



Coursedog

Banner Ethos Integration Guide



Find more resources at
Coursedog.freshdesk.com



Banner Ethos Integration Guide

This document outlines credentials, configuration, and extension requirements for integrating Coursedog with Banner Ethos

Table of Contents

Banner Ethos Integration Guide	2
Table of Contents	2
Introduction	3
Integration Requirements	3
Credentials	3
Access Control	3
Add an unrestricted API key	3
Ellucian Ethos Resources Required	4



Introduction

This document describes the technical requirements and access required for Coursedog to connect to Ellucian Banner Ethos.

Integration Requirements

Coursedog will invoke the Ellucian Ethos APIs exposed by the host URL at <https://integrate.elluciancloud.com>.

Credentials

Coursedog will need authorization keys for each Banner environment connected to Ethos that is to be integrated with our platform. This usually includes:

- The Ethos authorization key for the integration configured against the Banner **test or QA environment**
- The Ethos authorization key for the integration configured against the Banner **production environment**

Add API key

For CD follow below instructions to create a unrestricted API key

1. On the Ethos Integration header bar, click the gear button and then select the environment where you want to perform this procedure.
2. On the Ethos Integration header bar, click Applications.
3. On the Applications page, locate and click the application name.
4. On the Application Overview page, click the API Keys tab.
5. Click Add API Key.
6. Click Add API key with no IP address restrictions. (*see optional IP restrictions in next section*)
7. Click Add.



Access Control

[Optional] Set API key to have IP address restriction

Non-production:

- 89.187.178.178/32
- 18.219.207.201/32
- 18.218.30.254/32
- 3.23.218.154/32
- 18.190.119.221/32

Production:

- 89.187.178.178/32
- 18.190.84.87/32
- 3.22.31.120/32

Ellucian Ethos Resources Required

The Coursedog integration with Banner Ethos requires access to the following set of Ethos resources. The table also outlines the operations that will be executed (GET, POST, PUT, DELETE) against those resources.

API Name	Security Object	Method	Description
academic-levels	API_ACADEMIC_LEVELS	GET	The level of instruction for a course or program of study.
academic-periods	API_ACADEMIC_PERIODS	GET	Defines the time periods used by institutions of higher education. An institution can define the start and end dates for academic years, terms, and sub-terms. An academic term can also specify the academic year in which it occurs and the academic term that immediately precedes it. Similarly, an academic sub-term can specify the academic term in which it occurs and the academic sub-term that immediately precedes it.
academic-programs	API_ACADEMIC_PROGRAMS	GET	An offering by an institution that represents a combination of courses and requirements leading to a degree, diploma, or certificate for a defined set of majors, minors, or concentrations. Academic programs are defined in Banner Curriculum, Advising and Program Planning Module (CAPP)- SMAPRLE form. This is a program definition form where minimum details of a program are first defined. After a program is defined in SMAPRLE, curriculum rules are used to define the academic programs in use at the institution using the SOACURR form. Rules such as valid majors, minors, concentrations can be



API Name	Security Object	Method	Description
			defined for that program.
administrative-instructional-methods	API_ADMI_INSTRUCTIONAL_METHODS	GET	The methods, styles, or formats for which hours are established.
administrative-periods	API_ADMINISTRATIVE_PERIODS	GET	Endpoint for list of time periods defined for administrative purposes
buildings	API_BUILDINGS	GET	Buildings define the physical structures that contain rooms. These are used in scheduling course sections. The physical location (site) is also specified for each building.
course-categories	API_COURSE_CATEGORIES	GET	A user defined list of valid course categories.
course-levels	API_COURSE_LEVELS	GET	A designation of the level of complexity of an academic course.
course-statuses	API_COURSE_STATUSES	GET	The course statuses entity contains the user defined list of statuses for courses.
course-title-types	API_COURSE_TITLE_TYPES	GET	The Course Title Types entity specifies a valid list of user defined course title types (e.g. short title, long title).
courses	API_COURSES	GET POST PUT DELETE	A course is a unit of teaching on an individual subject. A grade and academic credit can be awarded on successful completion of the course. Each course can be offered at different levels of complexity, from introductory to advanced, or in-depth, study of a specialized topic, and at various academic levels. Multiple instructional methods may be used in teaching each course, and different grade schemes and credit specifications can apply to it. In the case of a multidisciplinary course, teaching responsibilities may be shared between two or more departments (organizations) within the academic institution.
credit-categories	API_CREDIT_CATEGORIES	GET	Credit categories include academic credits that are grouped by purpose and what they count towards. Typical groupings include continuing education, institution (college credit), or transfer.
educational-institution-units	API_EDU_INST_UNITS	GET	This model defines the structure for exchanging information about operational units within an educational institution.
educational-institutions	API_EDUCATIONAL_INSTITUTIONS	GET	Educational institutions are part of the hierarchy of entities that capture structures internal and external to the institution. This can range from vendors to academic departments.
grade-schemes	API_GRADE_SCHEMES	GET	A specification for how grades should be calculated and reported for a course.
instructional-delivery-meth	API_INSTRUCT_DELIVERY_ME	GET	Endpoint for list of valid delivery methods



API Name	Security Object	Method	Description
ods	THOD		used for instruction.
instructional-events	API_INSTRUCTIONAL_EVENTS	GET POST PUT DELETE	The Instructional Events entity contains a set of meetings or gatherings of students and teachers such as lectures, discussions, or lab experiments that are scheduled in a specific learning environment suitable for the type of event. An instructional event is associated with a course section and an appropriate instructional method. Instructional events can be recurrent and are scheduled to occur in a specific location.
instructional-methods	API_INSTRUCTIONAL_METHODS	GET	An instructional method contains details about the method or format in which a course is taught.
instructors	API_INSTRUCTORS	GET	Information about individuals who provide instruction at an educational institution.
persons	API_PERSONS	GET	Persons is used to structure the basic demographic information of the people associated with higher education. People fulfill different and multiple roles within higher education. This entity only contains properties that are common to all roles. Properties associated with the roles people fill are contained in role-specific entities (students, constituents).
room-characteristics	API_ROOM_CHARACTERISTICS	GET	Attributes that could be attached to the rooms.
rooms	API_ROOMS	GET	A room is a portion of space within a building or other structure, separated by walls or partitions from other parts. In HEDM, it primarily refers to classrooms of any kind, as well as offices at an academic institution. Each room exists within a building, and has at least one layout type (classroom, theater, etc.), which defines its maximum occupancy.
section-crosslists	API_SECTION_CROSSLISTS	GET	Section crosslists represent lists of sections of different courses, usually in different departments/subject areas, that meet as a single class. Typically cross-listed sections meet together, cover the same course material, and have a single instructor (or set of instructors.) The entity requires that at least one section be specified. Each section in the cross-list can be optionally specified as "Primary" or "Secondary". The entity can also optionally specify how wait-lists are applied to the cross-listed sections along with the maximum enrollment and the maximum wait-list length across all cross-listed sections.
section-instructors	API_SECTION_INSTRUCTORS	GET POST PUT	The Section Instructors entity provides information about assignments of individuals as instructors to sections. This entity includes references to:



API Name	Security Object	Method	Description
		DELETE	<ul style="list-style-type: none">• The person assigned as an instructor to the section.• The section to which the instructor is assigned.• The instructional events associated with the assignment of the instructor to the section, if applicable.• The method, style, or format of instruction associated with the instructor's involvement with the section (for example, 'Lecture', 'Lab').• An indication whether the instructor is identified as the primary instructor for the section.• The amount of work attributed to the instructor for the assignment.• The percentage of the total responsibility for managing the instructional method's activities attributed to the instructor for the assignment.• The first and the last dates associated with the instructor's assignment.
section-statuses	API_SECTION_STATUSES	GET	The list of user defined statuses that may be applied to a section.
section-title-types	API_SECTION_TITLE_TYPES	GET	The valid list of user defined section title types (e.g. short title, long title).
sections	API_SECTIONS	GET POST PUT	A section is an instance of a course that is used to group students interested in taking the course. When students are enrolled in a course, they are actually enrolled in one of the sections of that course. All sections of a course share the same content associated with the course. In addition to the attributes of the course, each section may: <ul style="list-style-type: none">• exist within a specific academic period.• utilize a certain instructional platform.• be offered at a distinct site (campus) of the institution (for face-to-face instructional events)
sections-maximum	API_SECTIONS	GET POST PUT	A section is an instance of a course that is used to group students interested in taking the course. When students are enrolled in a course, they are actually enrolled in one of the sections of that course. All sections of a course share the same content associated with the course. Sections maximum is an alternate representation of sections that retrieves more details of Banner sections from SSBSECT table. The API includes additional



API Name	Security Object	Method	Description
			attributes of a course associated with section from SCBCRSE, academic levels from SCRLEVL, grade schemes from SHRGSCH, instructional events from SSRMEET and instructors from SIRASGN.
sites	API_SITES	GET	Sites define physical locations utilized by organizations such as an institution, college, or department. Each site is specified along with the organization associated with it. For higher education, sites often represent campuses.
subjects	API_SUBJECTS	GET	Subjects define a topic or category used to group together a branch of knowledge which can be used in scheduling courses.
extension-codes	API_EXTENSION_CODES	GET POST PUT DELETE	Configure Ethos Extension Codes
extension-definitions	API_EXTENSION_DEFINITIONS	GET POST PUT DELETE	Configure Ethos Extension Definitions
extension-versions	API_EXTENION_VERSIONS	GET POST PUT DELETE	Configure Ethos Extension Versions