



College Scheduler Workday Installation Guide

1.0.0.0 Version

This document details the procedures necessary to install the College Scheduler integration into Workday environments.

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College Scheduler Installation Guide - Workday Student

[Overview](#)

[Setup](#)

[Academic Period Availability and Assignment](#)

[Base API URL and Tenant](#)

[API Permissions](#)

[Open Seats Custom Report](#)

[Open Seat Custom Report Requirements](#)

[Parameters](#)

[Response](#)

[Raw Data Example](#)

[Custom Report API Security](#)

[Single Sign-On \(SSO\) Setup](#)

Overview

[College Scheduler](#) by Civitas Learning offers a Web based class scheduling system for student use at colleges and universities. Students can build optimized class schedules that take into account their personal needs (like work, athletics, or leisure). The integration of College Scheduler into Workday allows these schedules to be saved back into Workday for seamless registration for each available term.

At a high level, the College Scheduler system works by calling the latest version of Workday Integration API, as documented in the [Workday Web Services \(WWS\) Directory](#). There is an additional requirement of a Custom Report to support up-to-the-minute section-level seat count information. Lastly, the system must then be configured for student login through your Single Sign-On (SSO) provider, such as Apereo CAS or similar solution.

Setup

Academic Period Availability and Assignment

College Scheduler displays only the Academic Periods that are available for scheduling and registration. There are two key dates in *Workday Academic Period Date Control* that affect the availability of Terms available in College Scheduler:

*Date Control	Use Course Section Start?	Date
× Last Add Date	<input type="checkbox"/>	01/20/2020 11:59 PM
× Drop with W Grade End	<input type="checkbox"/>	04/03/2020 11:59 PM
× Drop without Record End	<input type="checkbox"/>	01/20/2020 11:59 PM
× Final Grading End	<input type="checkbox"/>	05/15/2020 11:59 PM
× Final Grading Start	<input type="checkbox"/>	04/30/2020 12:00 AM
× Student Access to Open Course Section List	<input type="checkbox"/>	10/28/2019 12:00 AM
× Program Completion Application Deadline	<input type="checkbox"/>	03/01/2020 12:00 AM

Name	Definition	Required?
Student Access to Open Course Section List	STU_ACCESS_OPEN_COU RSE_SEC_LIST	Yes

Last Add Date	LAST_ADD_DATE	No
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So, if an Academic Period Date Control for the *Student Access to Open Course Section List* field is in less than or equal to the current date and there is no *Last Add Date* then the associated Term will be ingested into College Scheduler. If there is a *Last Add Date* and it is less than or equal to the current date, then the term will not be ingested into College Scheduler.

Key point: All student records must be associated with at least one active Academic Period in order to be deemed “term active” and therefore able to login and use College Scheduler. Usage of College Scheduler for Workday Student is unsupported without this assignment of Academic Period, at this time.

Base API URL and Tenant

A major element of the integration to Workday from College Scheduler is to identify and share the Base URL of the Workday Web Services. Example:

<https://services1.myworkday.com/ccx/service>

In addition, most Workday API service calls will include your environment’s “tenant” in the API request. This is usually appended to the ISU credentials in a `wsse:Security` element of the SOAP envelope of each request.

API Permissions

College Scheduler works by ingesting course and section data from the Workday system so all possible schedules available to the student are generated with the College Scheduler user experience. This data is pulled on a recurring basis from the Workday Web Services (WWS) API, typically once every hour, in order to ensure the course and section information is as current as possible.

The Workday API Services used in the College Scheduler integration are as follows:

Service Name	Operations
Academic_Foundation	Get_Maintained_Academic_Periods_Request
Human_Resources	Get_Workers_Request
Student_Records	Get_Course_Sections_Request Get_Meeting_Patterns_Request Get_Student_Courses_Request

	Get_Student_Course_Registrations_Request Get_Student_Schedules_for_Registration_Request Put_Student_Schedule_for_Registration_Request
--	---

To call the services above, the College Scheduler implementation will require username and credentials to your chosen Integration Security User API credential. This can be configured as you see fit, whether shared across all of your Workday application integrations or made specific to the College Scheduler application. Configuration of the Integration Security User within Workday is beyond the scope of this document.

Open Seats Custom Report

In order to keep College Scheduler’s catalog files as up to date as possible, the system retrieves section-level seat count (e.g. seats remaining, seats filled, waitlist capacity) information approximately every minute. As of this writing, there is not a standard WWS API endpoint that can support the regular retrieval of delta seat count information as required by College Scheduler. As such, we require customers to implement a custom report to provide this data.

Open Seat Custom Report Requirements

As part of the implementation of the Open Seats Custom Report, the College Scheduler implementation team will work with you to develop a report that meets the following requirements:

Parameters

Returns a “delta” of seat count information taking the following parameters:

Parameter Name	Description
LastUpdated	A <code>datetime</code> representing the start of a time period after which to return changes to seat counts
AcademicPeriod!Academic_Period_ID	A <code>string</code> representing the term code for which seat count information is being retrieved.
format	A <code>string</code> representing the format used for the results (e.g. <code>simplexml</code> or <code>json</code>)

Response

Returns the following data elements in each entry returned:

Report Entity Name	Description
Term	A string representing the term name/title for which seat count information is being retrieved.
TermCode	A string representing the term code for which seat count information is being retrieved.
CourseSectionDefinitionID	A string representing the Definition ID of the related section
Timestamp	A datetime representing the date and time of the call to the Custom Open Seats Report
SeatCapacity	A decimal representing the overall seat capacity for the related section
SeatsFilled	A decimal representing the seats filled for the related section
SeatsOpen	A decimal representing the seats remaining capacity for the related section
WaitlistCapacity	A decimal representing the waitlist capacity for the related section
WaitlistFilled	A decimal representing the waitlist seats that have been taken for the related section
WaitlistOpen	A decimal representing the waitlist seats remaining for the related section
Section_Listings	A collection of related sections for the given open seat entry
RegistrationNumber (child of Section_Listings)	A string representing the Definition ID of the related section
ReserveCapacity	A decimal representing the overall seat capacity reserved for specific students with a special eligibility
SectionStatus	A string representing the status of the related section

Raw Data Example

----Request-----

```
https://services1.myworkday.com/ccx/service/customreport2/example_tenant/CollegeScheduler_API_User/CollegeScheduler_-_Course_Section_Seats?LastUpdated=2020-04-02T06:00:00.000-08:00&AcademicPeriod!Academic_Period_ID=202009&format=json
```

----Response-----

```
<?xml version='1.0' encoding='UTF-8'?>
<wd:Report_Data
xmlns:wd="urn:com.workday.report/CollegeScheduler-CourseSectionSeats">
  <wd:Report_Entry>
    <wd:Term>2020 Fall Semester (08/31/2020-12/09/2020)</wd:Term>
    <wd:TermCode>202009</wd:TermCode>

<wd:CourseSectionDefinitionID>COURSE_SECTION_DEFINITION-3-27413</wd:CourseSectionDefinitionID>
  <wd:Timestamp>2020-04-02T20:16:15.346-07:00</wd:Timestamp>
  <wd:SeatCapacity>21</wd:SeatCapacity>
  <wd:SeatsFilled>0</wd:SeatsFilled>
  <wd:SeatsOpen>21</wd:SeatsOpen>
  <wd:WaitlistCapacity>0</wd:WaitlistCapacity>
  <wd:WaitlistFilled>0</wd:WaitlistFilled>
  <wd:WaitlistOpen>0</wd:WaitlistOpen>
  <wd:Section_Listings>

<wd:RegistrationNumber>COURSE_SECTION-3-27413</wd:RegistrationNumber>
  </wd:Section_Listings>
  <wd:ReserveCapacity>0</wd:ReserveCapacity>
  <wd:SectionStatus>Open</wd:SectionStatus>
</wd:Report_Entry>
<wd:Report_Entry>
  <wd:Term>2020 Fall Semester (08/31/2020-12/09/2020)</wd:Term>
  <wd:TermCode>202009</wd:TermCode>

<wd:CourseSectionDefinitionID>COURSE_SECTION_DEFINITION-3-27414</wd:CourseSectionDefinitionID>
  <wd:Timestamp>2020-04-02T20:16:15.346-07:00</wd:Timestamp>
  <wd:SeatCapacity>21</wd:SeatCapacity>
  <wd:SeatsFilled>9</wd:SeatsFilled>
  <wd:SeatsOpen>12</wd:SeatsOpen>
```



```
<wd:WaitlistCapacity>0</wd:WaitlistCapacity>
<wd:WaitlistFilled>0</wd:WaitlistFilled>
<wd:WaitlistOpen>0</wd:WaitlistOpen>
<wd:Section_Listings>

<wd:RegistrationNumber>COURSE_SECTION-3-27414</wd:RegistrationNumber>

  </wd:Section_Listings>
  <wd:ReserveCapacity>0</wd:ReserveCapacity>
  <wd:SectionStatus>Open</wd:SectionStatus>
</wd:Report_Entry>
</wd:Report_Data>
```

Custom Report API Security

As with the standard WWS API services, the chosen ISU credentials to be used for the College Scheduler integration must be granted access to execute this Custom Report API. The configuration of Custom Report security is beyond the scope of this document.

Single Sign-On (SSO) Setup

The configuration of a single sign-on (SSO) integration is required for College Scheduler to integrate with Workday. Additional College Scheduler SSO setup and configuration materials are provided to you as part of the installation process, separately from this document. Please work with your College Scheduler project team in order to coordinate the setup and verification of SSO.