



Banner Student API Release Guide

Release 9.4
October 2015



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Revision History

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Introduction

This *Release Guide* documents the Banner® Student Application Programming Interface (API) 9.4 release enhancements.

For information on the list of all the APIs, refer to *Ellucian XE Registry* on the Ellucian Hub.



Note: The `rel-studentapi-9.4` is the tag name used for this release source code to generate the package. You can retrieve the source code from our public repository server to your repository using the `git clone --bare ssh://git@banner-src.ellucian.com/banner/apps/banner_student_api_app` command. This requires you to have requested access from ActionLine and to have installed the private SSH key on your local repository server.

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” on page 4](#)
- [“Application server” on page 5](#)
- [“Middle Tier \(application server\) platforms” on page 5](#)
- [“Ellucian software” on page 6](#)

Oracle Database

The application is supported on Oracle Database 11.1.0.7 and 11.2.0.2:

- Minimum version for 11gR1: 11.1.0.7
- Minimum version for 11gR2: 11.2.0.2

Application server

The application is supported on the following application servers:

- Oracle Fusion Middleware 11gR1 and 11gR2 using WebLogic 10.3.3, 10.3.4, 10.3.5, and 10.3.6.
- Apache Tomcat 6 and 7

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

Ellucian software

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

- Banner DB Upgrade 9.3
- Banner General 8.7.5
- Banner Student 8.8.3
- Banner Accounts Receivable 8.4.5
- (Optional) EMS v1.0.1
- (Optional) Banner Event Publisher 1.2.3
- (Optional) INTCOMP 8.0.2.6



Note: EMS v1.0.1 and BEP 1.2.3 are needed for clients using HEDM 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 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, the institutions have to set these values based on their requirements. The script is delivered as part of Banner XE DB upgrade 9.2.

Integration Configuration Settings Form (GORICCR)

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



Note: This section documents only the integration configuration requirements for the APIs delivered in this release. Refer to the appropriate previous release guides for APIs delivered in prior releases.

API	GORICCR Configuration Settings	Translation	Example
	SECTIONDETAIL.CE_GRADABLE	Update the Value-Description, Y-Yes/N-No	HEDM Default Section Gradable Indicator
	SECTIONDETAIL.FEE_ASSMT	Update the Value-Description, Y-Yes/N-No	HEDM Default Section Fee Assessment
	SECTIONDETAIL.WEB_DISPLAY	Update the Value-Description, Y-Yes/N-No	HEDM Default Section Display on Web

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.

The following API is added for this release.

Crosswalk GUID for Ethnicities

The following GUID is included for the APIs available in this release.

Domain Name	Table Name	Key Columns	SQL Query
Ethnicities	GORGUID		<code>Select gorguid_domain_key from gorguid Where gorguid_ldm_name='ethnicities-us';</code>

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.

Banner Student API Enhancements

The Banner Student API 9.4 release offers you the following enhancements.

- Edit section schedule and class instances schedule.
- Ethnicity V3 now supports new ethnicity values.

Changed APIs

The following APIs are changed for this release to support the 9.4 release enhancements.

- [“Sections” on page 9](#)
- [“Person” on page 9](#)
- [“Section Registrations” on page 10](#)
- [“Ethnicity” on page 10](#)
- [“Instructional Events” on page 10](#)

Sections

This API is changed to add configuration to disable grading, fee assessment, and display of Elevate sections in Self-service. The configuration is driven by the GORICCR form and Sections API.

Person

The following changes are made to this API.

- The Person API’s phone number validation is changed so that the phone number will not reject the person API messages when phone number is invalid.
- The Person API is changed to accept only new ethnicity code based on changes to the ethnicity API.

Section Registrations

This API is changed to support the back-dated registration processing for administrative users. Section registration was happening only between a particular start and end date.

For example, if the section registration start date is 1st of October, 2015, and the end date is 15th of October, 2015, the registrar/administrator will be able to do the section registration even after 15th of October, 2015.

Ethnicity

This API is changed to indicate that the API now returns only new ethnicities. Also, this API now supports only GET operations for V3. This API will now support only GET method for V3 version:

- Not Hispanic or Latino
- Hispanic or Latino
- None

Instructional Events

This API is changed to promote the instructional events to V3 schema.

Resolutions

The *Banner Student API Resolutions Report 9.4* is a companion to this release guide. The Resolutions Report provides summary information about the change requests that are resolved in Banner Student API 9.4. Use the following steps to access the Resolutions Report on the Ellucian Support Center:

1. Go to the Ellucian Client Support web site: <http://www.ellucian.com/Solutions/Ellucian-Client-Support>.
2. Click the **Ellucian Hub** button to log in to the Ellucian Hub.
3. Choose the Ellucian Download Center application.

or

Choose the Ellucian Support Center application.