process (optional)	GLBDATA
D2L Extract Process	ZSRD2LX

Using the D2L Extract Process

Introduction
The ZSRD2LX extracts data and creates xml data files for uploading into D2L. Users can run the export every time changes are made to the course scheduling, enrollment, or person records that require a new file be uploaded to D2L.

The first step in creating a useable xml file for D2L is to verify settings on several forms. Most settings will already be correctly set up as other processes use these same rules and settings.
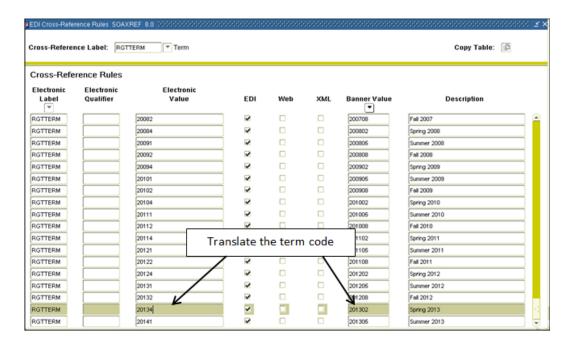
Verify Settings
The following steps are standard for all terms and should have been completed prior to creating the course sections and enrolling students for the reporting term. There are no special setup for these items required by the ZSRD2LX process:

- Establish term and part of term codes for the reporting term in the Term Control form (SOATERM).

- Establish enrollment status codes on the Enrollment Status Code Validation form (STVESTS).

- Define valid enrollment status rules for the term on the Enrollment Status Control form (SFAESTS).

- Establish registration status codes on the Course Registration Status Code Validation form (STVRSTS). <u>The Status Type field should be populated for all codes.</u>

- Define valid registration status rules for the term and parts of term on the Course Registration Status form (SFARSTS).

- Define courses on the Basic Course Information form (SCACRSE)

Verify Translation of the Term Code
Translate the Banner term code for the reporting term to its equivalent Regents term code value on the EDI Cross Reference Rules form (SOAXREF) using Cross-Reference Label value "RGTTERM". The "Banner Value" is the value the institution uses in Banner; the "Electronic Value" is the Regents Term Code equivalent.

Translate the term code

Define Sections

Define course sections offered for the term and assign instructors on the Schedule form (SSASECT).

Register Students for Course Sections

Students register/drop through Self Service Banner. Students can also be administratively registered, dropped, or withdrawn for course sections through the Student Course Registration form (SFAREGS).

Verify Individual Third Party ID and Sourced ID Values

If needed on an individual basis, verify that a value exists for the third Party ID and Sourced ID fields on the Third Party Access Audit form (GOATPAD). Note that PIN values are not viewable from any form.

Verify Individual Email Address Values

If needed on an individual basis, verify that appropriate email addresses exist. Values can be viewed on either the E-mail Address form (GOAEMAL) or the E-mail tab on the General Person Identification form (SPAIDEN).

Build Population Selection (optional)

A population selection is not required to execute the ZSRD2LX process. The process inherently limits the population of users included in the User and Membership xml files to the following:

- All students with enrollment activity in course sections being pulled by the current data extraction

- All instructors assigned to course sections being pulled by the current data extraction

Users and enrollment/assignment activity can be further limited by making the appropriate selections for the "Extract Users", "Extract Instructor Assignments", and "Extract Student Enrollments" parameters. If additional limitation of the users and enrollments/assignments is desired, a custom population selection can be created and specified in parameters 11 through 14. Please reference Banner documentation for additional information on creation of population selections.

Run the D2L Extract Process

The D2L Extract Process (ZSRD2LX) is run from the Process Submission controls form (GJAPCTL) and generates several output files that can be loaded into D2L.

There are a number of options when running ZSRD2LX. These options allow you to limit the file data that are pushed to D2L. Limiting the data in the file accomplishes several objectives: 1) reduces the possibility of data errors from previous data loads, 2) reduces stress on the system by limiting the amount of data needed to be processed, 3) enables your campus to better identify data issues in the file, 4) provides flexibility in loading specific data sets.

Remember that the ZSRD2LX process may be run a number of different ways to limit extraction based on person record types, updates to courses, sections, and enrollments/memberships. The process is designed to allow you to restrict data extraction to only the information that is needed.

Parameters for ZSRD2LX

No	Name	Required	Description/Instructions	Default Values	Character Length
01	Term Code	Yes	Term Code for which data should be extracted. Must be a valid term code defined on STVTERM.		6
02	Extract Courses	Yes	Y = extract all active courses with active sections for the term N = do not extract courses	Y	1

No	Name	Required	Description/Instructions	Default Values	Character Length
03	Extract Sections	Yes	A = Extract all active sections for the term O = Extract only active sections that are not cross-listed X = Extract only active sections that are cross-listed N = Do not extract sections	A	1
04	Report Cross-listed as Not Cross-listed	Yes	N – Report as cross-listed Y – Report as not cross-listed	N	1
05	Extract Users	Yes	A – Extract All Instructors and Students I – Extract Instructors only S – Extract Students only N – Do not extract Users Selection will only limit User data – does not affect Membership data. **NOTE: Only users associated with the sections included in the current extraction will be reported.**	A	1
06	Extract Instructor Assignments	Yes	Y = Extract instructor assignments in active sections N – Do not extract instructor assignments in active sections Selection will limit extraction of instructor assignments (Memberships) – does not affect User data. **NOTE: Only instructor assignments associated with the sections included in the current extraction will be reported.**	Y	1
07	Extract Student Enrollments	Yes	A = Extract All student enrollments/unenrollments in active sections E = Extract only Enrollments in active sections U = Extract only Unenrollments in active sections N = Do not extract student enrollments/unenrollments Selection will limit extraction of student enrollments (Memberships) – does not affect User data. **NOTE: Only student enrollments associated with the sections included in the current extraction will be reported.**	A	1
08	Instructor Email Type, Primary	Yes	P = Select the email marked as Preferred for each Instructor {xxx} = Select the {xxx} email type for each instructor. Must be a valid email type defined on GTVEMAL.	P	4
09	Instructor Email Type, Second	No	Enter the email type to be extracted if the primary email type has not been defined for an instructor. P = Select the email marked as Preferred for each Instructor {xxx} = Select the {xxx} email type for each instructor. Must be a valid email type defined on GTVEMAL.		4

No	Name	Required	Description/Instructions	Default Values	Character Length
10	Student Email Type, Primary	Yes	P = Select the email marked as Preferred for each student {xxx} = Select the {xxx} email type for each student. Must be a valid email type defined on GTVEMAL.	P	1
11	Student Email Type, Second	No	Enter the email type to be extracted if the primary email type has not been defined for a student. P = Select the email marked as Preferred for each Instructor {xxx} = Select the {xxx} email type for each instructor. Must be a valid email type defined on GTVEMAL.		1
12	Application Code	No	Application Code for the Population Selection		30
13	Selection ID	No	Selection ID for the Population Selection		30
14	Creator ID	No	Creator ID for the Population Selection		30
15	User ID	No	User ID for the Population Selection		30

Process Results

The ZSRD2LX process will create a .lis and a .log file. The .lis file will contain success and error messages related to those records being extracted from Banner. The .log file will contain general processing messages and may include error messages not specifically related to a particular data record.

Be sure to check the contents of these files to identify any errors that may have been encountered. Correct any issues identified and rerun the process.

ZSRD2LX Data Files Produced:

ZSRD2LX extracts 5 categories of data. Each category will be written to a separate xml data file, with the process number included in the file name. For each xml file, an additional empty file with the same name as the data file but with an extension of ".alldone" will also be created; this file is used by D2L for file processing purposes only.

Category	Description	Data File Names {xxxxxx} = job number
Template	Basic course level information. Data are not tied to a particular term. Templates are tied directly to the departments in D2L.	Template_{xxxxxx}.xml Template_{xxxxxx}.alldone
Course Offering	Course section data OR course cross-listing group data. Data are tied to a term and to a template in D2L.	Offering_{xxxxxx}.xml Offering_{xxxxxx}.alldone
Section	Section level data. Data are tied to a Course Offering.	Section_{xxxxxx}.xml Section_{xxxxxx}.alldone

User	All data required to define a person (either student or instructor) to the D2L environment	User_{xxxxxx}.xml User_{xxxxxx}.alldone
Membership	Used to enroll users as either students or instructors in specific sections. Person record must exist in D2L before enrollment record can be created.	Membership_{xxxxxx}.xml Membership_{xxxxxx}.alldone

Submitting Data for Upload to D2L

To submit data for loading into the D2L Learning Environment, zip all of the .xml and .alldone files along with the .lis and .log files and upload to the GAVIEW FTU site at https://ftu.usg.edu/view/ftu/index.phtml. Files will be uploaded according to the most current GAVIEW data loading schedule. At this time the following schedule is in effect:

> Files received before 3:00 p.m. on an ITS business day are loaded into D2L by 9:00 a.m. the next business day. Data files received by 3:00 p.m. Friday are loaded into D2L by 9:00 a.m. the following Monday.

Sample Files

Samples of the .log and .lis files follow.

Sample zsrd2lx.lis

```
@00010275  Joel, Billie    *** ERROR *** Username Is Null

05-21-2013 09:50:21              TEST Database              PAGE:   1
Run No. 838594           Desire2Learn Extraction Process        ZSRD2LX 8.22

                        * * * CONTROL REPORT * * *

   Parameter Description            Parameter Value(s)

   Term Code                             201302
   Extract Courses?                      Y
   Extract Sections?                     A
   Report Cross-Listed as Not Cross-Listed?  N
   Extract Users?                        A
   Extract Instructor Assignments?       Y
   Extract Student Enrollments?          A
   Instructor Email Type, Primary        P
   Instructor Email Type, Secondary
   Student Email Type, Primary           P
   Student Email Type, Secondary
   Application
   Selection
   Creator
   User ID

   Number in Population Selection            0
   Number of Template Objects                8
   Number of Non-Cross Listed Course Offering Objects 8
   Number of Cross Listed Group Course Offering Objects   2
   Number of Section Objects                13
   Number of User Objects                   11
   Number of Student Enrollment Objects          20
   Number of Student Unenrollment Objects        1
   Number of Faculty Assignment Objects          3


   ZSRD2LX 8.22 completed successfully
```

Any errors will be displayed here

Sample zsrd2lx.log

```
Username: Connected.

Run Sequence Number...................................:
Connected.|
Connected.
```

Appendix A: Document History

This section details the history of the document and updates made for each modification.

Release and Date	Form/Process	Page	Update Description
Georgia Enhancements 8.14, June 2012	NA	NA	Original
Georgia Enhancements 8.14.3, September 2012	ZSRD2LX	NA	The D2L Extract Process (ZSRD2LX) has been updated to: • remove errors for campuses using LDAP that do not store student passwords in Banner; • correctly process RSTS codes for which no value has been stored in the Status Type field on the STVRSTS form
Georgia Enhancements 8.22, May 2013	ZSRD2LX	NA	The D2L Extract Process (ZSRD2LX) has been updated to: • Identify passwords containing special characters and report them to D2L as blank passwords • Translate ascii characters to XML entities in the first name and last name fields • Include registration records with en error code of 'D' • Add the "Report Cross-listed as Not Cross-listed" parameter and all associated programming logic • Update the first and last name fields to report up to 60 characters each • Update the email address to report up to 128 characters

Appendix B: Process Flow

```
┌─────────────────────────────────┐
│  Verify settings and term code  │
│           translation           │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│ Define sections; assign instructors; │
│   register students per normal   │
│        business practices        │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│   Register/drop/withdraw students │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│  Verify Third Party ID, Sourced ID, │
│         Email as needed         │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│    Build Population Selection    │
│            (optional)            │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│         Execute ZSRD2LX         │
└─────────────────────────────────┘
                 │
                 ▼
┌─────────────────────────────────┐
│  Zip files and submit for upload to │
│               D2L               │
└─────────────────────────────────┘
```