ellucian

Banner Student API
Handbook

Release 9.5
March 2016

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Revision History

Publication Date	Summary
March 2016	New version that supports Banner Student API 9.5 software.

Contents

Introduction

An Application Programming Interface (API) is a specification intended to be used as an interface by software components to communicate with each other. REpresentational State Transfer (REST) is a set of principles that define how Web standards such as HTTP and URIs.

The objective of the Banner RESTful APIs (is to expose the services available in the new Banner applications powered by XE as RESTful APIs. The target end users for these APIs will be developers at campuses and partner developers. These RESTful APIs will enable integration across a number of Ellucian product offerings.

RESTful APIs provide simple yet powerful interface for interacting with Banner. APIs are useful for developers and administrators who aim to integrate Banner with external applications. APIs are excellent choice for integration as they are accessible using simple HTTP methods (GET, POST, PUT, and DELETE). APIs also provide flexibility to specify the response data format (JSON or XML).

REST is about ‘resources’

RESTful architectures expose resources. A resource is an abstraction of a piece of information, such as a single data record or a collection of records. RESTful resources provide the following benefits:

- Each resource is identified by a unique URI.
- All resources are accessed with a uniform interface over HTTP. Any resource can be manipulated using standard HTTP methods (GET, POST, PUT, DELETE).
- Each resource support multiple representations (JSON and XML).

Security Overview

It is recommended that APIs be submitted over HTTPS to ensure encryption of the request and response.

Note: All examples in the following documentation show HTTP against a local host. The client will want to deploy the war file to a server that has HTTPS and the URL for the API will be for that server and HTTPS. The web service definition for the API includes the pattern for HTTPS and for the server and port information.

APIs requires submission with an authorization header. The authorization header ID must use a valid Oracle ID with proxy access to the banproxy user. Security for Banner APIs powered by XE is similar to security for accessing Banner Administrative forms.

A Banner administrative account (Oracle user) must be created to access RESTful APIs. The following privileges should be defined in the Banner administrative account for RESTful API access:

- Define Oracle Create Session privilege or the USR_DEFAULT_CONNECT Oracle role as the default role for the user.
- Define the BAN_DEFAULT_M Oracle role as granted to the user. It does not need to be a default role, as it is password protected.
- Define the BANPROXY access set in the Oracle/Banner Security Maintenance Form (GSASECR) or the ALTER USER username GRANT CONNECT THROUGH BANPROXY.
- Define access to the General Menu (GUAGMNU) Banner security object using the Oracle/Banner Security Maintenance Form (GSASECR). We can grant access to 'GUAGMNU' directly to the user or assign user to a security class that is granted access to 'GUAGMNU'.
- If Banner has been configured for MEP, the user must be authorized for any VPDI contexts that will be accessed from APIs.

Note: In MEP-enabled Banner, institutions must include their MEP code (also known as VPDI_CODE) in the URL to access the API. Following is a sample URL with MEP code:
http://host:port/StudentApi/<MEP code>/api/<ResourceName>

Hardware requirements

The application has the following CPU and memory requirements:

Recommended:	Quad core CPU with 4 to 8 GB of memory for the application server
Minimum:	Quad core CPU with 4 GB of memory for the application server

Software requirements

The application has the following software requirements.

Oracle Database

This upgrade is recommended to be applied with Oracle Database Release 11.2.0.4.

Application server

The application is supported on the following application servers:

- Oracle Fusion Middleware 11gR1, 11gR2, and 12c using WebLogic 10.3.3, 10.3.4, 10.3.5, 10.3.6, and 12.1.3
- Apache Tomcat 7 and 8

Middle Tier (application server) platforms

The application is supported on the following application server and operating system combinations:

Tomcat (64 bit)	WebLogic (64 bit)
Red Hat Linux 5.3	Red Hat Linux 5.3
Windows Server 2008	Windows Server 2008
Solaris 10	Solaris 10
AIX 6.1 (JDK 1.6.0 SR10 or later)	AIX 6.1 (JDK 1.6.0 SR10 or later)
HP-UX	HP-UX 11iV3 (11.31)

Note: Banner 9.x applications were tested on WebLogic using both the Classic Domain template and the Basic Domain template.

For WebLogic server environments, JPA 2.0 support must be enabled. WebLogic server does not enable JPA by default. To enable JPA, use the steps in the appropriate Oracle documentation:

WebLogic 10.3.3:
http://docs.oracle.com/cd/E14571_01/web.1111/e13720/using_toplink.htm#i1221315

WebLogic 10.3.4:
http://docs.oracle.com/cd/E17904_01/web.1111/e13720/using_toplink.htm#i1221315

WebLogic 10.3.5:
http://docs.oracle.com/cd/E21764_01/web.1111/e13720/using_toplink.htm#EJBAD1309

WebLogic 10.3.6:
http://docs.oracle.com/cd/E23943_01/web.1111/e13720/using_toplink.htm#autold2

Weblogic 12.1.3
https://docs.oracle.com/middleware/1213/wls/EJBAD/using_toplink.htm#EJBAD1288

Ellucian software

Depending on the products that are licensed at your institution, the following product upgrades must be applied:

- Banner DB Upgrade 9.4
- (Optional) EMS v1.0.1
- (Optional) Banner Event Publisher (BEP) 1.2.3 or 2.0
- (Optional) INTCOMP 8.0.2.6

Note: EMS v1.0.1 and BEP 1.2.3 or 2.0 are needed for clients using APIs asynchronously and INTCOMP 8.0.2.6 is needed for ILP clients using grade-entries API.
To access the grade-entries API that is used to submit mid-term and final grade for a student, you must install the INTCOMP 8.0.2.6 patch (pcr-000124801_int8000206).

Java dependencies

Java 7 (64-bit version) must be installed on the application server before you install the application. The application supports Java 7 JDK and JRE in run time.

The JDK bin directory must be defined in the PATH system property.

Banner XE Student API 9.5 is now certified on the following:

Compile	Runtime	Application Server
Java 7	Java 7	Tomcat 7
Java 7	Java 7	Weblogic 10.3.6
Java 7	Java 7	Tomcat 8
Java 7	Java 7	Weblogic 12.1.3
Java 7	Java 8	Tomcat 8
Java 7	Java 8	Weblogic 12.1.3

Banner Setup Requirements

Various integration configuration elements that are required for APIs must be set up as part of the Banner setup requirements.

A script is being delivered to insert the integration configuration elements into the GORICCR table with UPDATEME value.

During implementation, these values must be set based on the requirements. The script is delivered as part of Banner DB Upgrade 9.4.

Sample client application in API source code

A sample client application (Grails application) is included with the API source code and will be delivered to customers via GIT.

Use the following procedure to run the sample client application.

1. Download the following .zip file.

   `[ssh://git@banner-src.ellucian.com/banner/apps/banner_student_api_app.git] / docs / samples / banner-rest-ga-demo.zip`

2. Extract the files from the .zip file to C:\banner-rest-ga-demo.
3. Open the command prompt in the C:\banner-rest-ga-demo directory and execute the following command:

   ```
   grails run-app
   ```

   Note: You must set all the environment variables such as *JAVA_HOME* and *GRAILS_HOME* before executing the `grails run-app` command.
   The default server port used to run your demo application is 8090. You can change the port by editing the value of `grails.server.port.http` property in `banner-rest-ga-demo/grails-app/conf/BuildConfig.groovy`

4. Open the http://localhost:8090/banner-rest-ga-demo/restdemo/mainMenu URL in Google Chrome or Mozilla Firefox Web browsers.
5. From the main menu, click the **API Configuration** tab to configure the required details to call the APIs (Banner API App URL, user name, and password).
6. From the main menu, click the **Registration APIs** to call the APIs.
7. From the drop-down list, select your desired API.
8. Click **Go Fetch it**.

   The list of API results will be displayed automatically.

Globally Unique Identifier (GUID)

GUID is a unique 128 bit number. You use GUIDS when there are multiple independent systems or when generating unique IDs.

Rationale for Using GUIDS

GUIDS are just one form of an enterprise identifier. The following are some of the characteristics:

- The format is well known
- Supported by an international standard (RFC 4122)
- Multiple tools available to support
- It is a single data type
- It has a very large symbol space

Create a GUID

According to RFC 4122 standard, the GUIDS must be of version 4. Version 4 GUID are formed from randomly generated 122 bit numbers in which 6 bits are reserved by the specification.

GUID sub-components must be considered as hexadecimal values. Hexadecimal must use lower-case letters when the GUID is created but should be treated as case-insensitive when being compared.

Note: Ellucian RESTful API's GUID conforms to RFC 4122 of version 4. The GUID format is constrained in the JSON schema definitions and cannot be changed. If you change the format of this value it will break Ellucian product integrations which are dependent on JSON schema's for exchanging data.

Generating a GUID using Java

This is Supported since Java 1.5. Java provides a simple utility function for generating Version 4 GUIDS. The following code block illustrates how to create a Version 4 GUID and return that GUID as a STRING.

```
public class RandomUUID
{
  public static String create()
  {
    return java.util.UUID.randomUUID().toString();
  }
}
```

Generating a GUID using JavaScript

Generation of GUIDS using JavaScript should be restricted to server side JavaScript. It is relatively easy to use browser tools like GreaseMonkey on Firefox or TamperMonkey on Chrome to subvert the GUID generation.

JavaScript does not have a built in method for generating Version 4 GUIDS.

Generating a GUID using Node.js

The following code block illustrates how to create a Version 4 GUID:

```
var uuid = require('node-uuid');
...
// Generate a v4 (random) id
uuid.v4(); // -> '110ec58a-a0f2-4ac4-8393-c866d813b8d1'
```

Generating a GUID using C#/.NET

.NET provides the Guid.NewGuid() function which returns a version 4 GUID. The following code block illustrates how to create a Version 4 GUID:

```
using System;
namespace ConsoleApplication1
{
    class Program
    {
        static void Main(string[] args)
        {
            for (int i = 0; i < 5; i++)
```

```
            {
                Console.WriteLine(Guid.NewGuid());
            }
            Console.ReadLine();
        }
    }
}
```

Generating a GUID using Microsoft SQL Server

Microsoft SQL Server provides the `NEWID()` call to return a version 4 GUID. To generate a GUID using Microsoft SQL Server, you must call the `NEWID()`using the following code:

```
Validating NEWID() is Version 4
SELECT NEWID();
```

Crosswalk GUIDS

The GORGUID table holds the GUID for the all records required for the integration API.

Column Name	Comment
GORGUID_GUID	Column holds the GUID information
GORGUID_LDM_NAME	The name of the domain object
GORGUID_DOMAIN_SURROGATE_ID	The hibernate unique id for the domain object
GORGUID_ACTIVITY_DATE	Date on which the GUID was added or last changed
GORGUID_DOMAIN_KEY	The Banner domain business key which used to identify the record in the domain object.
GORGUID_SURROGATE_ID	The hibernate unique index for the GORGUID table
GORGUID_VERSION	The hibernate optimistic lock version
GORGUID_USER_ID	User who inserted or last update the data
GORGUID_DATA_ORIGIN	Source system that created or updated the row
GORGUID_VPDI_CODE	Multi-entity processing code

Crosswalk GUID for Validation tables

The `GORGUID_DOMAIN_KEY` holds the code information of the validation table. The following table contains the list of validation tables that supports domain and the corresponding domain object name.

Domain Name	Table Name	Domain Key Column	SQL Query
ACADEMIC-LEVELS	STVLEVL	STVLEVL_CODE	`select gorguid_guid, stvlevl_code, stvlevl_desc from gorguid, stvlevl where stvlevl_code = gorguid_domain_key and gorguid_ldm_name = 'academic-levels' and stvlevl_code = '<Enter your code here>'`
CAMPUSES	STVCAMP	STVCAMP_CODE	`select gorguid_guid, stvcamp_code, stvcamp_desc from gorguid, stvcamp where stvcamp_code = gorguid_domain_key and gorguid_ldm_name = 'campuses' and stvcamp_code = '<Enter your code here>'`
COLLEGES	STVCOLL	STVCOLL_CODE	`select gorguid_guid, stvcoll_code, stvcoll_desc from gorguid, stvcoll where stvcoll_code = gorguid_domain_key and gorguid_ldm_name = 'colleges' and stvcoll_code = '<Enter your code here>'`
ETHNICITIES	STVETHN	STVETHN_CODE	`select gorguid_guid, stvethn_code, stvethn_desc from gorguid, stvethn where stvethn_code = gorguid_domain_key and gorguid_ldm_name = 'ethnicities' and stvethn_code = '<Enter your code here>`
	GORGUID		`Select gorguid_domain_key from gorguid Where gorguid_ldm_name='ethnicities-us';` **Note:** The new query is added to implement V3 and V4 versions of ethnicities API. This returns the new Hispanic or Latino, Not Hispanic or Latino and None records

Domain Name	Table Name	Domain Key Column	SQL Query
GRADE-SCHEMES	STVGMOD	STVGMOD_CODE	select gorguid_guid, stvgmod_code, stvgmod_desc from gorguid, stvgmod where stvgmod_code = gorguid_domain_key and gorguid_ldm_name = 'grade-schemes' and stvgmod_code = '<Enter your code here>'
INSTRUCTIONAL-METHODS	STVSCHD	STVSCHD_CODE	select gorguid_guid, stvschd_code, stvschd_desc from gorguid, stvschd where stvschd_code = gorguid_domain_key and gorguid_ldm_name = 'instructional-methods' and stvschd_code = '<Enter your code here>'
MARITAL-STATUS	STVMRTL	STVMRTL_CODE	select gorguid_guid, stvmrtl_code, stvmrtl_desc from gorguid, stvmrtl where stvmrtl_code = gorguid_domain_key and gorguid_ldm_name = 'marital-status' and stvmrtl_code = '<Enter your code here>'
RACES	GORRACE	GORRACE_RACE_CDE	select gorguid_guid, gorrace_race_cde, gorrace_desc from gorguid, gorrace where gorrace_race_cde = gorguid_domain_key and gorguid_ldm_name = 'races' and gorrace_race_cde = '<Enter your code here>'
Note: *Copy GORICCR script* is delivered as part of the Banner DB Upgrade 9.4 for RACES and MARITAL-STATUSES APIs that copies the existing GORICCR settings to the new RACE.RACIALCATEGORY and MARITALSTATUS.MARITALCATEGORY V4 GORICCR settings.			
RESTRICTION-TYPES	STVHLDD	STVHLDD_CODE	select gorguid_guid, stvhldd_code, stvhldd_desc from gorguid, stvhldd where stvhldd_code = gorguid_domain_key and gorguid_ldm_name = 'restriction-types' and stvhldd_code = '<Enter your code here>'

Domain Name	Table Name	Domain Key Column	SQL Query
SUBJECTS	STVSUBJ	STVSUBJ_CODE	select gorguid_guid, stvsubj_code, stvsubj_desc from gorguid, stvsubj where stvsubj_code = gorguid_domain_key and gorguid_ldm_name = 'subjects' and stvsubj_code = '<Enter your GUID here>'
ROOMS	SLBRDEF	SLBRDEF_BLDG_CODE || '- ^' || SLBRDEF_ROOM_NUMBER || '-^' || SLBRDEF_TERM_CODE_EFF	select gorguid_guid,slbrdef_bldg_code, slbrdef_room_number,slbrdef_term_code_eff from gorguid,SLBRDEF where gorguid_domain_surrogate_id = slbrdef_surrogate_id and gorguid_ldm_name = 'rooms' and slbrdef_bldg_code = '<Enter your building code>' and slbrdef_room_number = '<Enter your room number>' and slbrdef_term_code_eff = '<Enter your term here>'
ROOM-TYPES	GORGUID	GORGUID_DOMAIN_KEY = 'C'	Select gorguid_guid from gorguid Where gorguid_ldm_name='room-types' and gorguid_domain_key=<Enter your room-types code here>;
ACADEMIC-DISCIPLINES	STVMAJR	STVMAJR_CODE || ^ || STVMAJR_TYPE	Select gorguid_guid as GUID , to_char(STVMAJR_CODE || '^' || <Enter your academic-disciplines type here>) as DOMAIN_KEY from gorguid,STVMAJR Where gorguid_ldm_name='academic-disciplines' and gorguid_domain_key= to_char(STVMAJR_CODE || '^' || <Enter your academic-disciplines type here>) and STVMAJR_CODE = <Enter your academic-disciplines code here>;
EMAIL-TYPES	GTVEMAL	GTVEMAL_CODE	Select gorguid_guid as GUID , gtvemal_code as DOMAIN_KEY from gorguid,gtvemal Where gorguid_ldm_name='email-types' and gorguid_domain_key=gtvemal_code and gtvemal_code = <Enter your email-types code here>;

Domain Name	Table Name	Domain Key Column	SQL Query
LOCATION-TYPES	STVATYP	STVATYP_CODE	Select gorguid_guid as GUID , stvatyp_code as DOMAIN_KEY from gorguid,stvatyp Where gorguid_ldm_name='location-types' and gorguid_domain_key=stvatyp_code and stvatyp_code = <Enter your location-types code here>;
PHONE-TYPES	STVTELE	STVTELE_CODE	Select gorguid_guid as GUID , stvtele_code as DOMAIN_KEY from gorguid, stvtele Where gorguid_ldm_name='phone-types' and gorguid_domain_key=stvtele_code and stvtele_code = <Enter your phone-types code here>;
GRADE-MODES	STVGMOD	STVGMOD_CODE	Select gorguid_guid as GUID , stvgmod_code as DOMAIN_KEY from gorguid,stvgmod where gorguid_ldm_name='grade-schemes' and gorguid_domain_key=stvgmod_code and stvgmod_code =<Enter your grade-modes code here>;
SECTION-GRADE-TYPES	GORGUID		select gorguid_domain_key, gorguid_guid from GORGUID where gorguid_ldm_name=’section-grade-types’;
GRADE-CHANGE-REASONS	STVGCHG	STVGCHG_CODE	select gorguid_guid from GORGUID where gorguid_ldm_name=’grade-change-reasons’ and gorguid_domain_key=<Enter your gradeChangeReason code here>;
CREDIT-CATEGORIES	N/A	N/A	select gorguid_guid,GORGUID_DOMAIN_KEY from gorguid where gorguid_ldm_name = 'credit-categories' and GORGUID_DOMAIN_SURROGATE_ID = '<Enter 1 or 2>'

Domain Name	Table Name	Domain Key Column	SQL Query
DEPARTMENTS	STVDEPT	STVDEPT_CODE	select gorguid_guid,stvdept_code, stvdept_desc from gorguid, stvdept where stvdept_code = gorguid_domain_key and gorguid_ldm_name = 'departments' and stvdept_code = '<Enter your code here>'
INSTRUCTIONAL -PLATFORMS	GORINTG	GORINTG_ INTEGRATION_ CDE	select gorguid_guid, gorintg_integration_cde, gorintg_desc from gorguid, gorintg where gorintg_integration_cde = gorguid_domain_key and gorguid_ldm_name = 'instructional-platforms' and gorintg_integration_cde = '<Enter your code here>'
SUBTERM	SOBPTRM	SOBPTRM_TERM_CODE||'-'||SOBPTRM_PTRM_CODE	select gorguid_guid, sobptrm_term_code, sobptrm_ptrm_code from gorguid_guid, sobptrm where gorguid_ldm_name = 'subterm' and sobptrm_term_code = '<Enter your term code here>' and sobptrm_ptrm_code = '<Enter your part of term code here>'
TERM	SOBTERM	SOBTERM_TERM_CODE	select gorguid_guid,sobterm_term_code from gorguid, sobterm where sobterm_term_code = gorguid_domain_key and gorguid_ldm_name = 'term' and sobterm_term_code = '<Enter your code here>'
YEAR	STVACYR	STVACYR_CODE	select gorguid_guid,stvacyr_code, stvacyr_desc from gorguid, stvacyr where stvacyr_code = gorguid_domain_key and gorguid_ldm_name = 'year' and stvacyr_code = '<Enter your code here>'

Domain Name	Table Name	Domain Key Column	SQL Query
BUILDINGS	SLBBLDG	SLBBLDG_BLDG_CODE	select gorguid_guid, slbbldg_bldg_code from gorguid, slbbldg where slbbldg_bldg_code = gorguid_domain_key and gorguid_ldm_name = 'buildings' and slbbldg_bldg_code = = '<Enter your code here>'
INSTRUCTIONAL-EVENTS	SSRMEET	SSRMEET_TERM_CODE || '-^' || SSRMEET_CRN || '-^' || SSRMEET_CATAGOR	select gorguid_guid,ssbsect_term_code, ssbsect_crn from gorguid, ssrmeet, ssbsect where ssrmeet_surrogate_id = gorguid_domain_surrogate_id and ssbsect_crn = ssrmeet_crn and ssbsect_term_code = ssrmeet_term_code and gorguid_ldm_name = 'instructional-events' and ssbsect_crn = '<Enter your crn here>' and ssbsect_term_code = '<Enter your term here>'
PERSONS	SPRIDEN	SPRIDEN_PIDM	select gorguid_guid, spriden_id, spriden_pidm, spriden_last_name from gorguid, spriden where spriden_pidm = gorguid_domain_key and gorguid_ldm_name = 'persons' and spriden_id = '<Enter your bannerId here>'
PERSON-FILTERS	GLBEXTR	GLBEXTR_APPLICATION || '-^' || GLBEXTR_SELECTION || '-^' || GLBEXTR_CREATOR_ID || '-^' || GLBEXTR_USER_ID	Select gorguid_guid as GUID , GLBEXTR_APPLICATION || '-^' || GLBEXTR_SELECTION || '-^' || GLBEXTR_CREATOR_ID || '-^' || GLBEXTR_USER_ID as DOMAIN_KEY from gorguid,GLBEXTR Where gorguid_ldm_name='person-filters' and gorguid_domain_key= GLBEXTR_APPLICATION || '-^' || GLBEXTR_SELECTION || '-^' || GLBEXTR_CREATOR_ID || '-^' || GLBEXTR_USER_ID And GLBEXTR_APPLICATION = <Enter value> And GLBEXTR_SELECTION = <Enter value> And GLBEXTR_CREATOR_ID = <Enter value> And GLBEXTR_USER_ID = <Enter value>;

Domain Name	Table Name	Domain Key Column	SQL Query
SECTIONS	SSBSECT	SSBSECT_TERM_CODE,SSBSECT_CRN	Select ssbsgid_guid, ssbsgid_term_code,ssbsgid_crn from ssbsgid where ssbsgid_term_code='<Enter your term code here>' and ssbsgid_crn='<Enter your CRN here>'
DIVISIONS	STVDIVS	STVDIVS_CODE	Select gorguid_guid as GUID , stvdivs_code as DOMAIN_KEY from gorguid,stvdivs Where gorguid_ldm_name='divisions' and gorguid_domain_key=stvdivs_code and stvdivs_code = <Enter your division code here>;
COURSES	SCBCRSE	SCBCRSE_SUBJ_CODE,SCBCRSE_CRSE_NUMB,SCBCRSE_TERM_CODE_EFF	Select scbcgid_guid ,scbcgid_subj_code,scbcgid_crse_numb ,scbcgid_term_code_eff from scbcgid a where scbcgid_subj_code='<Enter your subject code here>'and scbcgid_crse_numb='<Enter your course numberhere>' and scbcgid_term_code_eff=(selectmax(scbcgid_term_code_eff) from scbcgid b where a.scbcgid_subj_code=b.scbcgid_subj_code and a.scbcgid_crse_numb=b.scbcgid_crse_numb and scbcgid_term_code_eff<='<Enter your term code here>')
SECTION-REGISTRATIONS	SFRSTCR	SFRSTCR_PIDM,SFRSTCR_TERM_CODE,SFRSTCR_CRN	Select sfrrgid_guid,sfrrgid_pidm,sfrrgid_term_code, sfrrgid_crn from sfrrgid where sfrrgid_pidm='<Enter your pidm here' and sfrrgid_term_code='<Enter your term code here>' and sfrrgid_crn='<Enter your CRN here>'

Integration Configuration Settings Form (GORICCR)

The following table specifies the setup of various integration configuration elements required for APIs.

A script is being delivered to insert the integration configuration elements into the GORICCR table with UPDATEME value. During implementation, the institutions have to set these values based on their requirements.

Note: *Copy GORICCR script* is delivered as part of the Banner DB Upgrade 9.4 for RACES and MARITAL-STATUSES APIs that copies the existing GORICCR settings to the new RACE.RACIALCATEGORY and MARITALSTATUS.MARITALCATEGORY V4 GORICCR settings.

API	GORICCR Configuration Setting	Translation	Example
PERSON			
	PERSONS.MATCHRULE	Not available	In the Value field of this record, identify the Common Matching Rule that should be used in the process of creating new person records.
	PERSON.NAMES.NAMETYPE	Birth	Create a GORICCR record to designate the Birth Name type defined in the GTVNTYP table. For example, *BRTH*.
	PERSON.LOCATIONTYPES	For each of the location type contained in the **Translation** field, indicate the comparable Banner location type.	• home • school • vacation • billing • shipping • mailing • business • parent • family • other

API	GORICCR Configuration Setting	Translation	Example
	PERSON.PHONETYPES	For each of the phone type contained in the **Translation** field, indicate the comparable Banner phone type.	• mobile • home • school • vacation • business • fax • pager • tdd • parent • family • other
	PERSON.EMAILTYPES	For each of the email types contained in the **Translation** field, indicate the comparable Banner email type.	• personal • business • school • parent • family • other
	PERSON.ADDRESSES.POSTAL.CODE	Unknown	In the event that a postal code is not received from the external system, enter a default postal code to be used.
	PERSON.ADDRESSES.REGION	Unknown	Enter a default State/Province code to be used if the State/Province is not passed into Banner from an external source. The value entered must be defined in the State/Province Code Validation Form (STVSTAT).
	PERSON.NAMES.NAMETYPE	Birth	Create a GORICCR record to designate the Birth Name type defined in the GTVNTYP table. For example, *BRTH*.
	PERSON.ADDRESSES.ADDRESSTYPE	For each of the address type contained in the **Translation** field, indicate the comparable banner address type.	Home, Mailing, Work

API	GORICCR Configuration Setting	Translation	Example
	PERSON.EMAILS.EMAILTYPE	For each of the email type contained in the **Translation** field, indicate the comparable banner email type.	Work, Personal, Institution
	PERSON.PHONES.PHONETYPE	For each of the phone type contained in the **Translation** field, indicate the comparable banner phone type.	Work, Mobile, Home
	PERSON.UPDATESSN	The client sets the value. Enter the decision (Y (update) or N (do not update)) as to whether the Banner SSN should be updated from third party system. Prior to the introduction of this parameter, an existing SSN was not updated. If no SSN existed, however, the SSN was populated with the third party systems value.	Yes or No
	MARITALSTATUS. MARITALCATEGORY	A GORICCR record is generated automatically for each value in the STVMRTL validation table.	Match the values to one of the values in the **Translation** field: • single • divorced • widowed • separated • married
	RACE.RACIALCATEGORY	A GORICCR record will be generated automatically for each value in the GORRACE table.	Match the values to one of the following values in the **Translation** field: • alaskaNative • americanIndian • asian • black • nativeHawaiian • otherPacificIslander • white

API	GORICCR Configuration Setting	Translation	Example
ORGANIZATION	ORGANIZATION.LOCATIONTYPES	For each of the organization location types contained in the **Translation** field, indicate the comparable Banner organization location type.	• business • pobox • main • branch • region • support • matchingGifts • other
	ORGANIZATION.EMAILTYPES	For each of the organization email types contained in the **Translation** field, indicate the comparable Banner organization email type.	• sales • support • general • billing • legal • hr • media • matchingGifts • other
	ORGANIZATION.PHONETYPES	For each of the organization email types contained in the **Translation** field, indicate the comparable Banner organization phone type.	• main • branch • region • support • billing • matchingGifts • other
INSTRUCTIONAL-EVENTS	INSTRUCTOR.CONTRACT.TYPE	Not Available	Indicate the workload contract rule (from STVFCNT) that will be assigned to Instructors who will be assigned to sections.
COURSE			
	COURSE.ACADEMICLEVEL	Not Available	Enter the level to be defaulted to the course if no level is passed to Banner. The value entered must be defined in the Level Validation (STVLEVL) form.
	COURSE.COLLEGE	Not Available	Enter the college code to be defaulted to the course if no college is passed to Banner. The value entered must be defined in the College Code Validation (STVCOLL) form.

API	GORICCR Configuration Setting	Translation	Example
	COURSE.CREDITS.MINIMUM	Not Available	Enter the minimum number of credits to be defaulted to the course if none is passed to Banner. This is a mandatory value and must be provided in order to successfully generate the course record in Banner. A value of zero is recommended.
	COURSE.GRADESCHEME	Not Available	Enter the default grade mode to be defaulted to the course if no grade code is passed to Banner. The value entered must be defined in the Grade Mode Validation (STVGMOD) form.
	COURSE.INSTRUCTIONALMETHOD	Not Available	Enter the schedule type code to be defaulted to the course if no schedulate type is passed to Banner. The value entered must be defined in the Schedule Type Validation (STVSCHD) form.
SECTION			
	SECTIONDETAIL.DURATION.UNIT	Days Months	For each of the four duration codes contained in the Translation field (Days, Weeks, Months, Years), indicate the comparable Banner value as defined in the Duration Code Validation (GTVDUNT) form.
	SECTIONDETAIL.STATUS	Open Cancelled	For each of the four status codes contained in the Translation field (Open, Closed, Pending, Cancelled), indicate the comparable Banner value as defined in the Section Status Code Validation (STVSSTS) form.
	SECTIONDETAIL.DURATION. DEFAU LT	NULL	The default duration defined in days used when end date is NULL in request. (this has to be a numerical number only). For example, *2*.

API	GORICCR Configuration Setting	Translation	Example
	SECTIONDETAIL.CE_GRADABLE	Update the Value-Description, Y-Yes/N-No	Default Section Gradable Indicator This setting was developed to provide the means to designate whether or not the **Gradable** indicator should be checked in the Schedule (SSASECT) form. As part of the baseline Banner processing, this indicator will allow/disallow the entry of a midterm or final grade in the Class Roster forms.
	SECTIONDETAIL.FEE_ASSMT	Update the Value-Description, Y-Yes/N-No	Default Section Fee Assessment
	SECTIONDETAIL.WEB_DISPLAY	Update the Value-Description, Y-Yes/N-No	Default Section Display on Web
SECTION REGISTRATION	INTEGRATION.PARTNER	Elevate (UPDATE ME)	Code must be defined in GORINTG.
	INTGRTN.CE.ADM.TYPE.DEFAULT		Data Dependency: The Admission Type code to be used when generating the Admissions record. This is initially validated against the STVADMT table when entered.
	INTGRTN.CE.APP.STATUS. DEFAULT		Data Dependency: The Student Status code to be used when generating the General Student record. This is initially validated against the STVSTST table when entered.

API	GORICCR Configuration Setting	Translation	Example
	INTGRTN.CE.DECISION. DEFAULT		Data Dependency: The client should specify the decision code to be applied to the admissions application. To generate the General Student record, the decision code will need to be defined as “Applicant Acceptance” (STVAPDC_STDN_ACC_IND = Y). This is initially validated against the STVAPDC table when entered.
	INTGRTN.CE.MAJOR.DEFAULT		The client should specify the Major code to be used when create the curriculum records. This is initially validated against the STVMAJR table when entered.
	INTGRTN.CE.PROGRAM. DEFAULT		The client should specify the Program code to be used when create the curriculum records. This is initially validated against the SMRPRLE table when entered.
	INTGRTN.CE.RESIDENCE. DEFAULT		Data Dependency: The Residence code to be used when generating the Admissions record. This will default to the General Student record. This is initially validated against the STVRESD table when entered.
	INTGRTN.CE.STU.STATUS. DEFAULT		Data Dependency: The Student Status code to be used when generating the General Student record. This is initially validated against the STVSTST table when entered.

API	GORICCR Configuration Setting	Translation	Example
	INTGRTN.CE.STU.TYPE.DEFAULT		Data Dependency: The Student Type code to be used when generating the Admissions record. This value will be defaulted to the General Student record. This is initially validated against the STVSTYP table when entered.
	REGISTRATION.STATUS.REASON	Withdrawn (UPDATE ME)	The value entered in this field must be matched to the STVRSTS_VOICE_TYPE. If the translation value is `Withdrawn`, STVRSTS_VOICE_TYPE should be *W*
	REGISTRATION.STATUS.REASON	Pending (UPDATE ME)	If the translation value is `Pending`, STVRSTS_VOICE_TYPE should be *L*
	REGISTRATION.STATUS.REASON	Registered (UPDATE ME)	If the translation value is `Registered`, STVRSTS_VOICE_TYPE should be *R*
	REGISTRATION.STATUS.REASON	Dropped (UPDATE ME)	If the translation value is `Dropped`, STVRSTS_VOICE_TYPE should be *D*
	REGISTRATION.STATUS.REASON	Canceled (UPDATE ME)	If the translation value is `Canceled`, STVRSTS_VOICE_TYPE should be *D*
ROOMS AND ROOM-TYPES			
	ROOM.OCCUPANCY.ROOMLAYOUTTYPE	Classroom	Indicate the room type to be considered when retrieving active rooms for consideration in the Room Scheduling functionality.
	ROOM.ROOMTYPE	Indicate the room type to be considered when retrieving active rooms for consideration in the Room Scheduling functionality in Elevate.	classroom

API	GORICCR Configuration Setting	Translation	Example
REGISTRATION-CURRICULUM PROCESSING	INTGRTN.CE.CREATE.ADMISSIONS	Controls if an Admissions application and ADMISSIONS Curriculum/ Field of Study should be created	
	INTGRTN.CE.CREATE. CURRICULUM	Controls the creation of a separate LEARNER curriculum record based on the GORICCR default values.	This setting must be Y if INTGRTN.CE.CREATE.ADMISSIONS is Y.
	INTGRTN.CE.COPY.STUDENTREC	Indicates if the previous General Student record should be copied to the new term	
	INTGRTN.CE.CREATE. STUDENTREC	Used in conjunction with re-admittance processing. This setting denotes whether or not the re-admit process should be executed automatically or whether there is a preference for manual intervention through the use of the existing Admissions/Quick Admit processing to create the appropriate General Student and LEARNER Curriculum/Study of Field records	
	INTGRTN.CE.REINSTATE.INELIG	Controls whether or not a student should be reinstated if the current General Student record is not eligible to register as denoted by the Student Status code.	
	INTGRTN.CE.PROGRAM. DEFAULT	Indicates the program that should be used to generate the curriculum records for the individual student.	

API	GORICCR Configuration Setting	Translation	Example
	INTGRTN.CE.MAJOR.DEFAULT	in the Quick Entry Rules form (SAAQKER), it is necessary to define the major that should be used when generating the curriculum records for the individual student.	This value will be validated against the Major, Minor, Concentration Code Validation table (STVMAJR).
	INTGRTN.CE.DECISION. DEFAULT	For the Quick Admit processing, a Decision Code is required and, when entered, will be validated against the Admissions Application Decision Code Validation table (STVAPDC).	
	INTGRTN.CE.STU.STATUS. DEFAULT	Complying with the requirements of the Quick Admit processing, a Student Status Code is required and, when entered, will be validated against the Student Status Code Validation table (STVSTST).	
	INTGRTN.CE.STU.TYPE.DEFAULT	To maintain the requirements of the Quick Admit processing, a Student Type Code is required and, when entered, will be validated against the Student Type Code Validation table (STVSTYP).	
	INTGRTN.CE.RESIDENCE. DEFAULT	Enter a Student Residence code to be used to populate the Admissions record which when entered, will be validated against the Residence Code Validation table (STVRESD).	
	INTGRTN.CE.ADM.TYPE. DEFAULT	Enter an Admissions Type which, when entered, will be validated against the Admissions Type Code Validation table (STVADMT).	

API	GORICCR Configuration Setting	Translation	Example
	INTGRTN.CE.APP.STATUS.DEFAULT	Enter an Admissions Status which, when entered, will be validated against the Admissions Application Status Code Validation table (STVAPST).	
	INTGRTN.CE.LEVEL.DEFAULT	Enter the level that should default if the Program is not being used. This information will be validated against the Level Validation Table (STVLEVL)	
	INTGRTN.CE.COLLEGE.DEFAULT	Enter the college code that should default if the Program is not being used. This information will be validated against the College Validation Table (STVCOLL)	
	INTGRTN.CE.DEGREE.DEFAULT	Enter the degree code that should default if the Program is not being used. This information will be validated against the Degree Code Validation Table (STVDEGC)	
	INTGRTN.CE.CAMPUS.DEFAULT	Enter the campus code that should default if the Program is not being used. This information will be validated against the Campus Validation Table (STVCAMP). Note – this is an optional value.	