accruent

EMS Desktop Client - Academic Planning

Installation, Configuration, & User Guides

V44.1

April 2019

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CHAPTER 1: Introduction to Installing the EMS Campus Planning Interface (CPI)

This guide lists the steps you must take to install EMS Campus (formerly known as the EMS Campus Web Client). EMS Campus is a web-based tool typically used by academic departments to review course schedule data, communicate course changes to the registrar, and set course room preferences.

To install and configure EMS Academic Planning features, you will:

1. Install and configure the EMS Campus Planning Interface (a separate web-based application controlled by settings in EMS Desktop Client).
   a. Install and configure the EMS Campus Planning Web Service to manage communication between the EMS Campus database and your organization's Student Information System (SIS).
   b. Install the EMS Campus Auto Sync Service to enable EMS changes to courses to update your organization's SIS.
2. Configure Academic Planning Features (primarily in the Academic Planning menu in EMS Desktop Client).

Contact Customer Support

- **Option 1 (Recommended):** Search the Knowledge Base available at Accruent Access.
- **Option 2:** Submit a case directly via Accruent Access.
- **Option 3:** Email emssupport@accruent.com.
- **Option 4:** Phone (800) 288-4565.

Important!

If you do not have a customer login, register here.

CHAPTER 2: System Requirements and Prerequisites

This topic includes the system requirements for the successful installation of EMS Desktop Client – Academic Planning.

See Also: EMS 44.1 System Requirements.

EMS Database Server Requirements

Compatibility Level	Version	DB Compatibility
110	Microsoft SQL Server 2012 = 11.00.XXXX	110
120	Microsoft SQL Server 2014 = 12.00.XXXX	110 (avoid CL for 2014)
130	Microsoft SQL Server 2016 = 13.00.XXXX	130

Important!

2017 is not yet officially supported by EMS Software.

EMS Web Server Requirements

Operating System	IIS VERSION
Windows Server 2016	10.0
Windows Server 2012	8.0
Windows Server 2012 R2	8.5
Windows Server 2016	
Prerequisites	
Application Pool Running	(2.0 or 4.0 depending on the EMS Software Application)
.NET Framework 4.6.1**	
Minimum System Requirements Processor: 2.0 GHz and 4 cores or faster	

Operating System	IIS VERSION
Memory: 8 GB or more** Hard-Disk Space: 1 GB or more *For up to 100 concurrent users. Increased specs required for 100+ concurrent users.	

*Requires an update to Windows Management Framework to version 3.
**= varies per EMS Software Application

EMS Desktop Client Requirements

Operating System
Windows 7 (32-bit and 64-bit)
Windows 8 (32-bit and 64-bit)
Windows 8.1 (32-bit and 64-bit)
Windows 10 (32-bit and 64-bit)
.NET Framework 4.6.1

CHAPTER 3: Obtain the Latest Release of EMS Campus Planning Interface

The latest release of the EMS Campus Planning Interface can be downloaded from the online Support Center.

1. Log into Accruent Access.
2. Click **My Products**.
3. Under **EMS**, click **Downloads**.

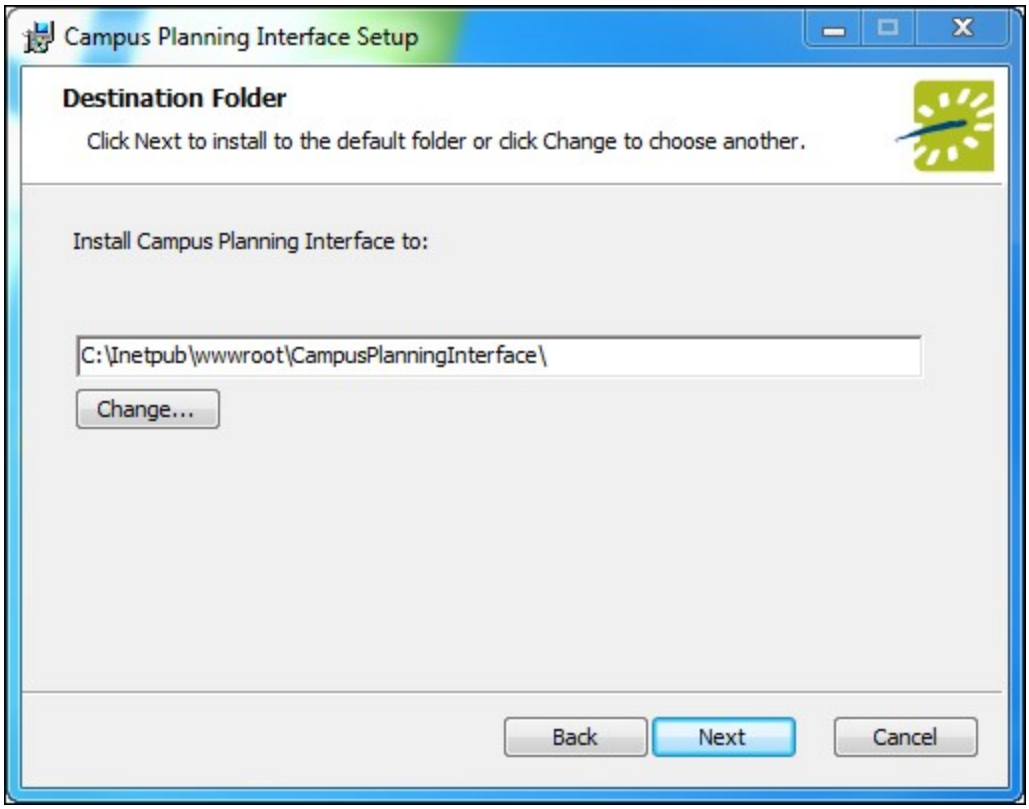
   The downloads page opens in a new browser tab.
4. In the **Software Downloads** area, click the link for your version of software, for example, **V44.1 Releases & Patches**.

   A new page opens listing the downloads available based on your license.
5. Download the EMS Campus Planning Interface (**EMSCampusPlanningInterface.msi**), which is required for both first time installations and upgrades.

CHAPTER 4: Install or Upgrade the EMS Campus Planning Interface

Note:
Before beginning the installation process, please install or upgrade your EMS databases as outlined in the Installation Guide for EMS Desktop Client.

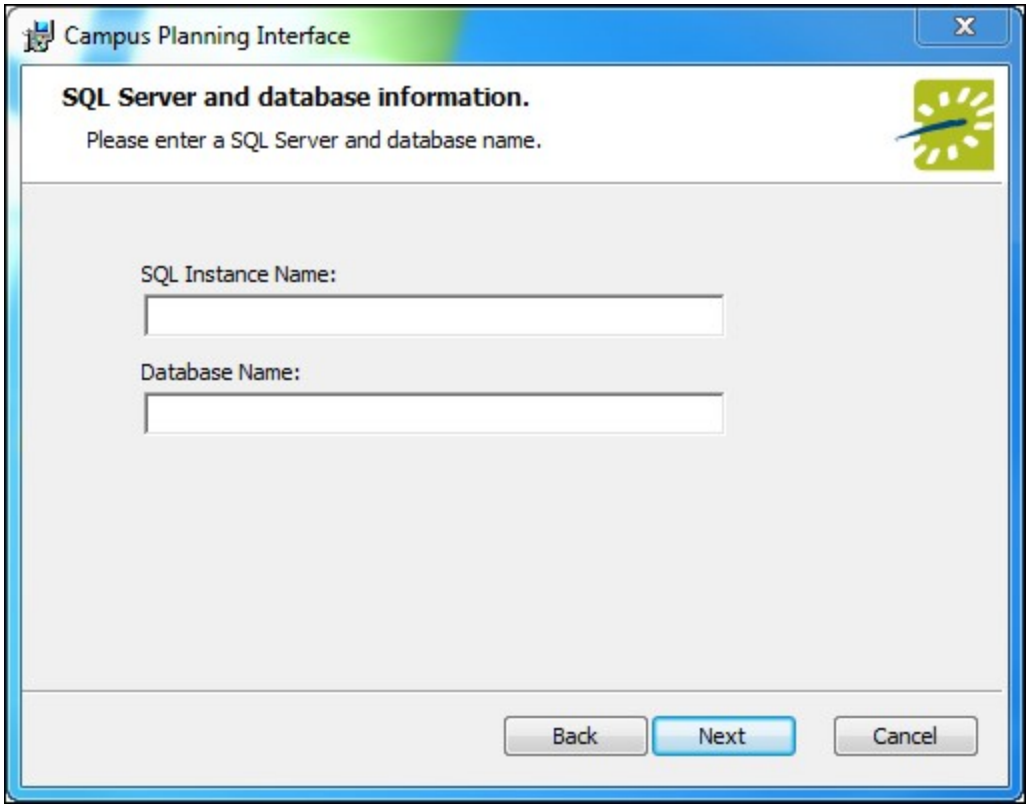
1. Manually uninstall any previous versions of the EMS Campus Web Client/EMS Campus Planning Interface on your web server.
2. Verify that the System Requirements and Prerequisites for EMS Campus have been met.
3. Download the EMSCampusPlanningInterface.msi file onto the web server that will be running EMS Campus Planning Interface.
4. Run EMSCampusPlanningInterface.msi.
5. The first screen welcomes you to the Campus Planning Interface Setup Wizard. Click Next to begin the installation process. The Destination Folder screen will appear.



6. Select the destination folder. The installation process will create a new physical directory on your web server based on the destination folder path entered ("Campus Planning Interface" in the example above.) Click Next.

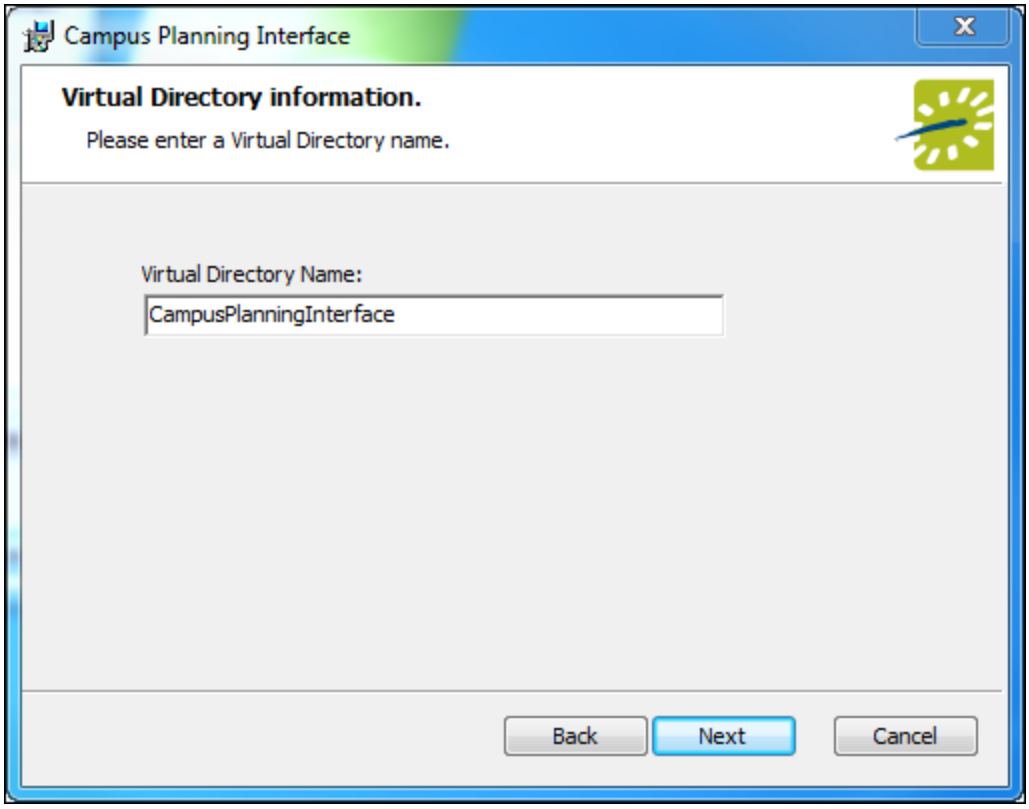
> **Note:**
> EMS Campus Planning Interface should not be installed in the same physical directory as other EMS web-based products OR under a site running another version of EMS Campus Planning Interface.

7. The SQL Server and database information screen will appear.



8. Enter your SQL Instance (i.e. Server) Name.
9. Enter your Database Name (typically named "EMS"). Click Next.

10. The Virtual Directory information screen will appear.



11. The Virtual Directory Name will default to the destination folder specified in Step 6. It is recommended that you keep the default setting. The installation process will create a virtual directory on your web server based on the virtual directory entered ("Campus Planning Interface" in the example above.) Click Next.

> **Note:**
> EMS Campus Planning Interface should not be installed in the same virtual directory as other EMS web-based products OR under a site running another version of EMS Campus Planning Interface.

12. The Ready to install Campus Planning Interface screen will appear. Click Install to install EMS Campus Planning Interface.
13. The Completed the Campus Planning Interface Setup Wizard screen will appear. Click Finish.

CHAPTER 5: Start the EMS Campus Planning Interface

Verify your EMS Campus Planning Interface installation by opening a browser and entering the EMS Campus Planning Interface address:

```
http://[ServerName]/CampusPlanningInterface/  (replace
[ServerName] with the name of your web server)
```

The first time you launch the EMS Campus Planning Interface, it might take a few extra moments for the website to display.

For information on how to use the EMS Campus Planning Interface, please refer to the EMS Desktop Client User Guide (V44.1)

Contact Customer Support

If you encounter any issues, please contact **Customer Support** below.

- **Option 1 (Recommended):** Search the Knowledge Base available at Accruent Access.
- **Option 2:** Submit a case directly via Accruent Access.
- **Option 3:** Email emssupport@accruent.com.
- **Option 4:** Phone (800) 288-4565.



Important!

If you do not have a customer login, register here.

CHAPTER 6: EMS Campus Web Service and White Paper Installation Guide

This guide is intended for System Administration and IT users installing the EMS Campus Web Service. The following topics are covered in this installation guide:

- Introduction
- EMS Campus Web Service Hardware and Software Requirements
- Obtain the Latest EMS Campus Web Service Components
- Install or Upgrade the EMS Campus Web Service
- Configure EMS Campus Web Service
- Data Models
    - Banner Views Data Model
    - CAMS Views Data Model
    - Colleague (Oracle or SQL) Views Data Model
    - Colleague Unidata Views Data Model
    - Jenzabar (CX - Informix) Views Data Model
    - Jenzabar (EX) Views Data Model
    - PeopleSoft Views Data Model
    - PowerCampus Views Data Model
- Web Service Overview
- Format for Tab-Delimited Files

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CHAPTER 7: Introduction to EMS Campus Web Service

EMS Campus uses a web service to manage communication between the EMS Campus database and the Student Information System (SIS). The web service reads courses and course-related data from the SIS database. Then, once a schedule for a term is published, the web service updates course room assignments in the SIS. This document provides an overview of the EMS Campus Web Service and outlines the installation process.

Important!

If you are upgrading from EMS Campus 2.x, a new version of the EMS Campus Web Service including the queries.xml and views.sql files might be required. Tab-delimited file format specifications might also have changed for the Courses.txt file. Please contact your Client Services Consultant to evaluate and discuss any potential impacts to your installation.

Course Data: Student Information Systems (SIS)

EMS integrates with most commercial and many custom SIS/ERP systems, saving your institution time and eliminating data entry duplication. The optional EMS Campus Web Service provides bi-directional integration so that course data and instructor information is pulled into EMS, and rooms assigned in EMS are then written back to the SIS. With SIS integration, you can:

- Pull course and instructor information from the SIS to create multiple scheduling scenarios.
- Quickly publish selected scheduling scenarios for students and instructors to view.
- Allow departments to collaborate online for a paperless planning process.
- Easily identify all new data moved into EMS for review.
- Report on seat fill percentage, time block availability, utilization trends, and more.

Supported SIS

You can manually or automatically synchronize your campus-specific SIS data (Instructors, Course Types, Subjects, and Terms) with EMS, using the following supported SIS.

- Ellucian's Banner
- Ellucian's Colleague on SQL or Oracle Platform
- Ellucian's PowerCampus
- Oracle's PeopleSoft

- Jenzabar (CX - Informix)
- Jenzabar (EX)

Note:
Non-SIS customers can still streamline data entry by importing tab-delimited lists of people/groups, rooms, resources, reservations, and (for EMS Campus), final exam schedules. See Also: Importing Files To Streamline Data Entry.

Contact Customer Support

- **Option 1 (Recommended):** Search the Knowledge Base available at Accruent Access.
- **Option 2:** Submit a case directly via Accruent Access.
- **Option 3:** Email emssupport@accruent.com.
- **Option 4:** Phone (800) 288-4565.

Important!
If you do not have a customer login, register here.

CHAPTER 8: System Requirements and Prerequisites for EMS Campus Web Service

When installing the EMS Campus Web Service on a Windows Server, please review the EMS Web Server Requirements and ensure that the requirements listed have been met.

CHAPTER 9: Obtain the Latest Version of EMS Campus Web Service

Important!

EMS Cloud Customers must contact EMS Support or their Professional Services Consultant to obtain the files below. All other customers can obtain the files from the Downloads area of Accruent Access. To view the Downloads area, log into Accruent Access and click **My Products** > **EMS Downloads** (opens a new tab) > **V44.1 Releases & Patches** (in Software Downloads area).

- **EMSCampusWebService.msi—**EMS Campus Web Service installation file.
- **Views.sql—**Script that will create EMS Campus specific views in your SIS that the EMS Campus Web Service will use to query/update data.
- **Queries.xml—**SIS-specific configuration file used by the EMS Campus Web Service to connect to your SIS.

Install the EMS Campus Views

Note:

EMS Campus clients using the tab-delimited file option can skip to the System Requirements and Prerequisites for EMS Campus Web Service section.

1. Obtain the Views.sql file (required for new EMS Campus installations AND upgrades.)
2. Create an EMS Campus specific account (name and password are arbitrary) in the SIS database that has been granted permissions to execute the EMS Campus views and has update privileges on the table used to store course meeting information. This account will be used by the EMS Campus Web Service to connect, query, and update your SIS via the views created by the Views.sql file.

   Note:

   For a list of permissions by table for your particular SIS, please contact your Professional Services Consultant.

3. Execute Views.sql against your SIS database.

> **Note:**
> Depending on your database management system, you might need to execute the Views.sql file using the account created in Step 2.

4. Complete the following additional steps based on your SIS Database Management System.

Microsoft SQL Server

No further steps are required.

Oracle

1. Install the Oracle Client (version 11.1.x or 11.2.x) on your web server. Choose the 'Administrator' installation type option.
2. Using the Oracle Net Manager, create a TNSNAMES.ora file.
3. Verify that the PATH Environment Variable references the location of your TNSNAMES.ora file.
4. Create a TNS_ADMIN Environment Variable to point to the location of your TNSNAMES.ora file.
5. Grant to the Authenticated Users group Read + Execute privileges on your main Oracle directory. Make sure that permissions are propagated to all child objects.
6. Reboot your web server.
7. Launch SQL Plus and log-in.
8. Execute the following statement to verify connectivity to your Oracle-EMS buildings view.
9. Select * from ems_vwbuildings.

IBM UniData

UniData comes with the following tools, which must be installed:

- Visual Schema Generator (VSG) – Used to build views and sub-tables for EMS Campus.
- ODBC Client Software.

Contact Customer Support

- **Option 1 (Recommended):** Search the Knowledge Base available at Accruent Access.
- **Option 2:** Submit a case directly via Accruent Access.
- **Option 3:** Email emssupport@accruent.com.
- **Option 4:** Phone (800) 288-4565.

Important!

If you do not have a customer login, register here.

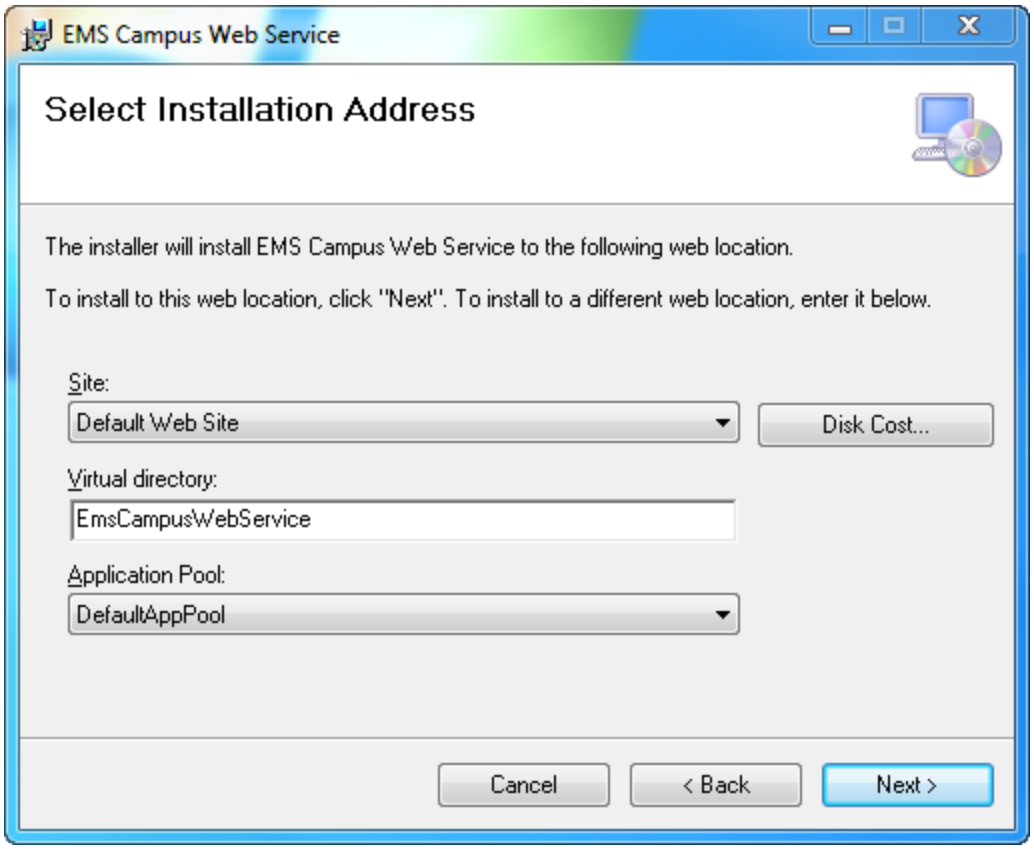
CHAPTER 10: Install or Upgrade the EMS Campus Web Service

Important!

Before beginning the installation process, please do the following:

- Install or upgrade your EMS databases as outlined in the EMS Installation Instructions.
- Manually **uninstall**any previous versions of the EMS Campus Web Service on your web server.

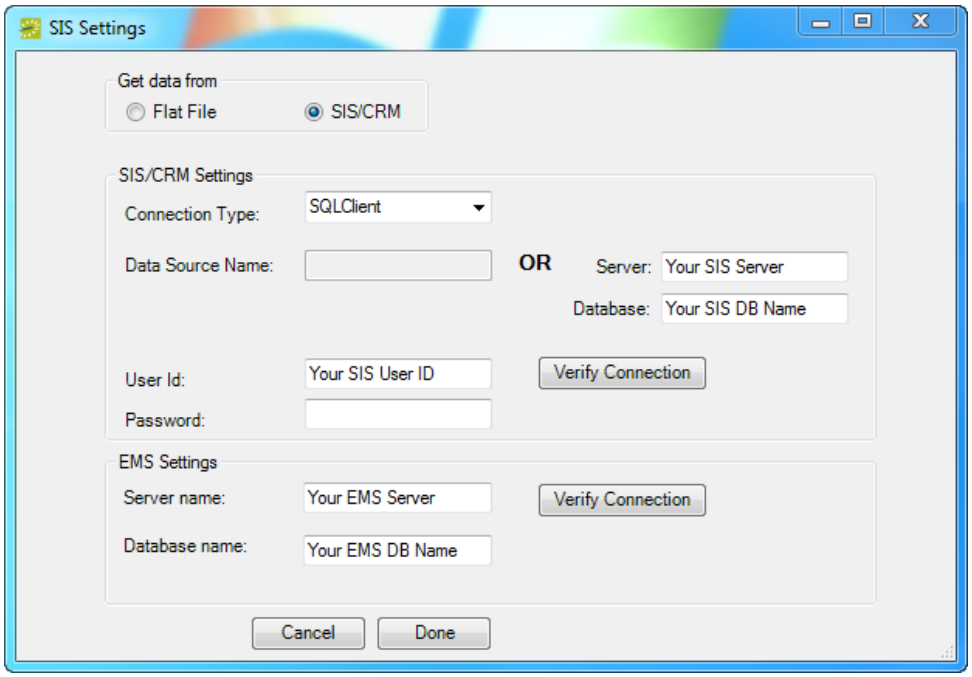
1. Verify that the prerequisite software has been installed.
2. Verify/confirm that the **View.sql** file has been executed against your SIS database. (Required for both first time installations AND upgrades.)
3. Download the **EMSCampusWebService.msi** file onto the web server that will be running the web service.
4. Run **EMSCampusWebService.msi**
5. The first screen welcomes you to the EMS Campus Web Service Setup Wizard. Click **Next** to begin the installation process. The Select Installation Address screen will appear.



6. Select the Site, Virtual Directory and Application Pool. It is recommended that you keep the default settings. The installation process will create a Physical and Virtual directory on your web server named “EMSCampusWebService” (or whatever value you entered in the Virtual Directory field.) Click **Next**.

> **Note:**
> The EMS Campus Web Service should not be installed in the same Virtual Directory as other EMS web-based products.

7. The Confirm Installation screen will appear. Click **Next**. The SIS Settings screen will appear.



8. In the Get data from section, choose either **Flat File** or **SIS/CRM** based on your SIS data source.
   - **Flat File**
     Choose this option if you will be outputting your SIS data to tab-delimited files. The EMS Campus Web Service will connect to and read information from these files which must conform to a specific format. See Appendix A for file format specifications. If you choose this option, please skip to Step 13.
   - **SIS/CRM**
     Choose this option if EMS Campus will be tied directly to your SIS database. The EMS Campus Web Service will connect directly to and read information from your SIS.

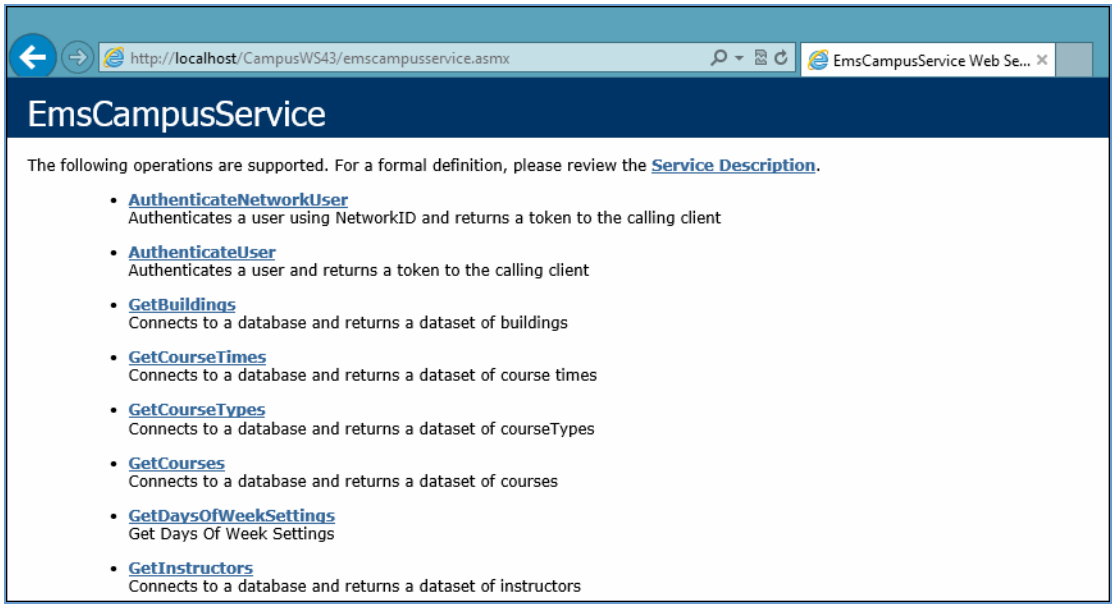
9. In the SIS/CRM Settings section, select your **Connection Type** based on the Database Management System that your SIS uses:
   - **SQLClient** – MS SQL Server
   - **OracleClient** – Oracle
   - **ODBC** – Other ODBC-compliant database

10. Select your Connection Method.
    - **Data Source Name** – The DSN for your SIS database if you selected **OracleClient** or **ODBC**. This option requires an ODBC Data Source created via the ODBC Data Source Administrator.
    - **Server** / **Database** – Your SIS server name and database name if you selected **SQLClient**.

11. Enter the **User ID** / **Password** for your SIS. The account created in the 'Installing the EMS Campus Views' section in this document should be used.

12. Click the **Verify Connection** button to confirm a successful connection to your SIS database.
13. In the EMS Settings section, enter your EMS **Server Name** / **Database Name**.
14. Click the **Verify Connection** button to confirm a successful connection to your EMS Campus database.
15. Click **Done**. The Installation Complete screen will appear. Click **Close**. EMS Campus clients using the tab-delimited file option should skip to Step 19.
16. Secure the **Queries.xml** file provided by your Client Services Consultant.
17. On your web server, navigate to the CustomConfig folder within your EMS Campus Web Service directory (typically C:\Inetpub\wwwroot\EMSCampusWebService\CustomConfig).
18. Replace the existing **Queries.xml** file with the new **Queries.xml** file (required for new EMS Campus installations AND upgrades.)
19. After following the steps above, verify your installation by opening a browser and entering the following URL:
    http://[ServerName]/EMSCampusWebService/EMSCampusService.asmx(replace [ServerName] with the name of your web server)

    The following screen should appear:



CHAPTER 11: Configure EMS Campus Web Service

1. Launch EMS Desktop Client and login as a user with System Administrator-level access.
2. Go to **System Administration** > **Settings** > **Parameters** > **EMS** .
3. Locate the **Campus - Web Service URL** parameter.
4. Enter the URL of your EMS Campus Web Service.

   http://[ServerName]/EMSCampusWebService/EMSCampusService.asmx (replace [ServerName] with the name of your web server)
5. Go to **Academic Planning** > **Configuration** . Execute the Synchronize Buildings function to verify that a list of Buildings is successfully pulled from your SIS. If you're using the tab-delimited file option, please see Appendix A - Format for Tab-Delimited Files for file formatting and placement information.
6. Refer to the Desktop Client — Academic Planning Configuration Guide for more information on how to synchronize and configure your EMS Campus database.

CHAPTER 12: Data Models

This section contains data models for specific integrations between other solutions and the EMS Web Service.

- Ellucian's Banner
- Ellucian's Colleague on SQL or Oracle Platform
- Ellucian's PowerCampus
- Oracle's PeopleSoft
- Jenzabar (CX - Informix)
- Jenzabar (EX)

CHAPTER 13: Banner Views Data Model

EMS Software will code a set of views specific to your organization's use of Banner to allow for integration between EMS and Banner. Outlined are the baseline tables/columns accessed in the views.

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual Banner implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review will be done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.

Note:

Optionally, and on a custom basis, up to 10 User Defined Fields can be added to the set of views for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

Modification of views by the customer is unsupported and voids the Annual Service Agreement for the integration with Banner.

Fields highlighted in BLUE are required to be unique.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

Banner Tables: SLBRDEF, STVBLDG

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	Banner Field
SISID	SLBRDEF_BLDG_CODE
BuildingCode	SLBRDEF_BLDG_CODE
BuildingDescription	STVBLDG_DESC

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

Banner Tables: SLBRDEF

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	Banner Field
SISID	SLBRDEF_ROOM_TYPE
RoomTypeDescription	SLBRDEF_ROOM_TYPE

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

Banner Tables: SLBRDEF

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS—related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	Banner Field
SISID	SLBRDEF_BLDG_CODE + SLBRDEF_ROOM_NUMBER
SISBuildingID	SLBRDEF_BLDG_CODE
SISRoomTypeID	SLBRDEF_ROOM_TYPE*
RoomCode	SLBRDEF_ROOM_NUMBER
RoomDescription	SLBRDEF_DESC*
Capacity	SLBRDEF_CAPACITY*

*Determined by max value of SLBRDEF_CAPACITY if duplicate room records exist

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

Banner Tables: SPRIDEN, SIRASGN

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	Banner Field
SISID	SPRIDEN_PIDM
InstructorDescription	SPRIDEN_LAST_NAME + SPRIDEN_FIRST_NAME

*uses SIRASGN to determine primary instructor (SIRASGN_PRIMARY_IND)

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

Banner Tables: SSBSECT, STVTERM

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	Banner Field
SISID	SSBSECT_TERM_CODE
TermCode	SSBSECT_TERM_CODE
TermDescription	SSBSECT_TERM_CODE
StartDate	STVTERM_START_DATE
EndDate	STVTERM_END_DATE

Subjects

EMS View: EMS_vwSubjects

View Permissions: Read Only

Banner Tables: SCBCRSE, SSBSECT, STVSUBJ

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	Banner Field
SISID	SCBCRSE_SUBJ_CODE
SubjectCode	SCBCRSE_SUBJ_CODE
SubjectDescription	STVSUBJ_DESC
CampusCode	SSBSECT_CAMP_CODE*
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

*NULL if not using Campus Codes

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

Banner Tables: SSRMEET, STVSCHD

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	Banner Field
SISID	SSRMEET_SCHD_CODE
Description	STVSCHD_DESC

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

Banner Tables: SSBSECT, SCBCRSE, SSRXLST, SSBXLST, SPRIDEN, SIRASGN

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	Banner Field
SISID	SSBSECT_TERM_CODE + SSBSECT_CRN
SISTermID	SSBSECT_TERM_CODE
SISSubjectID	SCBCRSE_SUBJ_CODE
CampusCode	SSBSECT_CAMPUS_CODE*
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL
CRN	SSBSECT_CRN
Course	SSBSECT_CRSE_NUMB
Section	SSBSECT_SEQ_NUMB
CourseTitle	SSBSECT_CRSE_TITLE or SCBCRSE_TITLE
SISInstructorID	SPRIDEN_PIDM**
EstimatedEnrollment	SSBXLST_MAX_ENRL or SSBSECT_MAX_ENRL
CrosslistParentID	SSRXLST_TERM_CODE + SSRXLST_CRN***
ActualEnrollment	SSBXLST_ENRL or SSBSECT_ENRL
CreditHours	SSBSECT_CREDIT_HRS or SCBCRSE_CREDIT_HR_LOW

Course Dates IDs

EMS View: EMS_vwCourseDatesIds

View Permissions: Update if allowing EMS to update room locations in Banner

Banner Tables: SSRMEET

Purpose: Used to identify the row number of each meeting pattern of each course in order to give each meeting pattern a unique identifier.

EMS Field	Banner Field
SISID	EMS_VWCOURSEDATES.SISID
SISCourseID	SSRMEET_TERM_CODE + SSRMEET_CRN
SISBuildingID	SSRMEET_BLDG_CODE
RoomID	SSRMEET_ROOM_CODE*

*Field used for updating room assignments

CHAPTER 14: CAMS Views Data Model

EMS Software will code a set of views specific to your organization's use of CAMS to allow for integration between EMS and CAMS. Outlined are the baseline tables/columns accessed in the views.

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual CAMS implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.

Note:

Optionally and on a custom basis, up to 10 User Defined Fields can be added to the set of views for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

Modification of views by the customer is unsupported and voids the Annual Service Agreement for the integration with CAMS.

Fields highlighted in BLUE are required to be unique.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

CAMS Tables: Buildings

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	CAMS Field
SISID	BuildingID
BuildingCode	Abbreviation
BuildingDescription	BuildingDescription

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

CAMS Tables: RoomTypes

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	CAMS Field
SISID	RoomTypeID
RoomTypeDescription	Description

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

CAMS Tables: Rooms

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS; related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	CAMS Field
SISID	RoomsID
SISBuildingID	BuildingID
SISRoomTypeID	TypeID
RoomCode	Number
RoomDescription	Name
Capacity	MaxOccupancy

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

CAMS Tables: Faculty

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	CAMS Field
SISID	FacultyID
InstructorDescription	LastName + FirstName

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

CAMS Tables: TermCalendar

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	CAMS Field
SISID	TermCalendarID
TermCode	TermCode
TermDescription	TextTerm
StartDate	TermStartDate
EndDate	TermEndDate

Subjects

EMS View: EMS_vwSubjects

View Permissions: Read Only

CAMS Tables: SRMaster (Distinct values)

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	CAMS Field
SISID	Department
SubjectCode	Department
SubjectDescription	Department
CampusCode	NULL
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

CAMS Tables: SROffer (Distinct values)

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	CAMS Field
SISID	CourseType
Description	CourseType

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

CAMS Tables: SROffer, CAMS_SROfferFacultyTeach_View

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	CAMS Field
SISID	SROfferID
SISTermID	TermCalendarID
SISSubjectID	Department
CampusCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL
CRN	SROfferID
Course	CourseID
Section	Section
CourseTitle	Coursename
SISInstructorID	FacultyID*
EstimatedEnrollment	MaximumEnroll
CrosslistParentID	CrossListId**
ActualEnrollment	CurrentEnroll
CreditHours	Credits

*uses CAMS_SROfferFacultyTeach_View to determine first instructor
**'0' if not crosslisted

Course Dates

EMS View: EMS_vwCourseDates

View Permissions: Update if allowing EMS to update room locations in CAMS

CAMS Tables: SSROfferSchedule, SSROffer, Rooms, Buildings

Purpose: Used to define the list of meeting patterns per course; related to courses, coursetypes, buildings, rooms.

EMS Field	CAMS Field
SISID	SSROfferScheduleID
SISTermID	SSROffer.TermCalendarID
SISCourseID	SROfferID
StartDate	StartDate
EndDate	EndDate
StartTime	OfferTimeFrom
EndTime	OfferTimeTo
SISBuildingID	Buildings.BuildingID
SISRoomID	OfferRoomID*
Sunday	OfferDays (U)
Monday	OfferDays (M)
Tuesday	OfferDays (T)
Wednesday	OfferDays (W)
Thursday	OfferDays (R)
Friday	OfferDays (F)
Saturday	OfferDays (S)
SISCourseTypeID	SROffer.CourseType

*field used for updating room assignments

CHAPTER 15: Colleague (Oracle or SQL) Views Data Model

EMS Software will code a set of views specific to your organization's use of Colleague to allow for integration between EMS and Colleague. Outlined are the baseline tables/columns accessed in the views.

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual Colleague implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.

Note:

Optionally and on a custom basis, up to 10 User Defined Fields can be added to the set of views for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

Modification of views by the customer is unsupported and voids the Annual Service Agreement for the integration with Colleague.

Fields highlighted in BLUE are required to be unique.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

Colleague Tables: BUILDINGS

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	Colleague Field
SISID	BUILDINGS_ID
BuildingCode	BUILDINGS_ID
BuildingDescription	BLDG_DESC

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

Colleague Tables: ROOM_TYPES

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	Colleague Field
SISID	ROOM_TYPES_ID
RoomTypeDescription	RMTP_DESCRIPTION

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

Colleague Tables: ROOMS

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS; related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	Colleague Field
SISID	ROOMS_ID
SISBuildingID	ROOMS_ID (parsed)
SISRoomTypeID	ROOM_TYPE
RoomCode	ROOMS_ID (parsed)
RoomDescription	ROOM_NAME
Capacity	ROOM_CAPACITY

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

Colleague Tables: COURSE_SEC_FACULTY, PERSON

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	Colleague Field
SISID	PERSON.ID
InstructorDescription	PERSON.LAST_NAME + PERSON.FIRST_NAME

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

Colleague Tables: TERMS

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	Colleague Field
SISID	TERMS_ID
TermCode	TERMS_ID
TermDescription	TERM_DESC
StartDate	TERM_START_DATE
EndDate	TERM_END_DATE

Subjects

EMS View: EMS_vwSubjects

View Permissions: Read Only

Colleague Tables: SUBJECTS

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	Colleague Field
SISID	SUBJECTS_ID
SubjectCode	SUBJECTS_ID
SubjectDescription	SUBJECTS_ID
CampusCode	NULL
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

Colleague Tables: INSTR_METHODS

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	Colleague Field
SISID	INSTR_METHODS_ID
Description	INM_DESC

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

Colleague Tables: COURSE_SECTIONS, COURSE_SEC_FACULTY, COURSE_SEC_XLISTS, COURSE_SECTIONS_LS

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	Colleague Field
SISID	COURSE_SECTIONS_ID
SISTermID	SEC_TERM
SISSubjectID	SEC_SUBJECT
CampusCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL
CRN	SEC_SYNONYM
Course	SEC_COURSE_NO
Section	SEC_NO
CourseTitle	SEC_SHORT_TITLE
SISInstructorID	COURSE_SEC_FACULTY.CSF_FACULTY*
EstimatedEnrollment	SEC_CAPACITY
CrosslistParentID	COURSE_SEC_XLISTS.CSXL_PRIMARY_SECTION**
ActualEnrollment	COURSE_SECTIONS_LS.SEC_ACTIVE_STUDENTS***
CreditHours	SEC_MIN_CRED

*First record
**'0' if not crosslisted
***COUNT of records

Course Dates

EMS View: EMS_vwCourseDates

View Permissions: Update if allowing EMS to update room locations in Colleague

Colleague Tables: COURSE_SEC_MEETING, COURSE_SECTIONS

Purpose: Used to define the list of meeting patterns per course; related to courses, course types, buildings, rooms.

EMS Field	Colleague Field
SISID	COURSE_SEC_MEETING_ID
SISTermID	COURSE_SECTIONS.SEC_TERM
SISCourseID	CSM_COURSE_SECTION
StartDate	CSM_START_DATE
EndDate	CSM_END_DATE
StartTime	CSM_START_TIME
EndTime	CSM_END_TIME
SISBuildingID	CSM_BLDG*
SISRoomID	CSM_BLDG + CSM_ROOM
RoomID	CSM_ROOM*
Sunday	CSM_SUNDAY
Monday	CSM_MONDAY
Tuesday	CSM_TUESDAY
Wednesday	CSM_WEDNESDAY
Thursday	CSM_THURSDAY
Friday	CSM_FRIDAY
Saturday	CSM_SATURDAY
SISCourseTypeID	CSM_INSTR_METHOD

*fields used for updating room assignments

CHAPTER 16: Colleague Unidata Views Data Model

EMS Software will code a set of views specific to your organization's use of Unidata to allow for integration between EMS and Unidata. Outlined are the baseline tables/columns accessed in the views.

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual Unidata implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.

Note:

Optionally and on a custom basis, up to 10 User Defined Fields can be added to the new SQL compliant dictionaries and EMS_vwCourses view for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

This topic will include information on the following fields:

- Buildings
- Room Types
- Rooms
- Instructors
- Terms
- Subjects (no Campus Codes)
- Subjects (with Campus Codes)
- Course Types
- Courses
- Course Dates

In order to build the EMS views, the following are required:

1. The VSG (Visual Schema Generator), an executable that is shipped with Unidata, must be installed on a computer that can access Unidata. If you cannot locate the .msi installer for this tool, EMS

Software can provide a copy.

- The purpose of the VSG is to create SQL compliant dictionary files based on the dictionary files that contain data that EMS requires. Once SQL compliant dictionaries are created by the VSG the final EMS views can be created and permissions granted via the VSG.

2. The 32-bit IBM Unidata ODBC driver must be installed in order for the VSG to connect to Unidata. If you cannot locate this installer, EMS Software can provide a copy.

Modification of SQL compliant dictionaries and views by the customer is unsupported and voids the Annual Service Agreement for the integration with Colleague Unidata.

Fields highlighted in BLUE are required to be unique.

New Unidata Dictionary Legend:

- **BLACK** – Fields generated from VSG – no AE Editor changes required.
- **GREEN** – New fields that must be added via the AE Editor.
- **RED** – Required changes via the AE Editor.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

Unidata Dictionary: BUILDINGS

New Dictionary: BUILDINGS_EMS

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM	ASSOC
BLDG_DESC	D	1		Description	30L	S	
ID	D	0		BUILDINGS	10L	S	
ID0	D	0		BUILDINGS_EMS	10L	S	

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	BUILDINGS_EMS Field
SISID	ID
BuildingCode	ID

EMS Field	BUILDINGS_EMS Field
BuildingDescription	BLDG_DESC

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

Unidata Dictionary: ROOM.TYPES

New Dictionary: ROOM_TYPES_EMS

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM	ASSOC
ID	D	0		ROOM.TYPES	10L	S	
ID0	D	0		ROOM_TYPES_ EMS	10L	S	
RMTP_ DESCRIPTION	D	1		Description	30L	S	

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	ROOM_TYPES_EMS Field
SISID	ID
RoomTypeDescription	RMTP_DESCRIPTION

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

Unidata Dictionary: ROOMS

New Dictionary: ROOMS_EMS (Requires modifications via AE Editor)

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM
ID	D	0		ROOMS	10L	S
ID0	D	0		ROOMS_ EMS	10L	S
ROOM_NAME	D	1		Description	30L	S
ROOM_CAPACITY	D	2	MD0,	Capacity	7R	S
ROOM_TYPE	D	4		Room Type	20L	S
ROOMS_BLDG_ID	I	FIELD (@ID,"*",1)		Building	4L	S
ROOM_CAPACITY_1	I	IF ROOM_ CAPACITY='' THEN '30' ELSE ROOM_ CAPACITY			7R	S
ROOM_CODE	I	FIELD (@ID,"*",2)			30L	S
ROOM_TYPE_1	I	IF ROOM_TYPE = '' THEN '0' ELSE ROOM_ TYPE			20L	S

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS; related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	ROOMS_EMS Field
SISID	ID
SISBuildingID	ROOMS_BLDG_ID
SISRoomTypeID	ROOM_TYPE_1
RoomCode	ROOM_CODE

EMS Field	ROOMS_EMS Field
RoomDescription	ROOM_NAME
Capacity	ROOM_CAPACITY_1

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

Unidata Dictionary: FACULTY

New Dictionary: FACULTY_EMS (Requires modifications via AE Editor)

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM
ID	D	0		FACULTY	10L	S
ID0	D	0		FACULTY_ EMS	10L	S
FAC_ FIRST_ NAME	I	TRANS (“PERSON”,@ID,”FIRST.NAME”,”X”)		Faculty First Name	35L	S
FAC_ FULL_ NAME	I	FAC_LAST_NAME:’, ‘:FAC_FIRST_ NAME			35L	S
FAC_ LAST_ NAME	I	TRANS (“PERSON”,@ID,”LAST.NAME”,”X”)		Faculty Last Name	35L	S

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	FACULTY_EMS Field
SISID	ID
InstructorDescription	FAC_FULL_NAME

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

Unidata Dictionary: TERMS

New Dictionary: TERMS_EMS (Requires modifications via AE Editor)

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM	ASSOC
ID	D	0		TERMS	10L	S	
ID0	D	0		TERMS_EMS	10L	S	
TERM_DESC	D	2		Description	30L	S	
TERM_START_DATE	D	5	D2/MDY	Start Date	8R	S	
TERM_END_DATE	D	6	D2/MDY	End Date	8R	S	

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	TERMS_EMS Field
SISID	ID
TermCode	ID
TermDescription	TERM_DESC
StartDate	TERM_START_DATE
EndDate	TERM_END_DATE

Subjects (no Campus Codes)

EMS View: EMS_vwSubjects

View Permissions: Read Only

Unidata Dictionary: SUBJECTS

New Dictionary: SUBJECTS_EMS (Requires modifications via AE Editor)

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM
ID	D	0		SUBJECTS	10L	S
ID0	D	0		SUBJECTS_EMS	10L	S
SUBJ_DESC	D	1		Description	30L	S
CAMPUS_CODE	I	‘’			30L	S
DIVISION_CODE	I	‘’			30L	S
DEPT_CODE	I	‘’			30L	S
LEVEL_CODE	I	‘’			30L	S
CUSTOMCODE1	I	‘’			30L	S
CUSTOMCODE2	I	‘’			30L	S

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	SUBJECTS_EMS Field
SISID	ID
SubjectCode	ID
SubjectDescription	SUBJ_DESC
CampusCode	NULL
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

Subjects (with Campus Codes)

EMS View: EMS_vwSubjects

Unidata Dictionary: COURSE.SECTIONS

New Dictionary: COURSE_SECTIONS_EMS (*See Courses Below*)

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

Unidata Dictionary: INSTR.METHODS

New Dictionary: INSTR_METHODS_EMS

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM	ASSOC
ID	D	0		INSTR.METHODS	10L	S	
ID0	D	0		INSTR_METHODS_ EMS	10L	S	
INM_ DESC	D	1		Description	30L	S	

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	INSTR_METHODS_EMS Field
SISID	ID
Description	INM_DESC

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

Unidata Dictionary: COURSE.SECTIONS

New Dictionary: COURSE_SECTIONS_EMS

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM
ID	D	0		COURSE.SECTIONS	21L	S
ID0	D	0		COURSE_SECTIONS_EMS	21L	S
SEC_TERM	D	15		Term	35L	S
SEC_SUBJECT	D	6		Subject	40L	S
SEC_COURSE_NO	D	17		Course Number	7L	S
SEC_NO	D	18		Section	5L	S
SEC_SHORT_TITLE	D	1		Short Title	30L	S
SEC_FACULTY	D	40		Faculty	10L	S
SEC_CAPACITY	D	5	MD 0,	Capacity	5R	S
SEC_MIN_CRED	D	8	MD 25	Min Cred	8R	S
SEC_XLIST	D	32		XList	10L	S
CAMPUS_CODE	I	''		(This record required when NOT using Campus Codes. Otherwise do not include this record.)	40L	S
DIVISION_CODE	I	''			40L	S

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM
DEPT_CODE	I	''			40L	S
LEVEL_CODE	I	''			40L	S
CUSTOMCODE1	I	''			40L	S
CUSTOMCODE2	I	''			40L	S
SEC_ACTIVE_STUDENT_COUNT	I	IF SEC_ACTIVE_STUDENTS AND SEC_ACTIVE_STUDENTS NE "0" THEN (((COUNT(SEC_ACT IVE_STUDENTS,@VM)) + (1))) ELSE (0)	MD0,	Active Student Count	6R	S
CSXL_PRIMARY_SECTION	I	TRANS(COURSE.SEC.XLISTS,SEC_XLIST,'CSXL.PRIMARY.SECTION','X');IF @=ID THEN '0' ELSE IF @='' THEN '0' ELSE @		Primary Section	21L	S
SEC_FIRST_FACULTY	I	TRANS("COURSE.SEC.FACULTY", SEC_FACULTY, "CSF.FACULTY","X1");IF @='' THEN '0' ELSE @		Faculty	10L	S
SEC_CURRENT_STATUS	I	FIELD(SEC_STATUS,@VM,1)		Current Status	5L	S
SEC_STATUS	D	88		Status	30L	S
SEC_SYNONYM	D	61		Synonym	11L	S
SEC_ACTIVE_STUDENTS	D	66			6R	S
SEC_SUBJ_DESC	I	TRANS("SUBJECTS", SEC_SUBJECT, "SUBJ.DESC", "X1")		Subject	30L	S

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM
				Description (This record required when using Campus Codes)		
SEC_ LOCATION	D	6		Location (This record required when using Campus Codes)	40L	S

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	COURSE_SECTIONS_EMS Field
SISID	ID
SISTermID	SEC_TERM
SISSubjectID	SEC_SUBJECT
CampusCode	NULL (or SEC_LOCATION if using Campus Codes)
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL
CRN	SEC_SYNONYM
Course	SEC_COURSE
Section	SEC_NO
CourseTitle	SEC_SHORT_TITLE

EMS Field	COURSE_SECTIONS_EMS Field
SISInstructorID	SEC_FIRST_FACULTY
EstimatedEnrollment	SEC_CAPACITY
CrosslistParentID	CSXL_PRIMARY_SECTION
ActualEnrollment	SEC_ACTIVE_STUDENT_COUNT
CreditHours	SEC_MIN_CRED

Subjects with Campus Codes (distinct values)

EMS Field	COURSE_SECTIONS_EMS Field
SISID	SEC_SUBJECT
SubjectCode	SEC_SUBJECT
SubjectDescription	SEC_LOCATION
CampusCode	NULL
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

Course Dates

EMS View: EMS_vwCourseDates

View Permissions: Read Only

Unidata Dictionary: COUSRE.SEC.MEETING

New Dictionary: COURSE_SEC_MEETING_EMS

New Dictionary Permissions: Update if allowing EMS to update room locations in Unidata

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM	ASSOC
ID	D	0		COURSE.SEC.MEETING	10L	S	
ID0	D	0		COURSE_SEC_MEETING_EMS	10L	S	
CSM_SEC_TERM	I	TRANS ("COURSE_SECTIONS_EMS",CSM_COURSE_SECTION,"SEC_TERM","X")		Term	7L	S	
CSM_COURSE_SECTION	D	1		Section	21L	S	
CSM_START_DATE	D	2	D2/MDY	Start Date	8R	S	
CSM_END_DATE	D	3	D2/MDY	End Date	8R	S	
CSM_START_TIME	D	8	MT	Start Time	8R	S	
CSM_END_TIME	D	9	MT	End Time	8R	S	
CSM_BLDG*	D	4		Building	35L	S	
CSM_ROOM*	D	5		Room	35L	S	
CSM_SUNDAY	D	20		(this must be blank)	1L	S	

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM	ASSOC
CSM_MONDAY	D	14		(this must be blank)	1L	S	
CSM_TUESDAY	D	15		(this must be blank)	1L	S	
CSM_WEDNESDAY	D	16		(this must be blank)	1L	S	
CSM_THURSDAY	D	17		(this must be blank)	1L	S	
CSM_FRIDAY	D	18		(this must be blank)	1L	S	
CSM_SATURDAY	D	19		(this must be blank)	1L	S	
CSM_INSTR_METHOD	D	6		Instr Method	35L	S	
ROOM_ID	I	IF CSM_ROOM='' THEN '' ELSE CSM_BLDG:'*':CSM_ROOM			35L	S	
SUNDAY	I	IF CSM_SUNDAY='Y' THEN '1' ELSE '0'		Sunday (this is required)	1L	S	
MONDAY	I	IF CSM_MONDAY='Y' THEN '1' ELSE '0'		Monday (this is required)	1L	S	

@ID	TYPE	LOC	CONV	NAME	FORMAT	SM	ASSOC
TUESDAY	I	IF CSM_ TUESDAY='Y' THEN '1' ELSE '0'		Tuesday (this is required)	1L	S	
WEDNESDAY	I	IF CSM_ WEDNESDAY='Y' THEN '1' ELSE '0'		Wednesday (this is required)	1L	S	
THURSDAY	I	IF CSM_ THURSDAY='Y' THEN '1' ELSE '0'		Thursday (this is required)	1L	S	
FRIDAY	I	IF CSM_ FRIDAY='Y' THEN '1' ELSE '0'		Friday (this is required)	1L	S	
SATURDAY	I	IF CSM_ SATURDAY='Y' THEN '1' ELSE '0'		Saturday (this is required)	1L	S	

*Field used for updating room assignments

Purpose: Used to define the list of meeting patterns per course; related to courses, course types, buildings, rooms.

EMS Field	COURSE_SEC_MEETING_EMS Field
SISID	ID
SISTermID	CSM_SEC_TERM
SISCourseID	CSM_COURSE_SECTION
StartDate	CSM_START_DATE

EMS Field	COURSE_SEC_MEETING_EMS Field
EndDate	CSM_END_DATE
StartTime	CSM_START_TIME
EndTime	CSM_END_TIME
SISBuildingID	CSM_BLDG
SISRoomID	ROOM_ID
RoomID	CSM_ROOM
Sunday	SUNDAY
Monday	MONDY
Tuesday	TUESDAY
Wednesday	WEDNESDAY
Thursday	THURSDAY
Friday	FRIDAY
Saturday	SATURDAY
SISCourseTypeID	CSM_INSTR_METHOD

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CHAPTER 17: Jenzabar (CX - Informix) Views Data Model

EMS Software will code a set of views specific to your organization's use of Jenzabar (CX) to allow for integration between EMS and Jenzabar (CX). Outlined are the baseline tables/columns accessed in the views.

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual Jenzabar (CX) implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.

Note:

Optionally and on a custom basis, up to 10 User Defined Fields can be added to the set of views for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

Modification of views by the customer is unsupported and voids the Annual Service Agreement for the integration with Jenzabar (CX).

Fields highlighted in **BLUE** are required to be unique.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

Jenzabar (CX) Tables: bldg_table

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	Jenzabar (CX) Field
SISID	bldg
BuildingCode	bldg
BuildingDescription	txt

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

Jenzabar (CX) Tables: facil_table (Distinct values)

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	Jenzabar (CX) Field
SISID	ctgry
RoomTypeDescription	ctgry

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

Jenzabar (CX) Tables: facil_table

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS; related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	Jenzabar (CX) Field
SISID	bldg + room
SISBuildingID	bldg
SISRoomTypeID	ctgry
RoomCode	room
RoomDescription	descr
Capacity	max_occ

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

Jenzabar (CX) Tables: id_rec, sec_rec (Distinct values)

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	Jenzabar (CX) Field
SISID	sec_rec.fac_id
InstructorDescription	fullname

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

Jenzabar (CX) Tables: acad_cal_rec, sess_table

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	Jenzabar (CX) Field
SISID	yr + sess + subsess
TermCode	yr + sess + subsess
TermDescription	yr + txt
StartDate	beg_date
EndDate	end_date

Subjects

EMS View: EMS_vwSubjects

View Permissions: Read Only

Jenzabar (CX) Tables: crs_rec (Distinct values)

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	Jenzabar (CX) Field
SISID	crs_no (parsed)
SubjectCode	crs_no (parsed)
SubjectDescription	crs_no (parsed)
CampusCode	''
DivisionCode	''
DepartmentCode	''
LevelCode	''
CustomCode1	''
CustomCode2	''

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

Jenzabar (CX) Tables: im_table

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	Jenzabar (CX) Field
SISID	im
Description	descr

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

Jenzabar (CX) Tables: sec_rec, crs_rec, secmtg_rec

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	Jenzabar (CX) Field
SISID	crs_no + cat + yr + sess + sec_no
SISTermID	yr + sess
SISSubjectID	dept
CampusCode	‘’
DepartmentCode	‘’
LevelCode	‘’
CustomCode1	‘’
CustomCode2	‘’
CRN	crs_no
Course	crs_no (parsed)
Section	sec_no
CourseTitle	title1*
SISInstructorID	fac_id
EstimatedEnrollment	max_reg
CrosslistParentID	crs_no + cat + yr + sess + sec_no*
ActualEnrollment	reg_num
CreditHours	hrs

*First record from crs_rec based on crs_no
**’0’ if not crosslisted, otherwise matches on secmtg_rec.mtg_no

Course Dates

EMS View: EMS_vwCourseDates

View Permissions: Read Only

Jenzabar (CX) Tables: mtg_rec, secmtg_rec, sec_rec

Jenzabar (CX) Table Permissions: Update on mtg_rec table if allowing EMS to update room locations in Jenzabar (CX)

Purpose: Used to define the list of meeting patterns per course; related to courses, coursetypes, buildings, rooms.

EMS Field	Jenzabar (CX) Field
SISID	mtg_no
SISTermID	sec_rec.yr + sec_rec.sess + sec_rec.subsess
SISCourseID	secmtg_rec.crs_no + secmtg_rec.cat + secmtg_rec.yr + secmtg_rec.sess + secmtg_rec.sec_no
StartDate	beg_date
EndDate	end_date
StartTime	beg_tm
EndTime	end_tm
SISBuildingID	bldg*
SISRoomID	bldg + room
RoomID	room*
Sunday	days (parsed)
Monday	days (parsed)
Tuesday	days (parsed)
Wednesday	days (parsed)
Thursday	days (parsed)
Friday	days (parsed)
Saturday	days (parsed)
SISCourseTypeID	im

*Field used for updating room assignment

CHAPTER 18: Jenzabar (EX) Views Data Model

EMS Software will code a set of views specific to your organization's use of Jenzabar (EX) to allow for integration between EMS and Jenzabar (EX). Outlined are the baseline tables/columns accessed in the views.

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual Jenzabar (EX) implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.

Note:

Optionally and on a custom basis, up to 10 User Defined Fields can be added to the set of views for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

Modification of views by the customer is unsupported and voids the Annual Service Agreement for the integration with Jenzabar (EX).

Fields highlighted in BLUE are required to be unique.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

Jenzabar (EX) Tables: building_master

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	Jenzabar (EX) Field
SISID	bldg_cde
BuildingCode	bldg_cde
BuildingDescription	building_desc

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

Jenzabar (EX) Tables: room_master (Distinct values)

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	Jenzabar (EX) Field
SISID	room_type
RoomTypeDescription	room_type

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

Jenzabar (EX) Tables: room_master

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS; related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	Jenzabar (EX) Field
SISID	bldg_cde + room_cde
SISBuildingID	bldg_cde
SISRoomTypeID	room_type
RoomCode	room_cde
RoomDescription	room_desc
Capacity	max_capacity

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

Jenzabar (EX) Tables: name_master, faculty_master

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	Jenzabar (EX) Field
SISID	id_num
InstructorDescription	last_name + first_name

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

Jenzabar (EX) Tables: year_term_table

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	Jenzabar (EX) Field
SISID	yr_cde + trm_cde
TermCode	yr_cde + trm_cde
TermDescription	yr_trm_desc
StartDate	trm_begin_dte
EndDate	trm_end_dte

Subjects

EMS View: EMS_vwSubjects

View Permissions: Read Only

Jenzabar (EX) Tables: crs_comp_1

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	Jenzabar (EX) Field
SISID	crs_comp_1 (parsed)
SubjectCode	crs_comp_1
SubjectDescription	crs_comp_desc
CampusCode	NULL
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

Jenzabar (EX) Tables: n/a – view returns hard coded value of zero and (none).

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	Jenzabar (EX) Field
SISID	n/a
Description	n/a

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

Jenzabar (EX) Tables: section_master

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	Jenzabar (EX) Field
SISID	yr_cde + trm_cde + crs_cde
SISTermID	yr_cde + trm_cde
SISSubjectID	crs_cde (parsed)
CampusCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL
CRN	crs_cde
Course	crs_cde (parsed)
Section	crs_cde (parsed)
CourseTitle	crs_title
SISInstructorID	lead_instructor_id
EstimatedEnrollment	crs_capacity
CrosslistParentID	yr_cde + trm_cde + x_listed_parnt_crs*
ActualEnrollment	crs_enrollment
CreditHours	credit_hrs

*'0' if not crosslisted

Course Dates

EMS View: EMS_vwCourseDates

View Permissions: Update if allowing EMS to update room locations in Jenzabar (EX)

Jenzabar (EX) Tables: secion_schedule

Purpose: Used to define the list of meeting patterns per course; related to courses, coursetypes, buildings, rooms.

EMS Field	Jenzabar (EX) Field
SISID	yr_cde + trm_cde + crs_cde + row number
SISTermID	yr_cde + trm_cde
SISCourseID	yr_cde + trm_cde + crs_cde
StartDate	begin_dte
EndDate	end_dte
StartTime	begin_tim
EndTime	end_tim
SISBuildingID	bldg_cde*
SISRoomID	bldg_cde + room_cde
RoomID	room_cde*
Sunday	sunday_cde
Monday	monday_cde
Tuesday	tuesday_cde
Wednesday	wednesday_cde
Thursday	thursday_cde
Friday	friday_cde
Saturday	saturday_cde
SISCourseTypeID	0 – hard coded

*Field used for updating room assignments

CHAPTER 19: PeopleSoft Views Data Model

EMS Software will code a set of views specific to your organization's use of PeopleSoft to allow for integration between EMS and PeopleSoft. Outlined are the baseline tables/columns accessed in the views.

Note:
Enhanced write back feature and stored procedure is currently only available for PeopleSoft Oracle (not SQL).

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual PeopleSoft implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.

Note:
Optionally and on a custom basis, up to 10 User Defined Fields can be added to the set of views for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

Modification of views by the customer is unsupported and voids the Annual Service Agreement for the integration with PeopleSoft.

A stored procedure has been introduced into EMS_SPUPDATECOURSEDATES to provide additional updates to PeopleSoft. These updates and new stored procedure accomplish the following:

1. Update the PS_CLASS_MTG_PAT record with the room ID.
2. If an Event ID already exists, update the existing PS_CAMPUS_MTG records.
3. If an Event ID does not exist:
    a. Update the PS_EVENT_LAST_TBL table – increment by one.
    b. Retrieve the EVENT_NBR_LAST value from the PS_EVENT_LAST_TBL table.
    c. Update the PS_CLASS_TBL record with the Event ID.
    d. If it's a combined section then update the related combined sections in PS_CLASS_TBL with the Event ID so long as the SKIP_MTGPAT_EDIT flag is set to 'No.'

4. Create PS_CAMPUS_EVENT record if it doesn't exist for the Event ID.
5. Create PS_CAMPUS_MTG records if they don't exist for the Event ID and Meeting Number.

The Oracle account used for the integration with EMS will need to have write access to the following tables, if it does not already:

- PS_CLASS_MTG_PAT
- PS_EVENT_LAST_TBL
- PS_CLASS_TBL
- PS_CAMPUS_EVENT
- PS_CAMPUS_MTG
- PS_FACILITY_TBL

View Modifications

Fields highlighted in BLUE are required to be unique.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

PeopleSoft Tables: PS_BLDG_TBL

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	PeopleSoft Field
SISID	BLDG_CD
BuildingCode	BLDG_CD
BuildingDescription	DESCR

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

PeopleSoft Tables: PSXLATITEM ('FACILITY_TYPE')

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	PeopleSoft Field
SISID	FIELDVALUE
RoomTypeDescription	XLATLONGNAME

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

PeopleSoft Tables: PS_FACILITY_TBL, PS_BLDG_TBL, PSXLATITEM

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS; related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	PeopleSoft Field
SISID	FACILITY_ID
SISBuildingID	BLDG_CD
SISRoomTypeID	FACILITY_TYPE
RoomCode	ROOM
RoomDescription	DESCR
Capacity	ROOM_CAPACITY

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

PeopleSoft Tables: PS_INSTR_ADVISOR, PS_NAMES

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	PeopleSoft Field
SISID	EMPLID
InstructorDescription	PS_NAMES.NAME

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

PeopleSoft Tables: PS_TERM_TBL

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	PeopleSoft Field
SISID	STRM
TermCode	STRM
TermDescription	DESCR
StartDate	TERM_BEGIN_DT
EndDate	TERM_END_DT

Subjects

EMS View: EMS_vwSubjects

View Permissions: Read Only

PeopleSoft Tables: PS_SUBJECT_TBL, PS_CLASS_TBL (Distinct values)

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	PeopleSoft Field
SISID	SUBJECT

EMS Field	PeopleSoft Field
SubjectCode	SUBJECT
SubjectDescription	DESCR
CampusCode	PS_CLASS_TBL.LOCATION*
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

*NULL if not using Campus Codes

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

PeopleSoft Tables: PSXLATITEM ('SSR_COMPONENT')

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	PeopleSoft Field
SISID	FIELDVALUE
Description	XLATLONGNAME

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

PeopleSoft Tables: PS_CLASS_TBL, PS_CRSE_CATALOG, PS_CLASS_INSTR, PS_SCTN_CMBND

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	PeopleSoft Field
SISID	STRM + CLASS_NBR
SISTermID	STRM
SISSubjectID	SUBJECT
CampusCode	LOCATION*
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL
CRN	CLASS_NBR
Course	CATALOG_NBR
Section	CLASS_SECTION
CourseTitle	DESCR
SISInstructorID	PS_CLASS_INSTR.EMPLID**
EstimatedEnrollment	ENRL_CAP
CrosslistParentID	PS_SCTN_CMBND.STRM + PS_ SCTN_CMBND.CLASS_NBR***
ActualEnrollment	ENRL_TOT
CreditHours	PS_CRSE_CATALOG.UNITS_ MINIMUM

*NULL if not using Campus Codes
**First record
***'0' if not crosslisted, otherwise matching on SCTN_COMBINED_ID

Course Dates

EMS View: EMS_vwCourseDates

View Permissions: Update if allowing EMS to update room locations in PeopleSoft

PeopleSoft Tables: PS_CLASS_MTG_PAT, PS_CLASS_TBL, PS_FACILITY_TBL

Purpose: Used to define the list of meeting patterns per course; related to courses, coursetypes, buildings, rooms.

EMS Field	PeopleSoft Field
SISID	**SQL:** STRM + CLASS_NBR + Row Number **Oracle:** STRM + CRSE_OFFER_NBR + SESSION_CODE + CLASS_ SECTION + CLASS_MTG_NBR
SISTermID	STRM
SISCourseID	STRM + CLASS_NBR
StartDate	START_DT
EndDate	END_DT
StartTime	MEETING_TIME_START
EndTime	MEETING_TIME_END
SISBuildingID	BLDG_ID
SISRoomID	FACILITY_ID*
Sunday	SUN
Monday	MON
Tuesday	TUES
Wednesday	WED
Thursday	THURS
Friday	FRI
Saturday	SAT
SISCourseTypeID	SSR_COMPONENT

*Field used for updating room assignments

CHAPTER 20: PowerCampus Views Data Model

EMS Software will code a set of views specific to your organization's use of PowerCampus to allow for integration between EMS and PowerCampus. Outlined are the baseline tables/columns accessed in the views.

You will be provided a Campus Technical Environment Questionnaire which allows for identification of specific fields used by EMS that tend to vary in individual PowerCampus implementations. Following return of the questionnaire, EMS Views will be coded for your organization and a final review done in EMS. Your Implementation Consultant can assist in more detailed explanations or demonstrations of how the information will be used in EMS to support the Academic Scheduling process, as needed for completion of the questionnaire. Once reviewed and accepted, further view modifications will be subject to EMS Professional Services time and materials fees.



Note:

Optionally and on a custom basis, up to 10 User Defined Fields can be added to the set of views for each organization to support desired workflow. Detailed business requirements are needed to provide a quote for customization of the views for this purpose.

Modification of views by the customer is unsupported and voids the Annual Service Agreement for the integration with PowerCampus.

Fields highlighted in BLUE are required to be unique.

Buildings

EMS View: EMS_vwBuildings

View Permissions: Read Only

PowerCampus Tables: BUILDING

Purpose: Used to define buildings list in EMS. Required for buildings that host academic courses; additional buildings can be added manually to EMS if used only for non-academic purposes.

EMS Field	PowerCampus Field
SISID	BUILDING_CODE
BuildingCode	BUILDING_CODE
BuildingDescription	BUILD_NAME_1

Room Types

EMS View: EMS_vwRoomTypes

View Permissions: Read Only

PowerCampus Tables: CODE_ROOMTYPE

Purpose: Used to define room type list in EMS. Room Types classify each room and allows for searching, sorting, and reporting by classification. Additional room types can be added to EMS manually.

EMS Field	PowerCampus Field
SISID	CODE_VALUE_KEY
RoomTypeDescription	LONG_DESC

Rooms

EMS View: EMS_vwRooms

View Permissions: Read Only

PowerCampus Tables: ROOM

Purpose: Used to define list of rooms and their capacities for academic purposes in EMS; related to Buildings and Room Types. Required for rooms that host academic courses; additional rooms can be added manually to EMS if used only for non-academic purposes.

EMS Field	PowerCampus Field
SISID	BUILDING_CODE + ROOM_ID
SISBuildingID	BUILDING_CODE
SISRoomTypeID	ROOM_TYPE
RoomCode	ROOM_ID
RoomDescription	ROOM_NAME
Capacity	MAX_OCCUPANCY

Instructors

EMS View: EMS_vwInstructors

View Permissions: Read Only

PowerCampus Tables: PEOPLE, SECTIONPER

Purpose: Used to define list of instructors in EMS; related to Courses.

EMS Field	PowerCampus Field
SISID	PEOPLE_CODE_ID
InstructorDescription	LAST_NAME + FIRST_NAME

*Uses SIRASGN to determine primary instructor (SIRASGN_PRIMARY_IND)

Terms

EMS View: EMS_vwTerms

View Permissions: Read Only

PowerCampus Tables: SECTIONS, ACADEMICCALENDAR, CODE_ACASESSION

Purpose: Used to define list of terms in EMS; related to Courses. In conjunction with Domains, terms separate courses into distinct lists that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit.

EMS Field	PowerCampus Field
SISID	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION
TermCode	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION
TermDescription	ACADEMIC_YEAR + ACADEMIC_TERM + CODE_ ACASESSION.LONG_DESC
StartDate	ACADEMICCALENDAR.START_DATE
EndDate	ACADEMICCALENDAR.END_DATE

Subjects

EMS View: EMS_vwSubjects

View Permissions: Read Only

PowerCampus Tables: CODE_DEPARTMENT, SECTIONS, ORGANIZATION

Purpose: Used to define list of subjects in EMS. Within EMS, subjects are divided into Domains in order to create distinct lists of courses per term that will go through the academic planning process (synching, optimizing, publishing, reporting) as a unit, managed by the academic central scheduler.

EMS Field	PowerCampus Field
SISID	CODE_VALUE_KEY
SubjectCode	CODE_VALUE_KEY
SubjectDescription	LONG_DESC
CampusCode	ORGANIZATION.ORG_IDENTIFIER*
DivisionCode	NULL
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL

*NULL if not using Campus Codes

Course Types

EMS View: EMS_vwCourseTypes

View Permissions: Read Only

PowerCampus Tables: CODE_EVENTSUBTYPE

Purpose: Used to define the course type list in EMS; related to coursedates. Course Types are used to classify coursedates for purposes of searching, sorting, optimizing, and reporting.

EMS Field	PowerCampus Field
SISID	CODE_VALUE_KEY
Description	LONG_DESC

Courses

EMS View: EMS_vwCourses

View Permissions: Read Only

PowerCampus Tables: SECTIONS, SECTIONPER, ORGANIZATION, SECTIONCROSSTALLY

Purpose: Used to define the list of courses per term; related to subjects, instructors, terms.

EMS Field	PowerCampus Field
SISID	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION + EVENT_ID + EVENT_SUB_TYPE + SECTION
SISTermID	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION
SISSubjectID	DEPARTMENT
CampusCode	ORGANIZATION.ORG_IDENTIFIER*
DepartmentCode	NULL
LevelCode	NULL
CustomCode1	NULL
CustomCode2	NULL
CRN	SECTIONID
Course	EVENT_ID
Section	SECTION
CourseTitle	EVENT_LONG_NAME
SISInstructorID	SECTIONPER.PERSON_CODE_ID
EstimatedEnrollment	MAX_PARTICIPANT
CrosslistParentID	SECTIONCROSSTALLY .ACADEMIC_YEAR + SECTIONCROSSTALLY.ACADEMIC_TERM + SECTIONCROSSTALLY .ACADEMIC_SESSION + SECTIONCROSSTALLY .EVENT_ID + SECTIONCROSSTALLY.EVENT_SUB_TYPE + SECTIONCROSSTALLY .SECTION **
ActualEnrollment	ADDS

EMS Field	PowerCampus Field
CreditHours	CREDITS

*NULL if not using Campus Codes
**'0' if not crosslisted. Uses EMS_vwCrosslistings (definition below)

Course Dates

EMS View: EMS_vwCourseDates

View Permissions: Update if allowing EMS to update room locations in PowerCampus

PowerCampus Tables: SECTIONSCHEDULE, SECTIONS, CODE_DAY

Purpose: Used to define the list of meeting patterns per course; related to courses, coursetypes, buildings, rooms.

EMS Field	PowerCampus Field
SISID	SECTIONSCHEDULE_ID
SISTermID	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION
SISCourseID	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION + EVENT_ID + EVENT_SUB_TYPE + SECTION
StartDate	SECTIONS.START_DATE
EndDate	SECTIONS.END_DATE
StartTime	START_TIME
EndTime	END_TIME
SISBuildingID	BUILDING_CODE
SISRoomID	BUILDING_CODE + ROOM_ID
RoomID	ROOM_ID
Sunday	CODE_DAY.DAY_SUNDAY

EMS Field	PowerCampus Field
Monday	CODE_DAY.DAY_MONDAY
Tuesday	CODE_DAY.DAY_TUESDAY
Wednesday	CODE_DAY.DAY_WEDNESDAY
Thursday	CODE_DAY.DAY_THURSDAY
Friday	CODE_DAY.DAY_FRIDAY
Saturday	CODE_DAY.DAY_SATURDAY
SISCourseTypeID	EVENT_SUB_TYPE

Course Crosslistings

EMS View: EMS_vwCrosslistings

View Permissions: Read Only

PowerCampus Tables: SECTIONCROSSTALLY

Purpose: Used to identify a cross list parent child relationship for crosslistings to work in EMS.

EMS Field	PowerCampus Field
Crosslist1	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION + EVENT_ID + EVENT_SUB_TYPE + SECTION
Crosslist2	ACADEMIC_YEAR + ACADEMIC_TERM + ACADEMIC_SESSION + EVENT_ID + EVENT_SUB_TYPE + SECTION

CHAPTER 21: Web Service Overview

EMS Campus Application Architecture

The EMS Campus Web Service communicates with the SIS database via views. An installation script is provided during your implementation that will be executed against your SIS database to create the necessary views. The EMS Campus Web Service interacts directly with these views to handle all querying and updating room assignments.

EMS-SIS Data Synchronization

The EMS Campus Web Service synchronizes the following information from the SIS:

Facility Information

- Buildings (via ems_vwBuildings view)
- Room Types (via ems_vwRoomTypes view)
- Rooms (via ems_vwRooms view)

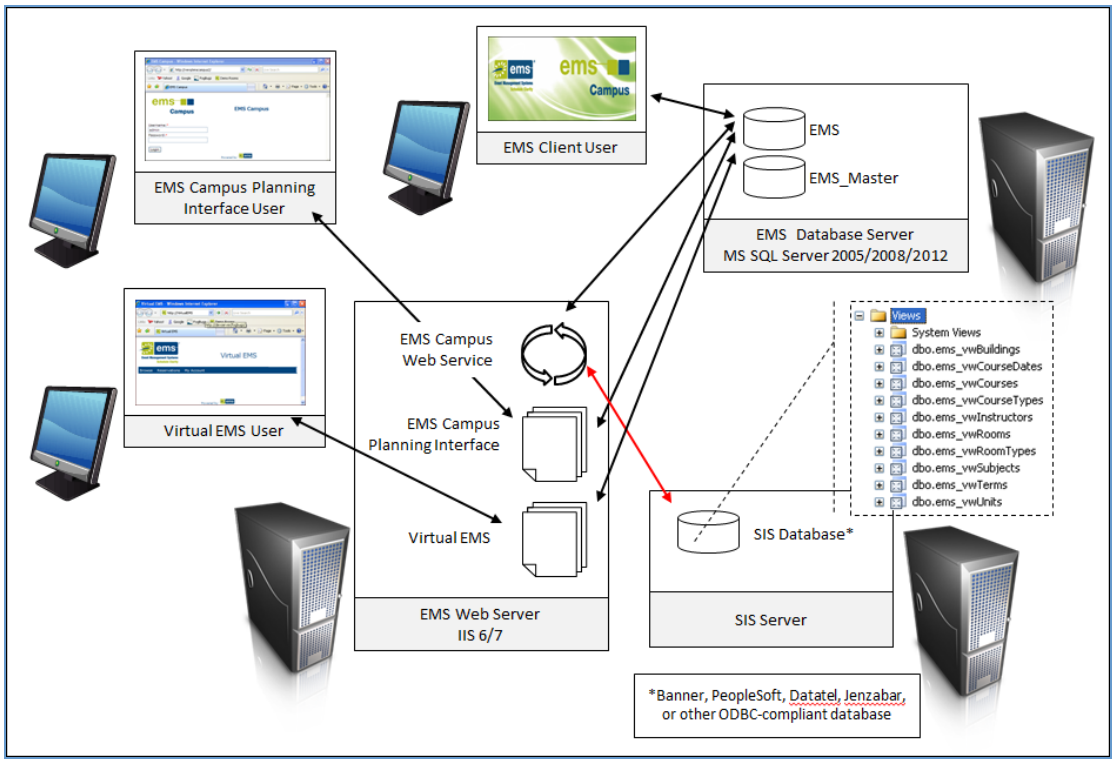
Course Related Information

- Subjects (via ems_vwSubjects view)
- Instructors (via ems_vwInstructors view)
- Course Types (via ems_vwCourseTypes view)
- Terms (via ems_vwTerms view)
- Courses and Course Dates (via ems_vwCourses and ems_vwCourseDates views)



Note:
An extra view – ems_vwCourseDates_IDs is provided for customers using Banner and PeopleSoft for their SIS.

When publishing your course schedule in EMS or when changing room assignments in EMS post-publish, the EMS Campus Web Service updates course room information in your SIS. This is the only information that the EMS Campus Web Service updates in the SIS database.



EMS/SIS Synchronization

Synchronization functions are executed by the Domain Scheduler using the EMS Campus client application. After changes are made in the SIS, the EMS Campus Web Service pulls that information into EMS Campus when a sync is ran from the Manage Terms screen.

When the Domain Scheduler publishes a term in EMS, reservations and bookings are created in EMS and updates to course room assignments are pushed back to the SIS. Post-publish changes to course room assignments made in EMS are automatically updated in the SIS.

Other Synchronization Options

If creating database views in your SIS is not possible, the following alternative is possible:

- If an SIS is not available or is incompatible with the EMS Campus, you can use course-related data from files exported from your SIS in a tab-delimited format. This method is a one-way import. EMS Campus will not update course room assignments back into your SIS.

  See Format for Tab-Delimited Files for file format information.

CHAPTER 22: Format for Tab-Delimited Files

The EMS Campus Web Service can import your course data into EMS Campus via tab-delimited files outputted from your SIS. The following tables outline the specifications for this option. A separate file is required for each of these tables. By default, the EMS Campus Web Service looks to C:\Inetpub\wwwroot\EMSCampusWebService\CustomConfig\ on your web server for your tab-delimited files.

Buildings.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	WASH	must be unique
BuildingCode	text	20	WASH	
Description	text	50	Washington	

RoomTypes.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	C	must be unique
Description	text	30	C	e.g. Classroom

Rooms.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	WA300	must be unique
RoomCode	text	20	WA300	
Description	text	50	WASHINGTON ROOM 300	
BuildingID	text	255	WASH	
RoomTypeID	text	255	C	

Column	Data Type	Max. Characters	Example	Notes
Capacity	number		30	

Instructors.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	123456	must be unique
Description	text	255	Terry Jones	

Subjects.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	WH	must be unique
SubjectCode	text	10	WH	
Description	text	50	World History	
CampusCode	text	30	MAIN	blank if N/A
DepartmentCode	text	50		optional, blank if N/A
DivisionCode	text	50		optional, blank if N/A
LevelCode	text	50		optional, blank if N/A
CustomCode1	text	50		optional, blank if N/A
CustomCode2	text	50		optional, blank if N/A

CourseTypes.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	L	must be unique

Column	Data Type	Max. Characters	Example	Notes
Description	text	255	L	e.g. Lecture

Terms.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	07FALL	must be unique
TermCode	text	10	07FALL	
Description	text	100	2007 FALL TERM	
StartDate	date		9/12/2007	must be in m/d/yyyy format
EndDate	date		12/15/2007	must be in m/d/yyyy format

Courses.txt

Column	Data Type	Max. Characters	Example	Notes
ID	text	255	100001	must be unique
CRN	text	255	100001	must be unique
CourseTitle	text	100	World History	
TermID	text	255	07FALL	
EstimatedEnrollment	number		30	
ActualEnrollment	number		0	
InstructorID	text	255	123456	
SubjectID	text	255	WH	
CrossListParentID	text	255	0	relates to ID, zero or blank if

Column	Data Type	Max. Characters	Example	Notes
				N/A
Course	text	10	101	
CampusCode	text	30	MAIN	optional, blank if N/A
Section	text	10	01	
Credit Hours	number		3.0	
DepartmentCode	text	50		optional, blank if N/A
DivisonCode	text	50		optional, blank if N/A
LevelCode	text	50		optional, blank if N/A
CustomCode1	text	50		optional, blank if N/A
CustomCode2	text	50		optional, blank if N/A

CourseDates.txt

Column	Data Type	Max. Characters	Example	Notes
CourseID	text	255	100001	
ID	text	255	100001	must be unique
CourseTypeID	text	255	L	
StartDate	date		9/11/2007	must be in m/d/yyyy format
EndDate	date		12/15/2007	must be in m/d/yyyy format
BuildingID	text	255	WASH	
RoomID	text	255	WA300	
StartTime	time		0900	HHMM format, no colon

Column	Data Type	Max. Characters	Example	Notes
EndTime	time		1300	HHMM format, no colon
Sunday	0 or 1		0	
Monday	0 or 1		1	
Tuesday	0 or 1		0	
Wednesday	0 or 1		1	
Thursday	0 or 1		0	
Friday	0 or 1		1	
Saturday	0 or 1		0	

CHAPTER 23: Integrate Course and Student Information with Student Information Systems (SIS)

EMS integrates with most commercial and many custom SIS/ERP systems, saving your institution time and eliminating data entry duplication. The optional EMS Campus Web Service provides bi-directional integration so that course data and instructor information is pulled into EMS, and rooms assigned in EMS are then written back to the SIS. With SIS integration, you can:

- Pull course and instructor information from the SIS to create multiple scheduling scenarios.
- Quickly publish selected scheduling scenarios for students and instructors to view.
- Allow departments to collaborate online for a paperless planning process.
- Easily identify all new data moved into EMS for review.
- Report on seat fill percentage, time block availability, utilization trends, and more.

See Also: EMS Campus Web Service and White Paper Installation Guide.

Supported SIS

You can manually or automatically synchronize your campus-specific SIS data (Instructors, Course Types, Subjects, and Terms) with EMS using the following supported SIS:

- Ellucian's Banner
- Ellucian's Colleague (on SQL or Oracle platform)
- Ellucian's PowerCampus
- Oracle's Peoplesoft
- Jenzabar CX
- Jenzabar EX



Note:

Non-SIS customers can still streamline data entry by importing tab-delimited lists of people/groups, rooms, resources, reservations, and (for EMS Campus), final exam schedules. See Also: Importing Files To Streamline Data Entry.

CHAPTER 24: EMS Campus (Academic Planning Component of EMS Desktop Client)

Configuration Guide

EMS Campus is an optional component of EMS software that provides all the functionality that is necessary for Domain Schedulers to ensure that every class meets in a location and at a time that is acceptable to departments and professors. The system provides automatic room assignment within user-supplied parameters, integration with your SIS/ERP software, and efficient online collaboration tools. It also simplifies final exam scheduling and offers a selection of reports to streamline and analyze the room scheduling process. When added to the functionality that meeting and event staff already have access to, it provides a complete campus-wide space management package referred to as EMS Academic Planning.

This guide details the synchronization of the information in your Student Information System, or SIS, with the information in your EMS database as well as the configuration of campus-specific data items for EMS Campus.

CHAPTER 25: EMS Desktop Client Academic Planning Configuration Guide

EMS Academic Planning is an optional component of EMS software that provides all the functionality that is necessary for Domain Schedulers to ensure that every class meets in a location and at a time that is acceptable to departments and professors. The system provides automatic room assignment within user-supplied parameters, integration with your SIS/ERP software, and efficient online collaboration tools. It also simplifies final exam scheduling and offers a selection of reports to streamline and analyze the room scheduling process. When added to the functionality that meeting and event staff already have access to, it provides a complete campus-wide space management package referred to as EMS Academic Planning.

This guide details the synchronization of the information in your Student Information System, or SIS, with the information in your EMS database as well as the configuration of campus-specific data items for EMS Academic Planning.

CHAPTER 26: Overview of Synchronization

Your *Student Information System*, or SIS, contains a wealth of information about your buildings, room types, rooms, instructors, course types, subjects, and terms. The process of importing this SIS data into your EMS database is referred to as *synchronization*. When you import campus-specific data (instructors, course types, subjects, and terms), you create the data items in your EMS database. When you import facility data (buildings, room types, and rooms), you must either create the data items in your EMS database, or if the facility data already exists in your EMS database, then you must link the SIS facility data to the corresponding facility data in your EMS database.

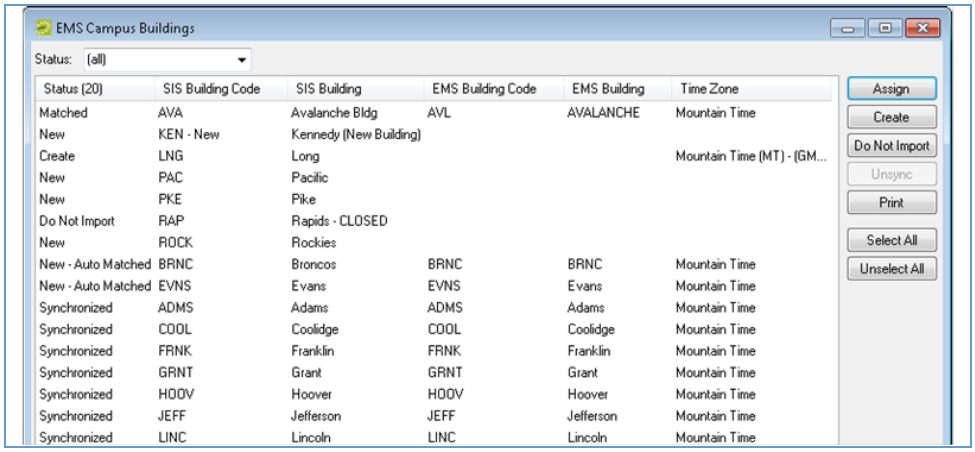
Note:

Before you can carry out synchronization, the EMS Campus Web Service must be installed and configured. Refer to the EMS Installation instructions for details.

Facility Data Synchronization

When you import facility SIS data, the actions that you must carry out are different if you do not have the facility data (building, room type, or room) already configured in your EMS database versus if you do have the data already configured. See also: Synchronize Facility Data.

- If you have not configured the necessary data items in your EMS database, then all data items that are imported from your SIS are flagged with a status of New. To configure these items in your EMS database, you must select the item and then click Create. (Depending on the item that you select, another window might open with additional configuration options that are required to completely configure the item in your EMS database.) For example, in the graphic below, the PAC-Pacific building, the PKE-Pike building, the ROCK-Rockies building, and the LNG-Long building exist in the SIS, but not in the EMS database. The status of the PAC-Pacific building, the PKE-Pike building, the ROCK-Rockies building is therefore set to New. The status of the of the Long building was set to Create by selecting the building, and then clicking **Create**.



- If you have configured the necessary data items in your EMS database, and you have named and/or coded them consistently between your EMS database and your SIS, then these data items are automatically matched and flagged with a status of New—Auto Matched. For example, in the graphic above, the Evans building and the Broncos building were configured in the EMS database prior to synchronization. Because the Evans building was named and coded identically as the same building in the SIS, EMS auto-matched the record for this building. Even though the Broncos building was named differently, it was coded identically as the same building in the SIS, and therefore, it was auto-matched as well.
  Auto-matching can occur only if each SIS facility data item can be matched to one and only one EMS data item. For example, if Softball Field and Soccer Field are separate buildings in the SIS, they cannot both be synchronized with Fields in the EMS database. Likewise, if Discussion Room and Conference Room are separate room types in the SIS, then the both cannot be synchronized to Meeting Room in the EMS database. In this case, the data items that are imported are with a status of New, and you must select each New item and assign it to the appropriate corresponding item in your EMS database. (See the bullet below.)
- If you have configured the necessary data items in your EMS database, but you have not named or coded these items consistently between your EMS database and your SIS, then the data items in your SIS are imported and also flagged with a status of New. You must select each New item and assign it to the appropriate corresponding item in your EMS database to set the status to Matched. For example, in the graphic above, the Avalanche building was imported from an SIS. The corresponding building in the EMS database was neither named nor coded identically. As a result, when it was imported, its status was set to New. After the record was selected and Assign clicked, and the building matched to an existing building in the EMS database, the status was set to Matched. When you manually match items, as is the case with Auto-Matching, each SIS facility data item can be matched to one and only one EMS data item.
- Just as with campus-specific data, you can also flag items from the SIS with a status of Do Not Import if you do not want the item to be configured in your EMS database, for example, a building on campus that has been permanently closed or a dormitory building that does not have space that can be scheduled. For example, in the graphic above, the RAP (CLOSED) - Rapids building has been permanently closed, so its status was set to Do Not Import. After a status has been set for all facility data, (New - Auto Matched, Matched, Create, or Do Not Import), you must click Process to complete synchronization. If you do not click Process, then the data items are not configured in your EMS database. After you create these items in your EMS database, the status of the items is set to Synchronized to indicate that the SIS data has been synchronized.

You must synchronize your facility data in the following order:

1. Buildings
2. Room Types
3. Rooms

The synchronization process does not update existing facility records after they have been imported and linked. For example, if a room's code, description, or capacity is changed in the SIS after it has been imported and linked, this information is not changed in the EMS database. Previously synchronized items

can be unsynchronized by selecting the item or items, and then clicking Unsynch. You must unsynchronize items in the reverse order in which they were synchronized. For example, you cannot unsynchronize buildings if the buildings have rooms that are still synchronized. You must first unsynchronize the rooms, and then you can unsynchronize the buildings. Likewise, you cannot unsynchronize room type if rooms are still synchronized with the room type. You must first unsynchronize the rooms, and then you can unsynchronize the room types. In addition, you cannot unsynchronize any facility data if courses that are synchronized use the buildings or rooms.

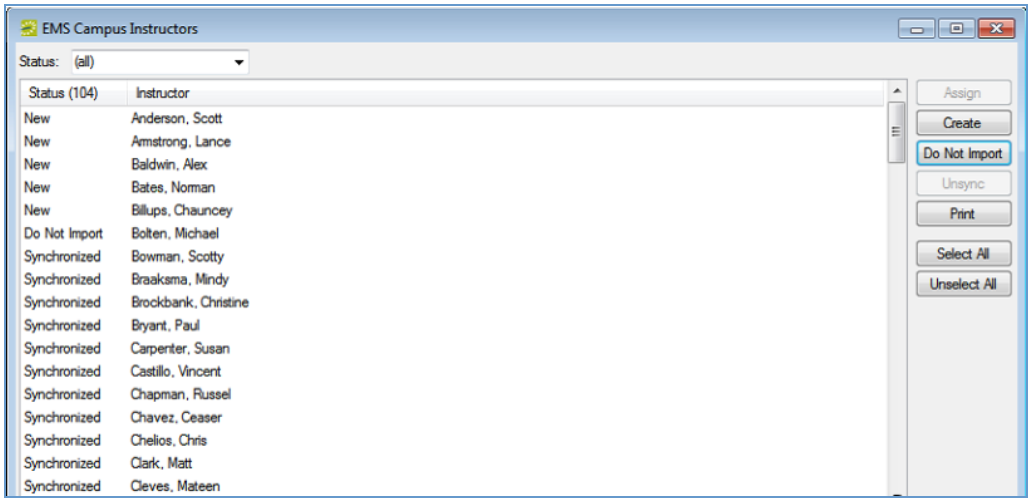
Campus-Specific Data Synchronization

When you import your campus-specific SIS data, all the SIS data items are flagged with a status of New. To create these items in your EMS database, you select the items, click Create, and then Process. After you create these items in your EMS database, the status of the items is set to Synchronized to indicate that the SIS data has been synchronized. If you do not want to create the SIS data item in your EMS database (for example, you are importing an Instructors list and an instructor is on sabbatical and unavailable to teach classes), then you can select the item and click **Do Not Import**. Previously synchronized items can be unsynchronized by selecting the item or items, and then clicking Unsynch.

See also: Synchronize Campus-Specific Data.

Note:

You can select a single data item at a time for processing, you can select multiple items for processing using the CTRL-click or SHIFT-click functions, or you can select all items in a single step by clicking Select All.



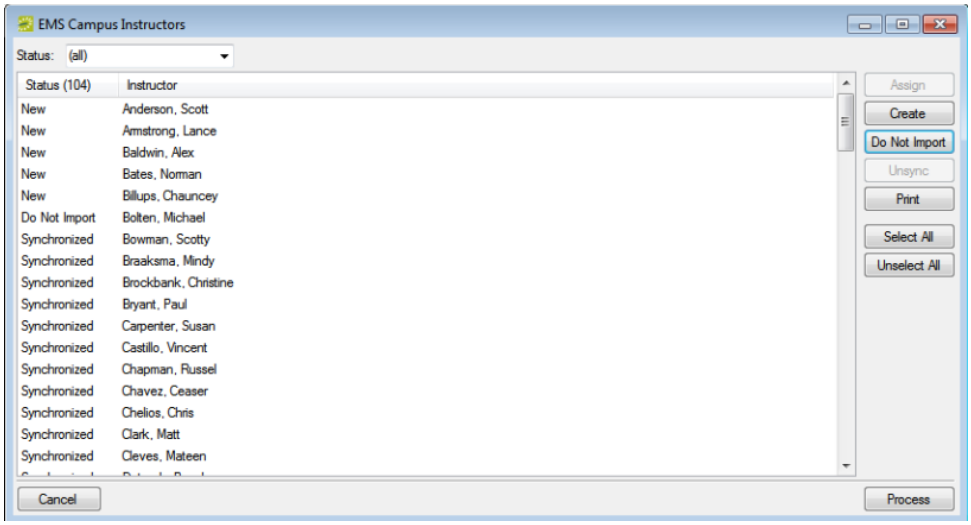
CHAPTER 27: Synchronize Campus-Specific Data

When you synchronize your campus specific SIS data (Instructors, Course Types, Subjects, and Terms), all the SIS data items are flagged with a status of New. To create these items in your EMS database, you select the items, click **Create**, and then click **Process**.

Synchronize Campus-Specific Data

> **Note:**
> The following procedure is written from the perspective of synchronizing Instructors, but, by analogy, you can follow this procedure to synchronize course types, subjects, and terms.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Synchronize Instructors**. The EMS Academic Planning Instructors window opens.



2. Select the SIS data item, or CTRL-click to select the multiple data items that you are creating in your EMS database, click Create, and then click **Process**. A message opens indicating that the data items were successfully processed.

> **Note:**
> If you do not want to create an SIS data item in your EMS database, select the item, and then click **Do Not Import**.

3. Click **OK** to close the message and return to the EMS Academic Planning Instructors window. The status of the data items is set to Synchronized to indicate that the SIS data has been synchronized.
4. Click **Cancel** or Close (x) to close the window.

CHAPTER 28: Synchronize Facility Data

You must synchronize your facility data in the following order:

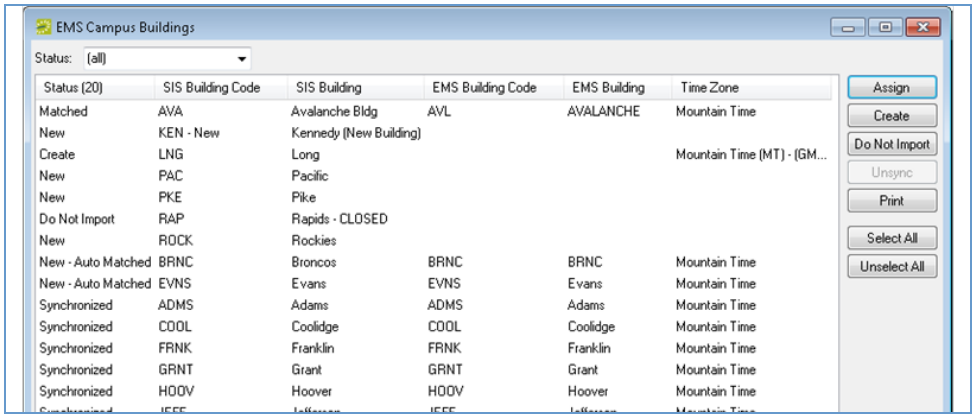
1. Buildings
2. Room Types
3. Rooms

The synchronization process does not update existing facility records after they have been imported and linked. For example, if a room's code, description, or capacity is changed in the SIS after it has been imported and linked, this information is not changed in the EMS database.

Synchronize Buildings

When you synchronize buildings, the values for Building Code and Description in the SIS are used for any new buildings that are configured in your EMS database. You can edit these values if needed in EMS. See Configure Buildings.

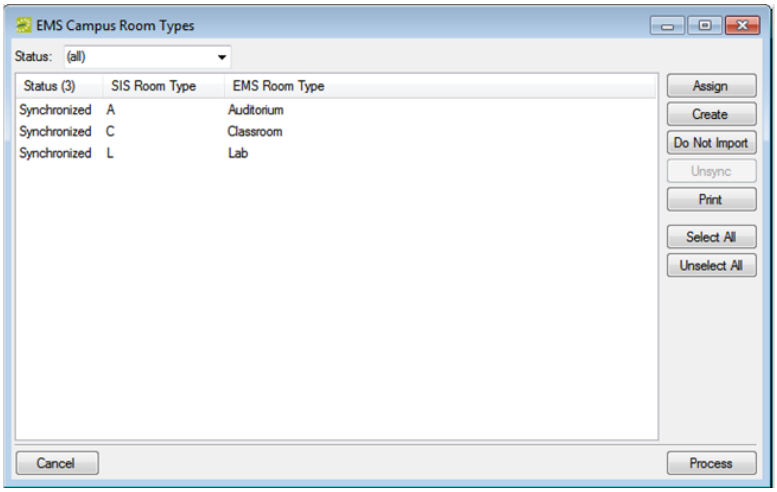
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Synchronize Buildings**. The EMS Academic Planning Building window opens.



2. Set the status of the imported buildings (New - Auto Matched, Matched, Create, or Do Not Import) as described in Facility data synchronization. A window opens that requires you to select a time zone for the referenced buildings.
3. Select the correct time zone, and then click **Close** to return to the EMS Academic Planning Buildings window.
4. Click **Process**. A message opens indicating that the buildings were successfully processed.
5. Click **OK** to close the message and return to the EMS Academic Planning Buildings window.
6. Click **Cancel** or Close (x) to close the window.

Synchronize Room Types

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Synchronize Room Types**. The EMS Academic Planning Room Types window opens.



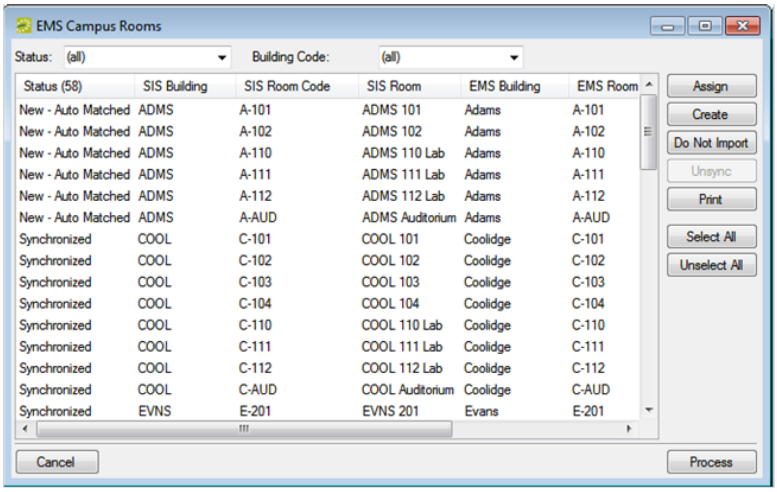
2. Set the status of the imported room types (New - Auto Matched, Matched, Create, or Do Not Import) as described in Facility data synchronization.
3. Click **Process**. A message opens indicating that the room types were successfully processed.
4. Click **OK** to close the message and return to the EMS Academic Planning Room Types window.
5. Click **Cancel** or Close (x) to close the window.

> **Note:**
> After you have synchronized the room types, you can edit the names as needed. See Configure Room Types.

Synchronize Rooms

Before you can synchronize room data, at least one setup type must be configured in your EMS database (for example, academic setup), or the synchronization process cannot correctly import the room capacity. To configure a setup type, or confirm that one already has been configured in your EMS database, see Configure Setup Types. After you have configured or confirmed this setup type, set the value for the following EMS system parameter (Area: Campus, Description: Default Setup Type) to this setup type. See Edit System Parameters.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Synchronize Rooms**. The EMS Academic Planning Rooms window opens.



2. Set the status of the imported rooms (New - Auto Matched, Matched, Create, or Do Not Import) as described in Facility data synchronization.
3. Click **Process**. A message opens indicating that the rooms were successfully processed.
4. Click **OK** to close the message and return to the EMS Academic Planning Rooms window.
5. Click **Cancel** or Close (x) to close the window.

Note:

After you synchronize the rooms, you can edit the names as needed. See Configure Rooms.

CHAPTER 29: Configure Domains

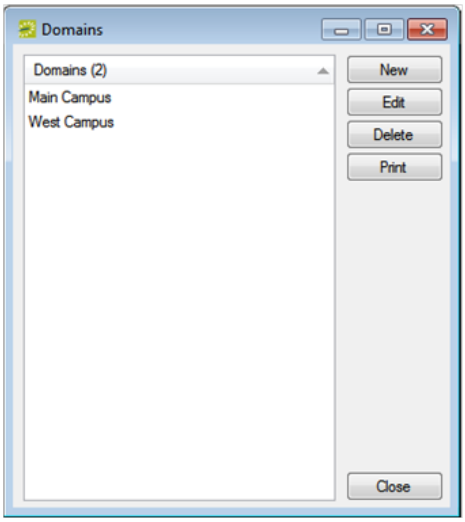
A *domain* is a level of organization within an institution that defines scheduling responsibility. Functions such as synchronizing, optimizing, and running reports are carried out on a per domain basis. When you configure your domain, you must identify the subjects that are offered in the domain and you must also specify the rooms that are controlled by the domain. The subjects that are defined within a domain determine the courses listed for the domain. The rooms that are defined within a domain determine all spaces that are potentially scheduled by the courses. Subjects can belong to only one domain. Rooms can belong to multiple domains.

Note:

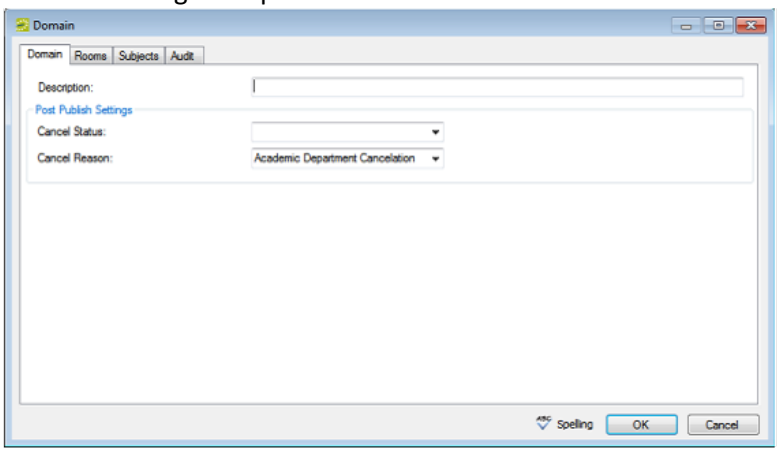
The term domain is controlled by an EMS system parameter (Campus: Domain Title Singular and Campus: Domain Title Plural), and it is often changed to Campus or School to better describe how course scheduling is divided. See Edit System Parameters.

Configuring Domains

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Domains**. The Domains window opens. This window lists all the domains that are currently configured in your EMS database.



2. Click **New**. The Domain dialog box opens on the Domain tab.



3. In the Description field, enter a name or description for the new domain.

> **Note:**
> The description can be a maximum of 50 characters, including spaces.

4. On the Cancel Status drop-down list, select the status that is to be used for canceling the room bookings in EMS when a course date is canceled in the SIS after publishing.
5. On the Cancel Reason drop-down list, select the reason that is to be used for cancellations after publishing.
6. Open the Rooms tab, and optionally do one or both of the following:
   - On the Building drop-down list, select (all) buildings, or select a specific building.
   - On the Room type drop-down list, leave the value set to (all), or select a specific room type. All rooms that meet your search criteria are displayed in the Available list.
7. On the Available list, select the room (CTRL-click to select multiple rooms) that is to be controlled by the campus, and then Move (>) to the Selected list.
8. Open the Subjects tab, and on the Available list, select the subject, or CTRL-click to select the multiple subjects that are offered by the campus, and then click the Move (>) button to move the selected subjects to the Selected list.
9. Optionally, click **Spelling** to spell check the domain before you save it.
10. Click **OK**. The Campus dialog box closes. You return to the Domains window the newly configured domain automatically selected.

CHAPTER 30: Configure Academic Units

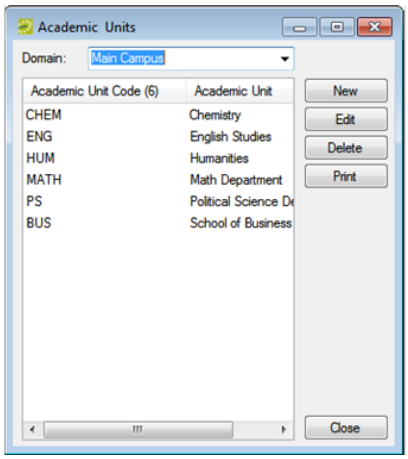
An *academic unit* is a level of organization within an institution that defines responsibility for making schedule requests for a portion of a domain. Academic units are used when assigning permissions to academic users and when filtering reports.

When you configure your academic units, you must specify the event type that is to be used when you publish your courses in EMS Software, LLC, an Accruent Company, the group for which the course reservation is to be made, the rooms that the units control, and the subjects that are associated with the units. The rooms that are defined within an academic unit give the unit the ability to require these spaces during optimization. The subjects that are defined within an academic unit determine the courses that are listed when filtering by the unit. Both subjects and rooms can belong to more than one academic unit.

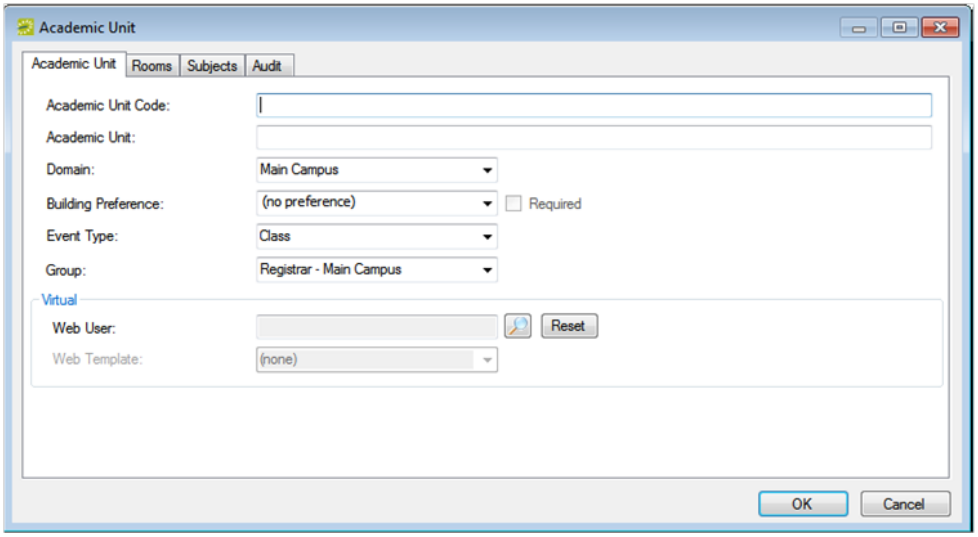
Note:

The term "domain" is controlled by an EMS system parameter (Campus: Academic Unit Title Singular and Campus: Academic Unit Title Plural), and typically, it is changed to Department or Division to better describe how course scheduling requests are divided.
See Also: Editing System Parameters.

1. On the EMS Campus menu bar, click Academic Planning > Configuration > **Academic Units**. The Academic Units window opens, listing the units associated with a specific domain.



2. On the Domain drop-down list, select the domain for which you are configuring the units, and then click **New**. The Academic Unit dialog box opens. The Academic Unit tab is the active tab.



3. Enter the information for the new academic unit.

Option	Description
Academic Unit Code	Required field. Abbreviated text that conveys the unit name or description. For example, if a unit is named Department of Life Science, then a code for the unit could be LIFESCI. **Note:** The code can be a maximum of 10 characters, including spaces.
Academic Unit	Required field. The name of the unit. **Note:** The name can be a maximum of 30 characters, including spaces.
Domain	The domain with which the units are associated. **Note:** The value that is displayed here is the value that you selected in Step 2 but you can select a different value if needed.
Building Preference	You can leave the building preference set to the default value of (no preference), or you can select a specific building, area, or view. If you select a specific building, area, or view, then this specific building, area, or view is set to the default value for all courses that are

Option	Description
	held in this academic unit during Set Preferences mode, but a user can select a different value if needed. If you select Required, then the specific building, area, or view is the only value that is allowed for all courses that are held in this academic unit during Set Preference modes.
Event Type	The event type that is to be used for the room bookings when publishing your courses in EMS for the unit. **Note:** You can also specify the event type at the course type level. The event type specified here is used if you choose not to associate course types with event types. See Configuring Course Types.
EMS Web App	
Everyday User Everyday User Process Template	Optionally, you can select a Everyday User for this academic unit and a default process template. After the term is published, this Everyday User will see the courses that are associated with this academic unit in the View My Requests section of EMS Web App. To select a user, click the Search icon to open the Everyday Users dialog box and search from a list of registered Everyday Users. • You can search by User Name or Email Address. • To search a list of all available Everyday Users, leave the Search field in the Everyday Users dialog box blank, and then click Display. • To search for a specific Everyday User, enter a search string in the Search field, and then click Display. **Note:** The string is not case-sensitive, but your search is limited to the exact order of characters in the string and it must begin with the information for which you are searching. For example, if searching by Email Address, a search string of bob returns bob.worth@emssoftware.com but not dbobbett@emssoftware.com. To return these fields to their default values at any time, click **Reset**.

4. Open the Rooms tab, and optionally do one or both of the following:
   - On the Building drop-down list, select (all) buildings, or select a specific building.
   - On the Room type drop-down list, leave the value set to (all), or select a specific room type. All rooms that meet your search criteria are displayed in the Available list.

5. On the Available list, select the room (CTRL-click to select multiple rooms) to which the academic unit should have access, and then Move (>) to the Selected list.
6. Open the Subjects tab, and on the Available list, select the subject (CTRL-click to select multiple subjects) to be associated with the academic unit's schedule, and then Move (>) to the Selected list. The Academic Unit dialog box closes. You return to the Academic Units window and the newly configured academic unit shows as automatically selected.

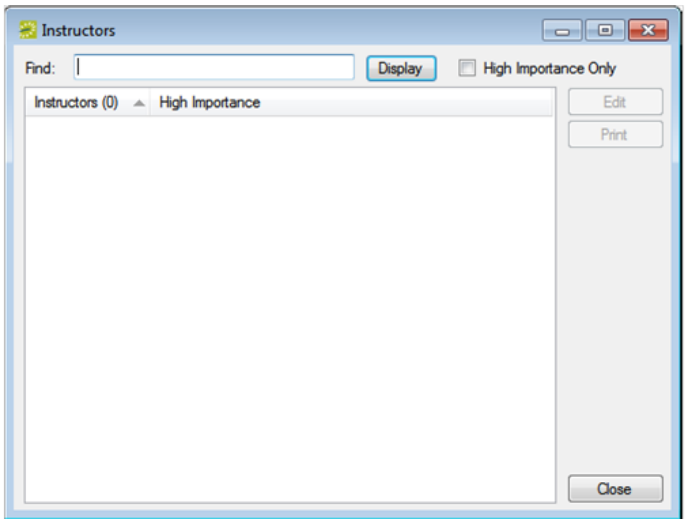
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CHAPTER 31: Configure Instructors

When you configure the *instructors* for your courses, you have the option of designating an instructor as one of *High Importance*.

Configure Instructors

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Instructors**. The EMS Academic Planning Instructors window opens.

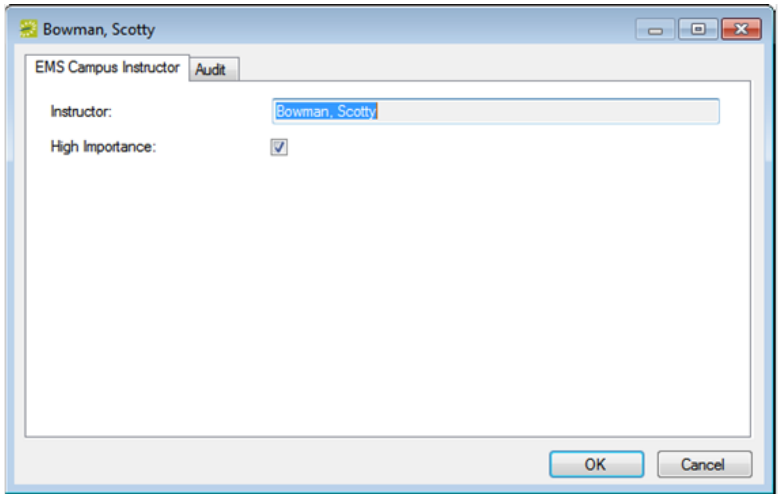


2. Optionally, do one or more of the following:
   - To display a list of all your synchronized instructors, click **Display**.
   - To filter the list by instructor name (last name, then first name), in the Find field, enter a search string.
   - To filter the list by instructor status, select **High Importance Only**.

> **Note:**
> The search string is not case-sensitive, but your search is limited to the exact order of the characters in the string and it must begin with the information for which you are searching. For example, a search string of Scott returns Scott, Todd, but not Bowman, Scott.

> **Note:**
> The optional "High Importance" designation is used during optimization. Courses that are taught by instructors with this designation have the potential to be given room preference priority.

3. Select the instructor whom you are configuring, and then click **Edit**. The Instructor dialog box opens. The Instructor field displays the name of the selected instructor and you cannot edit this value.



4. Select or clear the High Importance option for the instructor as appropriate, and then click **OK**. The Instructor dialog box closes. You return to the EMS Academic Planning Instructors window with the newly configured instructor automatically selected.

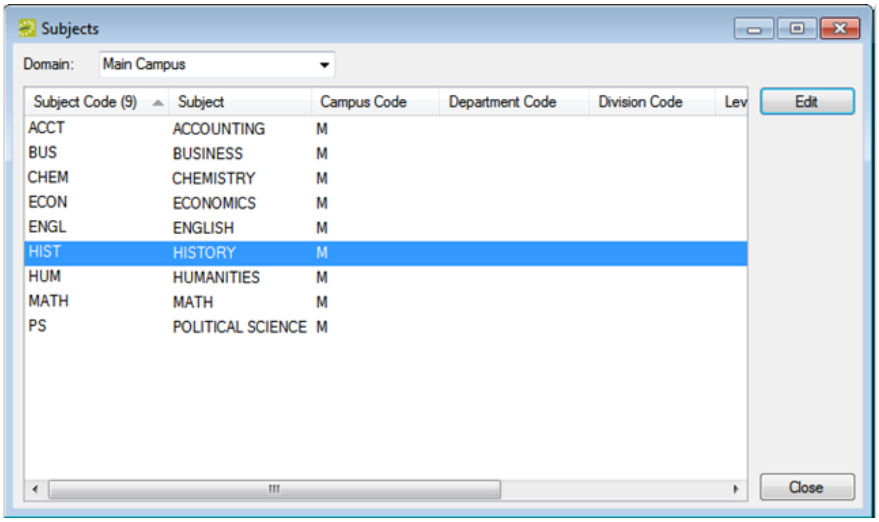
CHAPTER 32: Configure the Primary Academic Unit for a Subject

Typically, a *subject* is associated with a single *academic unit*; however, there might be times when you must assign a subject to multiple academic units, or departments. For example, you might need to assign a History class to a department in the College of Arts and Sciences and to a department in the College of Liberal Arts. In this case, you must configure a primary academic unit for the subject. A primary academic unit for a subject ensures the following:

- When EMS assigns a building preference to a course that belongs to a shared subject, it uses the building preference for the primary academic unit.
- When EMS publishes a course that belongs to a shared subject, it uses the Group, Event Type, and Reservation Source for the primary academic unit.
- When a course that belongs to a shared subject is displayed in the Navigator or Course Navigator, the primary academic unit for the course is displayed on the Course Info tab.

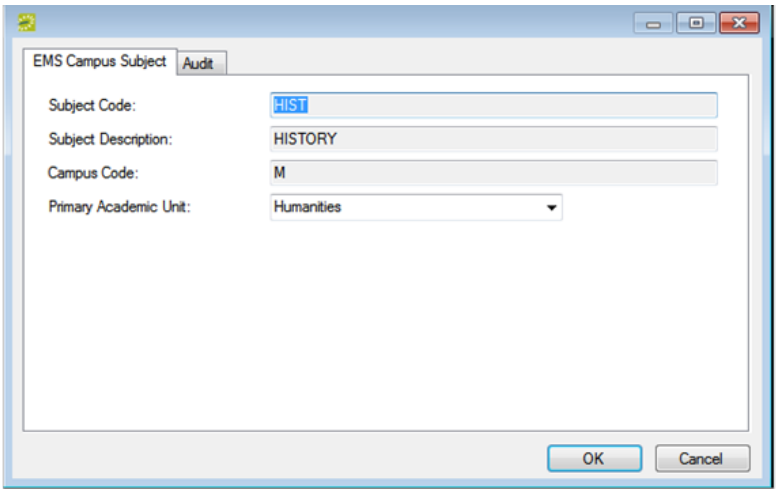
To configure the primary academic unit for a subject, do the following:

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Subjects**. The Subjects window opens, listing all the subjects currently configured in your EMS database for the indicated domain.



2. On the Domain drop-down list, select the domain for which you are configuring the subject, select the appropriate subject, and then click **Edit**. The Subject dialog box opens. This dialog box lists the code and description for the selected subject and the code for the selected domain.

Note:
This information was imported from your SIS and you cannot edit it.



3. Select the primary academic unit for the subject. (The default value is **None**.)
4. Click **OK**. The Subject dialog box closes. You return to the Subjects window with the newly configured subject automatically selected.

CHAPTER 33: Configure Course Types

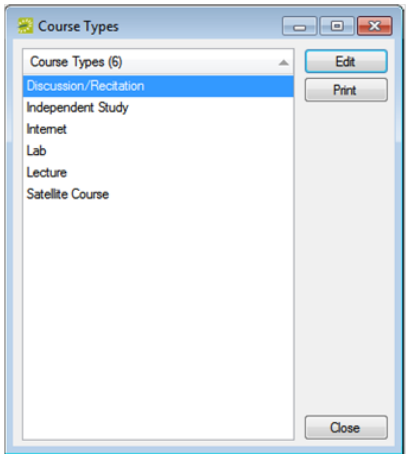
When you configure your *course types*, you have the option of assigning an event type at the course type level. If you do not select an event type at the course type level, then the event type that you selected at the academic unit level will be assigned to room bookings that are created for courses scheduled in EMS.

Note:

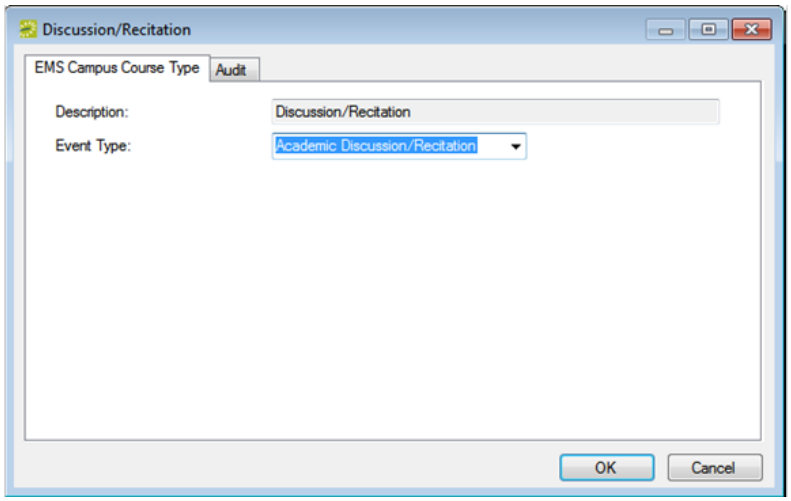
For information about event types at the academic unit level, see Configure Academic Units.

Configuring Course Types

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Course Types**. The Course Types window opens. This window lists all your synchronized course types.



2. Select the course type that you are configuring, and then click **Edit**. The Course Type dialog box opens. The Description field displays the description for the selected course type; you cannot edit this value.



3. On the Event Type drop-down list, select the event type for the course type, and then click **OK**. The Course Type dialog box closes. You return to the Course Types window with the newly configured course type automatically selected.

> **Note:**
> If the appropriate event type is not available, you can configure it. See Configure Event Types.

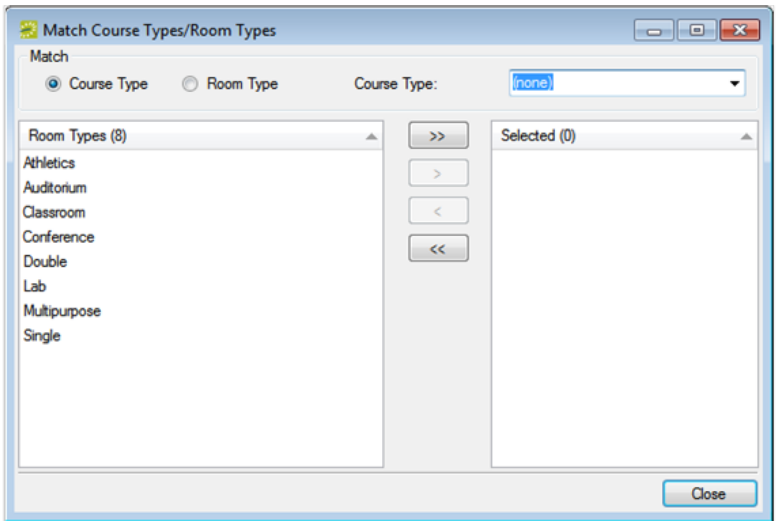
CHAPTER 34: Configure Course Types/Room Types Matches

When you configure *course types/room types matches*, you are indicating what room types best match particular course types. For example, a laboratory room type is appropriate for a laboratory class, but not for a general lecture class. Configuring these matches helps optimize room and course setup in EMS Academic Planning. When you configure course type/room type matches, you can approach it from either end—that is, you can select a specific course type and then select the room types that best match it, or you can select a specific room type and then select the course types best match it.

Configuring Course Types/Room Types Matches

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Match Course Types/Rooms Types**. The Match Course Types/Room Types dialog box opens. By default, **Course Type** is selected and all the active room types that are currently configured in your EMS database are displayed in the Room Type list.

> **Note:**
> If the appropriate room type is not available, you can configure it. See Configure Room Types.



2. Do one of the following:
   - *To match a course type to one or more room types:*
     - Select the course type on the Course Type drop-down list.
     - On the Room Types list, select the room type, or CTRL-click to select the multiple rooms types that are appropriate for the selected course type.

- Click the Move (>) button to move the selected room types to the Selected list. For example, if you select Discussion/Recitation for the Course Type, then appropriate room types could be Classroom or Conference Room.

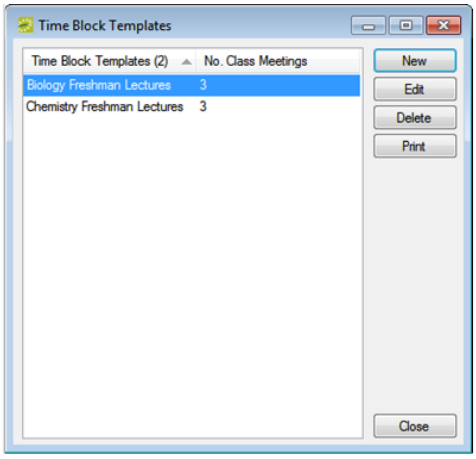
- *To match a room type to one or more course types:*
  - Click Room Type, and on the Room Type drop-down list, select the room type.
  - On the Course Types list, select the course type, or CTRL-click to select the multiple course types that are appropriate for the selected room type.
  - Click the Move (>) button to move the selected course types to the Selected list. For example, if you select Classroom as the room type, then appropriate course types could be Discussion/Recitation, Lecture, or Independent Study.

3. Click **Close**.

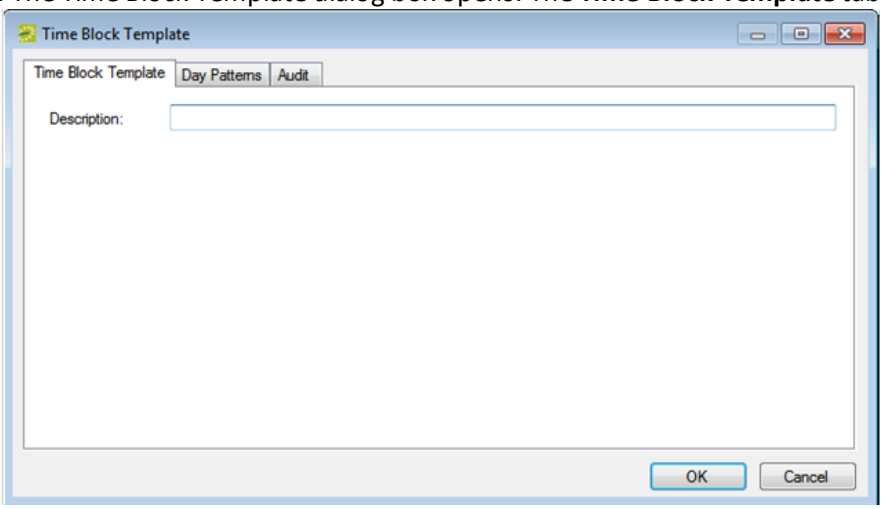
CHAPTER 35: Configure Time Block Templates

A *time block template* is an aggregate of individual, unique meeting patterns for a course, for example, MWF from 2:00 to 2:50 pm, TR from 1:30 to 2:50 pm, and M from 1 to 3:50 pm. You can use time block templates to limit the meeting patterns that are available during Define & Edit mode or Dual mode, to add weight to courses that comply with the template during optimization, and in academic reporting. You can manually configure time block templates, or if time block patterns from a previously configured term meet your needs, then you can import these time patterns and make a new template. During the configuration of time block patterns, or after importing time block patterns, if any of these patterns are the ones that are the most frequently requested and/or used for courses, then you can designate these patterns as *prime time*.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Time Block Templates**. The Time Block Templates window opens. This window lists all the time block templates that are currently configured in your EMS database. The window also shows the total number of class meetings possible for each template according to the time block (day and time) pattern for the template.



2. Click **New**. The Time Block Template dialog box opens. The **Time Block Template** tab is the active tab.



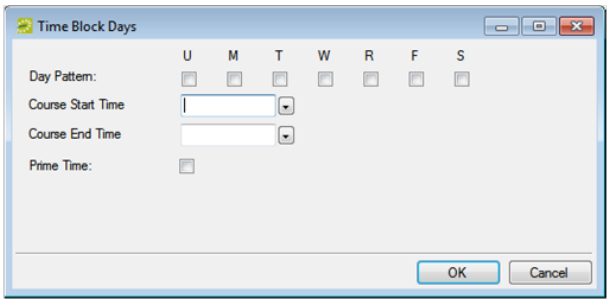
3. In the Description field, enter a name or description for the new time block template.

> **Note:**
> The description can be a maximum of 50 characters, including spaces.

4. Continue to one of the following:
   - To configure time block templates
   - To import time block patterns for a template

Configuring Time Block Templates

1. Open the **Day Patterns** tab and click **New**. The Time Block Days dialog box opens.
   Time Block Days Dialog

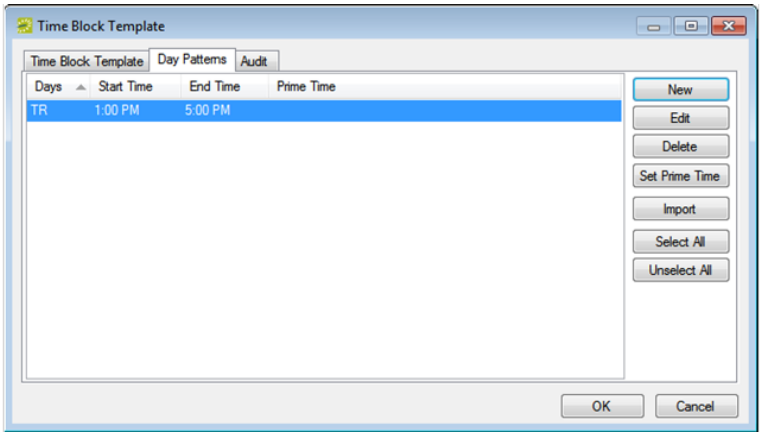


2. On the Time Block Days dialog box, select the day pattern for the course, and then select a start time and an end time.

3. Optionally, if the day and time pattern that you are configuring is one that is the most commonly requested and/or used for courses, then select **Prime Time**.

> **Note:**
> As described here, you can individually specify a day and time pattern as Prime Time, or after you configure multiple patterns for a course, you can select them on the Day Patterns tab and mark them all as Prime Time in a single step. See Step 6.

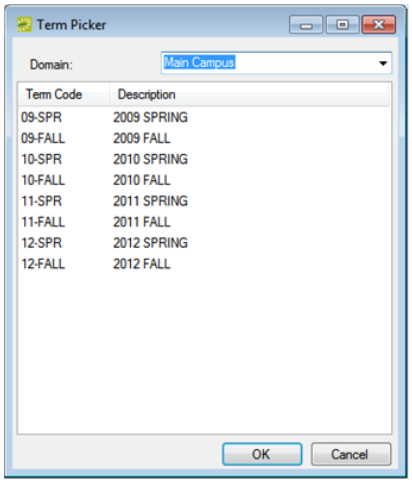
4. Click **OK**. The Time Block Days dialog box closes. You return to the Day Patterns tab with the newly configured pattern automatically selected.



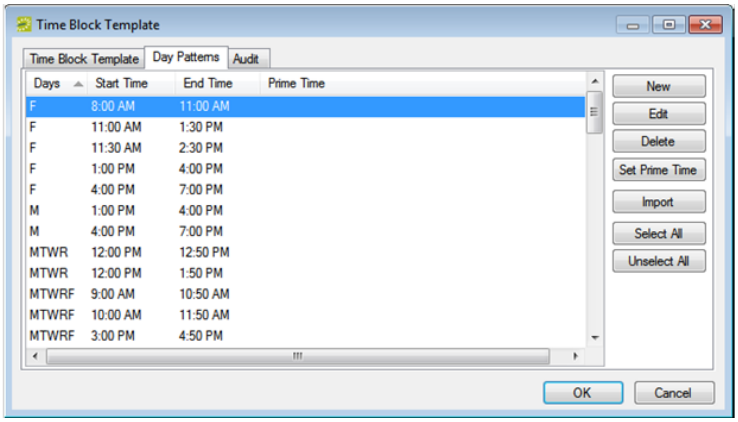
5. Repeat Step 1 through Step 4 until you have configured all the needed time block patterns.
6. Optionally, if multiple patterns listed on the Day Patterns tab are the most commonly requested and/or used for courses, and you want to set these courses as Prime Time, go to Step 7; otherwise, go to Step 8.
7. CTRL-click to select these patterns, and then select Set Prime Time. A message opens, asking you if it is OK to set the selected days as Prime Time. 8. Click **OK**. The message closes and you return to the Day Patterns tab.
8. Click **OK**. The Time Block Template dialog box closes. You return to the Time Block Templates window with the newly configured time block template automatically selected.

Importing Time Block Patterns for a Template

1. Open the Day Patterns tab, and on the tab, click **Import**. The Term Picker dialog box opens. This dialog box lists all active terms by domain.



2. On the Domain drop-down list, select the appropriate domain, select the term for the domain that contains the time block patterns that you are importing, and then click **OK**. A confirmation message displays.
3. Click **OK** to close the message and return to the Day Patterns tab. The time block template is created. All the imported time patterns for the template are listed on the tab.



4. Optionally, do one or both of the following:
   - If any of the patterns listed on the Day Patterns tab are *not* needed for the template you are configuring (for example, a non-standard pattern), you can delete them as follows:
     - Select the pattern, or CTRL-click to select multiple patterns, and then click **Delete**. A message prompts you to confirm that it is OK to delete the selected patterns.
     - Click **Yes** to delete the selected patterns. The message closes and you remain on the Day Patterns tab.
   - If any of the patterns listed on the Day Patterns tab are the most commonly requested and/or used for courses, you can set these courses as Prime Time as follows:

- Select the pattern, or CTRL-click to select multiple patterns, and then click **Set Prime Time**. You are prompted to confirm that it is OK to set the selected days as Prime Time.
- Click **Yes** to set the selected patterns as Prime Time. The message closes and you remain on the Day Patterns tab.

5. Click **OK**. The Time Block Template dialog box closes. You return to the Time Block Templates window with the newly configured time block template automatically selected.

CHAPTER 36: EMS Campus Planning Interface (CPI) User Guide

The EMS Campus Planning Interface is the web-based interface that academic units typically use to review course schedule data and communicate changes to the Domain Scheduler. You can access EMS Campus Planning Interface through any standard Internet browser.

To log in to the EMS Campus Planning Interface, follow these steps:

1. Enter the EMS Campus Planning Interface URL into your Web browser. The EMS Campus Planning Interface Home page opens.
2. Click **Log In**. The EMS Campus Planning Interface Login page opens.
3. In the User ID field, enter your **User ID**, which is either your EMS User ID or your network User ID.
4. In the Password field, enter your password.
5. Click **Login**. The Term Selector page opens. This page lists all the available terms in your organization's implementation of EMS Campus.
6. Select the term with which to work for this session of the EMS Campus Planning Interface, and then click **Save**. The Term Details page opens for the selected term opens. You are now ready to work with the selected term.

> **Note:**
> If the list of available terms is extensive, you can enter a search string in one or more of the available search fields and search for a specific term. Your search is not case-sensitive, but the search is limited to the exact order of the characters in the string and it must begin with the information for which you are searching. For example, to search for 2008 Spring, you can enter 2008, but not Spring. After you tab out of a search field, the list of available terms that meet all your search criteria is dynamically updated.
>
> The New Course option is displayed on the menu bar only if Define & Edit Courses mode or Dual mode has been set for the displayed term, and your EMS Administrator has configured your user account with the appropriate permissions. The Academic Book option is displayed on the menu bar only if Read Only mode has been set for the displayed term.

7. To log out, click **Log Out** on the Campus Planning Interface menu bar.

CHAPTER 37: Manage User Options in the EMS Campus Planning Interface

When your EMS administrator configures your user account, a default password is set for your account. You can customize your own password for the EMS Campus Planning Interface. Your EMS Administrator might have configured custom help text that is displayed on pages in the EMS Campus Planning Interface. You can set the options of the Academic Book or turn off/on the custom help text that is displayed on pages in the EMS Campus Planning Interface.

This section provides information about the following topics:

- Change Your EMS Campus Planning Interface Password
- Set Options for the Academic Book Display
- Turn On or Off Custom Help Text

Change Your EMS Campus Planning Interface Password

1. On the EMS Campus Planning Interface menu bar, click **Manage User Options**. The Manage User Options page opens. The Password Options tab is the active tab.
2. In the Old Password field, enter your current password for the EMS Campus Planning Interface.
3. In the New Password field, enter your new password.
4. In the Confirm New Password field, enter your new password again, exactly as you entered in the New Password field, including spaces and capitalization.
5. Do one of the following:
    a. Click **Save**. You remain on the Manage User Options page. An “Options saved successfully” message is displayed at the top of the page. If you changed your password, then the next time you log into the EMS Campus Planning Interface, you must use your new password.
    b. Continue to setting other user options as needed.

Set Options for the Academic Book Display

1. Open the **Book Options** tab.
2. Set the options for the Academic Book display.

Option	Description
Display	The information that is displayed for an event/course in the Academic Book. Options are: • Event Name/Course (the default value) • Group/Instructor
Start Time	The daily start time for the Academic Book.
Tooltip Options	The items that are to be included in the tooltip that opens when you place the cursor over an event/course in the Academic Book.

3. Do one of the following:
   - Click **Save**. You remain on the Manage User Options page. An "Options saved successfully" message is displayed at the top of the page. If you changed your password, then the next time you log into the EMS Campus Planning Interface, you must use your new password.
   - Continue to setting other user options as needed.

Turn On or Off Custom Help Text

1. Open the **Other Options** tab. By default, when the Other Options tab first opens, Show Help Text is selected.
2. Clear **Show Help Text** to turn off any custom help text that is displayed on any page of the EMS Campus Planning Interface; otherwise, select Show Help Text to turn on any custom help text that is displayed on any page of the EMS Campus Planning Interface.
3. Do one of the following:
   a. Click **Save**. You remain on the Manage User Options page. An "Options saved successfully" message is displayed at the top of the page. If you changed your password, then the next time you log into the EMS Campus Planning Interface, you must use your new password.
   b. Continue to setting other user options as needed.

CHAPTER 38: EMS Campus Planning Interface Reports

There are six academic reports available in the EMS Campus Planning Interface to assist you in monitoring and maintaining your academic unit's courses and instructors. They can be accessed under the Reports option on the EMS Campus Planning Interface menu bar. For any academic report, you can specify the parameters, options, and format for the report, or you can generate the report according to memorized settings. Not all reports require the same parameters, nor do they all have the same options available. In addition, you can generate different reports in different formats.

This section covers the following topics:

- Generate an Academic Report
- Understand Report Descriptions and Options

Generate an Academic Report

1. On the EMS Campus Planning Interface menu bar, click Reports to open the Reports menu, and then click the option for the report that you are generating. For example, to generate the Course List report, click **Reports** > **Course List**.
2. On the **Setup** drop-down list, do one of the following:
   - To generate the report according to the filter settings that you want (parameters, options, and so on), leave user-specified selected, then go to the next step.
   - To run the report with filter settings that have been saved, or memorized, select the memorized report, and then go to Step 5.
3. On the **Date Range** tab, select the domain, term, and scenario for which you are generating the report.
4. Specify the report parameters, options, and format.

> **Note:**
> For brevity and ease, the parameters and options that are available for each report are not discussed here. Instead, the options are discussed in Report Descriptions and Options. Contact your EMS administrator if you need assistance in generating any of these reports.

5. Optionally, in the Report Comment field, enter a comment that is to be printed on the report. The comment can be a maximum of 255 characters, including spaces.

6. Click **Generate Report**. Two tabs are opened in your browser.
   One tab is named < > Report and the second tab is simply named the same as the report that you generated. For example, if you generated the Course List report, then the first tab is named Course List Report and the second tab is named Course List. An onscreen preview of the report opens on the second tab. Use your browser's scroll features to scroll through a multiple page report. To close the report and return to the EMS Campus Planning Interface, close the second tab.

> **Note:**
> Unless you change the filter settings, all subsequent reports are generated and printed according to the parameters and options that you have specified and in the format that you specified.

Understand Report Descriptions and Options

This section provides a description of every report that is available in the EMS Campus Planning Interface.

It also defines the options that are available for each report:

- Course List
- Course Preferences
- Preferences Summary
- Instructor Back-to-Back
- Instructor Summary
- Final Exam Schedule

Course List

Description	Options
Provides a list of courses and course dates.	There are options to include courses without room assignments and to print User Defined Fields that are associated with courses. Formats include: • By Course • By Instructor • By Academic Department By Course

Description	Options
Note: This report is often sent out to academic units for review when the Domain Scheduler is finished with room assignments.	• By Academic Department By Instructor • By Day of Week • By Location • By Estimated Enrollment • By Start Time • By Subject • By Course Type

Course Preferences

Description	Options
Used after Set Preferences mode to provide a list of courses and course dates with their preferences and requirements.	Format Choices: • By Course • By Academic Department By Course • By Academic Department by Instructor

Preferences Summary

Description	Options
After running an optimization scenario, this report is used to summarize the following information: • The number of each type of preference or requirement. • The number of the preferences that can be met from the optimization process. • The number of preferences that cannot be met from the optimization process. You can generate this report for each different scenario that was optimized.	N/A

Instructor Back-to-Back

Description	Options
Lists the courses that have instructors who are scheduled to teach two courses at the same time (Conflicts) and instructors who are teaching back to back in different locations within the time gap that is specified in Options.	• The days of the week that are to be included in the instructor's schedule. • The time gap (in minutes) between classes on the specified days that determines *back to back*.

Instructor Summary

Description	Options
This report includes the following values per instructor: • Number of sections • Number of teaching hours • Number of credit hours • Total estimated enrollment • Total actual enrollment • Number of sections in Prime Time • Number of Time Block violations	N/A

Final Exam Schedule

Description	Options
Displays a list of courses with their corresponding final exam date, time, and room as assigned by the final exam session.	• **All Assigned:** All courses that have been assigned to a room by the final exam session • **Different Rooms:** All courses that have been scheduled in room that was not the same that was used all semester for the course for the final exam

Description	Options
	• **Unassigned:** All courses that have not been scheduled in a room for the final exam • **Final Exam Not Scheduled:** All courses for which no final exam was scheduled

CHAPTER 39: EMS Campus Planning Interface Search Tools

The EMS Campus Planning Interface has three search tools:

1. **Academic Browser:** Allows you to search for courses or course dates.
2. **Academic Book:** Provides a week-at-a-glance graphical view of the courses that are assigned to a specific room or instructor.
3. **Search for Rooms tool:** Simplifies the process of searching for classrooms.

You use the Academic Book and the Academic Browser to search for courses. The tools differ in how they present their search results and the options that are available for working with the search results. You use the Search for Rooms tool to search for available rooms. After a term is published, there are times when the specific rooms that are available for a particular meeting pattern and set of criteria must be identified. For example, you might need to add a new section for a course or you might be looking to change the times for a course. The Search for Rooms tool significantly simplifies the process of searching for classrooms in these situations.

This section will provide information on:

1. Search with the Academic Browser
2. Search with the Academic Book
3. Use the Search For Rooms Tool

Search Using the Academic Browser

You can use the Academic Browser to search for courses or course dates. The results are displayed in a list view. After the search results are returned, you have a variety of options for working with the results, including sorting and grouping information or using the Tools menu to perform functions. The actions that you can carry out in the Academic Browser depend upon the mode (Define & Edit Courses, Set Preferences, Dual Mode, or Read Only) that has been set in EMS Campus for the academic term with which you are working.

1. On the **Term Details** page menu bar, click **Academic Browser**. The Academic Browser page opens. The page lists all the courses for all academic units (departments) without course dates and all courses for all academic units with course dates (meeting patterns) that have been defined for the selected term. “Multiple” is displayed for those courses with more than one course date. Canceled courses are displayed with a strikethrough.

> **Note:**
> Although you can view all courses for all academic units, only those courses that belong to your academic unit are available for editing.

2. Optionally, to filter the data, do one or both of the following:

   a. Click **Filter** to open the Filter popup, change the search criteria, and then click **Get Data**.

Option	Description
Academic Units	Select a specific academic unit by which to filter the search.
Subject	Select a specific subject by which to filter the search.
Modified Only	EMS Campus flags course changes using a field named Course State. New, modified, and canceled courses are marked as “New,” “Edited,” and “Canceled,” respectively in the State column. Select this option to limit the search to only those course for which academic units have requested additions, deletions and/or modifications during the Define & Edit Courses phase.
Show Course Dates	Selected by default. Courses without course dates are suppressed while courses with multiple meeting patterns are expanded. If you clear this option, then: • *Multiple* is displayed for those courses with more than one course date. • Courses without course dates are displayed.

> **Note:**
> The selections you make here are retained for all subsequent login sessions.

   b. Enter a search string or select a specific value in one or more of the fields that are above the search results columns. For example:

   - To search only for Accounting courses, in the blank field below Courses, enter **ACCT** for a search string.
   - To search only for courses that are taught by a specific instructor, select the **Instructor** from the drop-down list at the top of the Instructor column.

Important!

Your search is not case-sensitive, but your search is limited to the exact order of the characters in the string and it must begin with the information for which you are searching. For example, the search string "CHEM 400" returns CHEM 4003 01, CHEM 4003 02, and so on, but a search string of 400 does not return anything. After you tab out of a search field in which you have entered a search string, or you select a value from a drop-down list, the list of available courses that meet your search criteria is dynamically updated.

Column	Search Option
Course	Enter a search string.
Shares Space	Enter a search string: • To find all courses that share space, whether or not the course is a parent, enter an asterisk (*). • To find all courses that share space with a specific course, enter a search string for the specific course. For example, the search string PS would return all courses that share space with PS 521 01.
SIS Xlist	To find all courses that are cross-listed in the SIS, enter an asterisk (*).
CRN	Enter a search string.
Course Title	Enter a search string.
Course Type	Enter a search string.
Course Instructor	Select a specific instructor from the drop-down list. To search by all instructors (the default value), select the blank value from the drop-down list.
Start Date / End Date	Select a specific start dates/end date from the calendar. To search by all start dates/end dates, click Clear on the calendar.
Days	Enter the letter that corresponds to the day of the week on which the class meets. For example to search for all classes that meet on a Monday (be it

Column	Search Option
	Monday through Friday, or Monday/Wednesday/Friday only), enter an "M." If you enter multiple days of the week, then the search string must be a valid meeting pattern. For example, if you enter MW, then only those classes that meet Monday and Wednesday are returned in the search results. Classes that meet Monday through Friday, or Monday/Wednesday/Friday are not returned in the search results.
Locations	Enter a search string.
Est Enroll Act Enroll Cred Hours	Enter a search string.
State	Campus flags course changes using a field named Course State. New, modified, and canceled courses are marked as "New," "Edited," and "Canceled," respectively in this column. Enter a search string to limit the search results to a specific state; otherwise, to search for all states, under Filter, select Modified Only.
Prefs	To search for only those courses that have preferences indicated, select Checked on the drop-down list above the Preferences column. To search for only those courses that do not have preferences indicated, select Unchecked. To search for both types of courses (the default value), select the blank value on the drop-down list.
Final Exam Not Required	To search for only those courses that do not require a final exam, enter Y (for Yes). To search for all courses (the default value), clear the search string.
Reservation ID	Enter a search string.

Note:
To reset all filters to their default values in a single step, click **Clear Filter**

3. The Course Details page displays a variety of information about the course, including the course details, the course dates, the final exam settings, and if applicable, the course preferences, any cross-

listed courses, and/or any shared space courses. Optionally, do one or more of the following:

- To open a course in the Course Details page, double-click the course entry on the Results tab.
- To sort the search results, click any column heading.
- To rearrange the search results, drag a column to a new location using the column heading.
- To group results by a specific column, drag the column header as indicated on the Results tab.

> **Note:**
> To return to the Academic Browser after you have viewed a course, click **Back** at the bottom of the course display.

4. If Define & Edit Courses mode or Dual mode has been set for the term with which you are working, then you can CTRL-click to select multiple courses, click **Tools**, and then select one of the following:
   a. **Shares Space:** To apply the shared space designation to the selected courses if the courses are not cross-listed in the SIS, have the same meeting pattern, and are meant to be held in the same room.
   b. **Does Not Share Space:** To reverse the shared space designation for the selected courses, or to indicate that a cross-listed course with a matching pattern is not meant to meet in the same room.
5. To display **custom help text** for the Academic Browser, under **Options**, click **Show Help Text**. Conversely, to turn off the custom help text, under Options, click **Show Help Text** again.

Search with the Academic Book

Academic Book is an available option only if Read Only mode has been set for the term with which you are working.

1. On the EMS Campus Planning Interface menu bar, click **Academic Book**. The Academic Book opens. If you are working with a future term, then the date is set to the first Sunday or Monday of a full week of the term; otherwise, if you are working with a current term, then the date is set to the current day's date.
2. On the Building drop-down list, select an **Area**, **Building**, or **View**.
3. From the Room drop-down list, select a **Room**. The Academic Book displays a week-at-a-glance graphical view of the courses that are assigned to the specific building and room.

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> **Note:**
> If a minimum and/or maximum capacity has been configured for a room, then this information is displayed next to the room on the Room drop-down list.

4. Select **Instructor**.
5. On the **Subject** drop-down list, select a subject. The Academic Book displays a week-at-a-glance view of the selected subject that is assigned to a specific instructor.
6. Modify the week-at-a-glance view to better suit your working needs:
    a. To start the week-at-a-glance view on a different day, click the **Calendar Picker** icon next to the Date field to open the Calendar Tool and select a different date.
    b. To start the week-at-a-glance view on the first day of the term, click the **Start of Term** button that is to the left of the Today button.
    c. To start the week-at-a-glance view on the last day of the term, click the **End of Term** button that is to the right of the Today button.
    d. To start the week-at-a-glance view on the current day's date, click **Today**.
    e. To change the week-at-a-glance view by one day at time, click the **Back One Day** button or the **Forward One Day** button as needed.
    f. To change the week-at-a-glance view by one week at a time, click the **Back One Week** button or the **Forward One Week** button as needed.
    g. To change the week-at-a-glance view by one month at a time, click the **Back One Month** button or the **Forward One Month** button as needed.

> **Note:**
> If you make a change to the week-at-a-glance view, and the change only partially refreshes the view, click **Refresh** to update the view.

7. Change the display for an entry in the Academic Book by navigating to Options. You can modify the display following the steps below:
    a. To turn off any custom help text for the Academic Book, click **Show Help Text**. Conversely, to turn on any custom help text, click **Show Help Text** again.
    b. Display the name of the group/instructor on a course entry by clicking **Display** > **Group/Instructor**. (By default, the event name/course are displayed on an entry in the

Academic Book.)

c. To change the starting time, click **Start Time**, and select a different starting time. (By default, the starting time for the week-at-a-glance view is 7:00 am.)

d. To remove the information from the tooltip, click **Tool Tip Options**, and then clear the selection for the information that is *not* to be displayed. (By default, the following information is displayed in a tooltip when you place the mouse pointer on a course entry in the Academic Book—Date, Room, Building, Instructor, Time, Estimated Enrollment, and Credit Hours.)

> **Note:**
> Any selections that you make here remain in effect for subsequent login sessions.

Use the Search For Rooms Tool

The Search for Rooms tool is available only if your EMS administrator has set the correct permissions for you.

1. On the EMS Campus Planning Interface menu bar, click **Search for Rooms**. The Search for Rooms page opens.
2. On the Domain drop-down list, select the appropriate domain.
3. On the Term drop-down list, select the appropriate term.
4. Manually enter the meeting pattern information (start and end dates, start and end times, and meeting days) for the course.
5. Click **Time Blocks** to open the Time Blocks popup, and then select a time block from a list of time blocks that have been made available for the term.
6. Enter your search criteria.

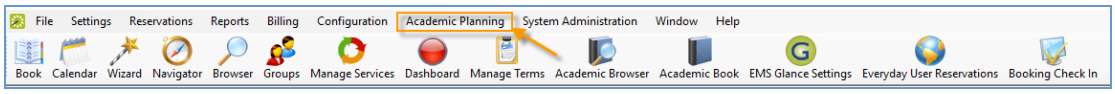
Option	Description
Building	The default value is (no preference). You can select a specific building, area, or view.
Room Type	The default value is (no preference), but you can select from a list of pre-configured types.
Enrollment	Available only if Ignore Room Capacity is not selected. You can enter a specific

Option	Description
Ignore Room Capacity	room capacity by which to search.
Ignore Term Excluded Dates	Not selected by default. Select this option to search for rooms that are available even on dates that are marked as “Excluded” for the term.

7. Click **Search**. The rooms that meet all your search criteria and are available are displayed on the Available Rooms tab. The rooms that are in academic conflict (a course has already been scheduled in a room for the selected day and time pattern) are displayed on the Academic Conflicts tab. The rooms that are in event conflict (a non-academic event has already been scheduled in a room for the selected day and time pattern) are displayed on the Event Conflicts tab.

CHAPTER 40: Introduction to the EMS Desktop Client Academic Planning User Guide

EMS Desktop Client -- Academic Planning is the optional component of EMS Software that provides all the functionality that is necessary for Domain Schedulers to ensure that every class meets in a location and at a time that is acceptable to departments and professors. The system provides automatic room assignment within user-supplied parameters, integration with your SIS/ERP software, and efficient online collaboration tools. It also simplifies final exam scheduling and offers a selection of reports to streamline and analyze the room scheduling process. When added to the functionality that meeting and event staff already have access to, it provides a complete campus-wide space management package referred to as EMS Campus.



CHAPTER 41: Overview of the Academic Scheduling Process

The academic scheduling process is a multi-step process for enabling online communication between the Domain Scheduler and academic units, optimizing academic space use, and creating reservations in EMS Academic Planning for academic courses. To use the full functionality of EMS Academic Planning, it is important that you understand the academic scheduling specific terms that are used in EMS Academic Planning and that you have a high-level understanding of the academic scheduling configuration process.

Academic Scheduling Specific Terms Used in EMS Campus

While meeting/event scheduling and academic scheduling have many features in common, EMS Academic Planning uses terms that are specific to the academic scheduling configuration process.

Term	Definition
SIS	Generic acronym that is used in EMS Academic Planning to represent a Student Information System. A system parameter controls the term "SIS," and typically, your EMS administrator changes it to the system-specific term that your organization uses, for example, PeopleSoft, Banner, Colleague, and so on.
Academic Term	Defines a set of courses that is taught for a specific time period and is synchronized from the SIS.
Instructors	Instructors are imported from your SIS. Instructors determine who is teaching a course. They are also referred to as a "contact" after publishing.
Subject	Subjects are imported from your SIS. Subjects describe the topic of the course offered, for example, Math or English. Subjects are assigned to domains and academic units to designate who manages the courses that are taught within a subject.
Course Type	A course type is imported from your SIS. Course types categorize offerings, for example, a lecture or a lab. Course types are used for limiting the types of rooms in which a course can be taught and for reporting.
Domain	A level of organization within the institution that defines scheduling responsibility. The subjects defined within a domain determine the courses that are listed for the domain. The rooms that are defined within a domain determine all spaces that are potentially available for the courses. Functions such as synchronizing, optimizing, and running reports are carried out on a per domain basis. (A user who has this type of access is referred to as a Domain Scheduler.) The term "domain" is controlled by a parameter, and in many cases it is changed to "Campus" or "School" to better describe how course scheduling is divided.

Term	Definition
Academic Unit	A level of organization within the institution that defines responsibility for making schedule requests for a portion of a domain. The rooms that are defined within an academic unit give the unit the ability to require these spaces during optimization. The subjects that are defined within an academic unit determine the courses that are listed when filtering by the unit. Academic units are used when assigning permissions to Academic users and when filtering reports. The term "academic unit" is controlled by a parameter, and in many cases it is changed to "Department" or "Division" to better describe how course scheduling requests are divided.
EMS Campus Planning Interface	The web-based interface that is typically used by academic units to review course schedule data and communicate changes to the domain scheduler. Any computer with a standard Internet browser can be used to access the EMS Campus Planning Interface.
Course	Equivalent to a section in the SIS. The high level descriptor of a class, such as "CHEM 101 - Introduction to Chemistry, and other associated information such as instructor and estimated enrollment. After a course is published, it becomes the reservation-level information.
Course Date	A unique meeting pattern that is associated with a course, such as Tuesday/Thursday, 8:00 am to 9:20 am. Courses can have multiple course dates, such as when a class has both a lecture and a lab component that meet on different days of the week and at different times. After a course date is published, it becomes the booking-level information.
Cross-listed Courses	Courses are designated in the SIS as cross-listed for a variety of reasons; however, after such designation, there are implications in EMS. If two or more courses are cross-listed and have identical course date records (meeting patterns), then these two courses are linked and they are assigned the same room during optimization and final exam scheduling. They, in essence, share space by default.
Shared Space	If two courses that have identical course date records are to be scheduled in the same room at the same time, but they are not cross-listed in the SIS, then they can be designated as Shared Space in EMS. This designation links the courses so that they are assigned to the same room during optimization and final exam scheduling. This designation does not affect the SIS.

Academic Scheduling Configuration Process

Before academic scheduling can be even be carried out, the following must be in place in your EMS database:

- Core data—building, rooms, instructors, course types, and subjects—must be synchronized with the Student Information System (SIS).
- Academic domains and academic units must be configured.
- Academic users must be configured with the appropriate security settings.
- Default values for academic parameters must be set.

> **Note:**
> See the EMS Desktop Client Configuration Guide for detailed instructions about configuring and synchronizing this needed academic data.

Although the academic scheduling configuration process varies from one academic site to another, typically, the same two-phase process, the Academic Planning phase and the Post-Publishing phase, is carried out, and each process typically has the same high-level steps.

Academic Planning Phase

The Academic Planning Phase is the first phase carried out in the academic scheduling process. This phase typically has the following high-level steps:

1. Importing an Academic Term. See Importing an Academic Term.
2. Defining and Editing Courses. See Defining and Editing Courses.
3. Settings Preferences. See Specifying Room Preferences.

> **Note:**
> You can carry out Step 2 and Step 3 individually, or you can carry them out simultaneously using Dual Mode.

1. Assigning rooms and optimizing. See Review and Verify Room Preferences.
2. Publishing terms in EMS. See Publishing a Term.
3. Once you have published a term:
    a. A new term is created in the SIS either by rolling forward a previous term or by creating it from scratch. The term is synchronized into EMS.
    b. The Domain Scheduler synchronizes the course schedule data from the campus SIS into EMS Campus.
    c. Academic units review the course schedule data in the Campus web client and make change requests as appropriate for new, edited, or canceled sections and/or mark the courses that Share Space.
    d. The Domain Scheduler reviews the changes and shared space settings in EMS Campus, modifies the data in the SIS and resynchronizes the updated course schedule into EMS Campus to synchronize the two systems.

e. The Domain Scheduler and/or academic units submit room preferences for courses.
f. Pre-assignments are completed and scenarios are created that apply weighted values to the preferences in order to meet organizational criteria for room scheduling and to make the best use of space.
g. The Domain Scheduler publishes the schedule to create reservations and bookings in EMS Campus for all academic courses and write the course location information back to the SIS.

Post-Publishing Phase

The Post-Publishing Phase is the second phase carried out in the academic scheduling process. This phase typically has the following high-level steps:

1. Reviewing reservations and resolving room assignments.
2. Creating a synchronization schedule.
3. Creating and publishing a final exam session.

For all these tasks, see Post-Publish Processing of Courses. Once you have completed them:

1. The Domain Scheduler reviews the room reservations and resolves unassigned courses or displaced event reservations.
2. A synchronization schedule is created to keep EMS up to date with changes that are made in the SIS.
3. The Domain Scheduler creates and publishes a final exam session for the term.

Importing an Academic Term

- Overview of Importing an Academic Term
- Synchronize an Academic Term
- Synchronize Courses

CHAPTER 42: Using the Academic Book

The Academic Book provides a week-at-a glance graphical view of the courses that are assigned to a specific room or instructor. The view is for one room at a time as opposed to the Reservation Book, which shows all rooms one day at a time. The Academic Book shows only classes during the Planning phase of academic scheduling, but it shows both classes and events post-publish.

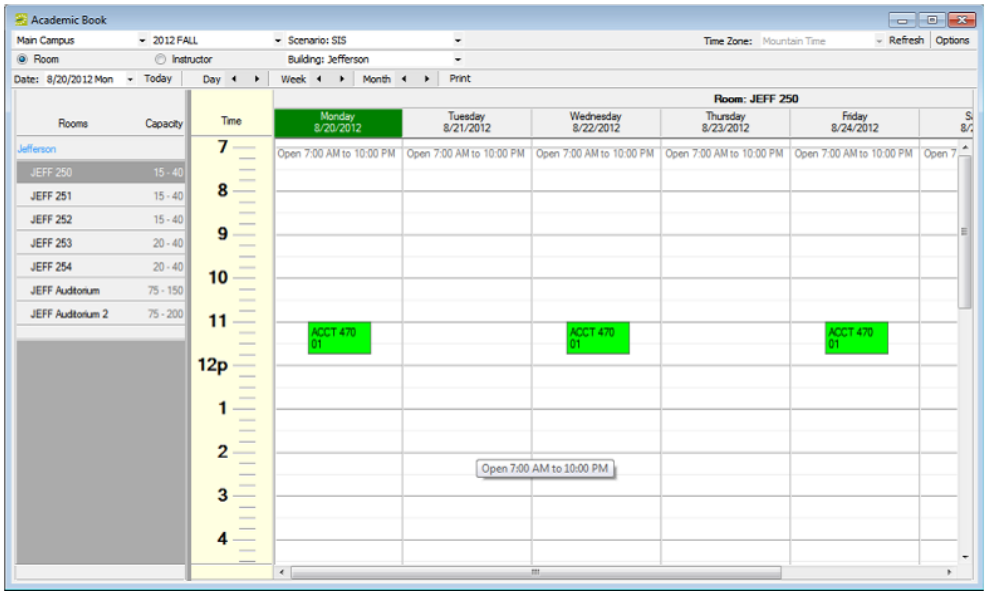
This topic will provide information that will allow you to do the following:

- Open the Academic Book
- Change the Date Display
- Change the View of Courses by Room
- Change the View of Courses by Instructor
- Set Options for the Academic Book
- Open a Course in the Course Navigator
- Display the Details for a Room

Open the Academic Book

To open the Academic Book, do one of the following:

- On the EMS Academic Planning toolbar, click the Academic Book icon.
- On the EMS Academic Planning menu bar, click Academic Planning > Courses > Academic Book.



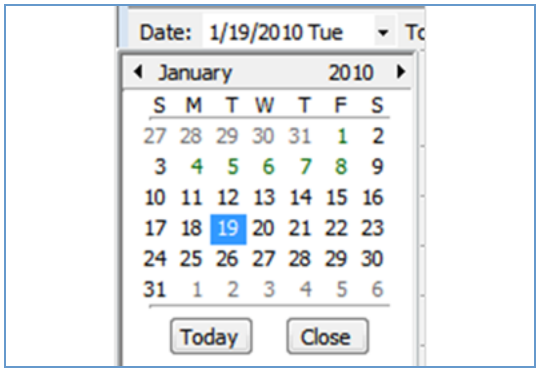
When the Academic Book first opens, if you are working with a future term, then the date is set to the first Sunday or Monday of a full week of the term; otherwise, if you are working with a current term, then the date is set to the first Sunday or Monday of the current week.

> **Note:**
> Whether the date is set to Sunday or Monday is determined by the setting for the Day Label - First Day of the Week EMS system parameter. See the EMS Desktop Client Configuration Guide.

In both cases, the display is filtered by Room and Building. You have many options for changing the view in the Academic Book to better meet your working needs

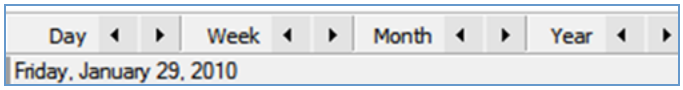
Change the Date Display

1. On the Date field, click the dropdown arrow to open the Calendar. Use the scroll features (< and >) at the top of the calendar to change the month or year. To select a different date for a month, click the date.



Academic Book calendar

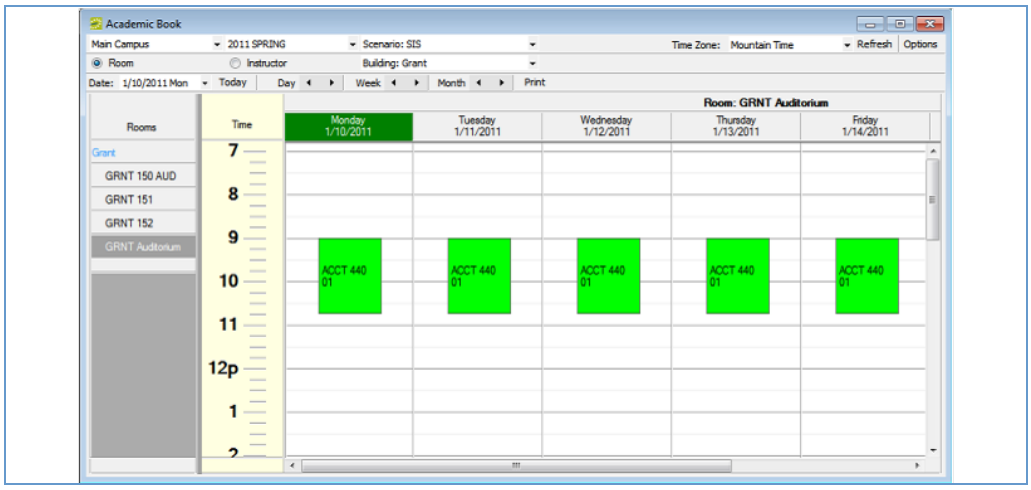
2. Use the scroll features at the top of the reservation book display to scroll to a different day, week, month, year, or any different combination of these.



Academic Book calendar scroll features

Change the View of Courses by Room

If the Academic Book is in the Room view, then the default minimum and/or maximum capacities that have been configured for a room are displayed next to the room. To change the view of courses by room, change any and all of the available display options—Domain, Term, Scenario (SIS by default or an Optimization scenario if optimization has taken place), the Building/Domain/View, and/or the Time Zone.



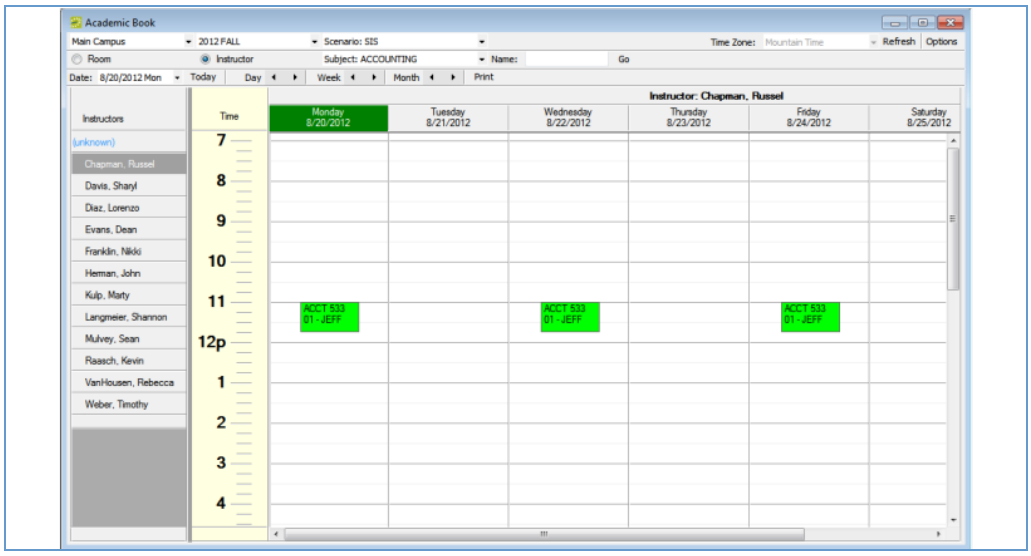
Academic Book, courses grouped by room

Change the View of Courses by Instructor

1. To change the view of courses to that by Instructor, click Instructor.
2. Change any and all of the available display options—Domain, Term, Subject, and/or Time Zone. To filter the list by a specific instructor, enter a search string in the Name field, and then click Go.
3. Click the name of an instructor in the left pane to see a list of courses that are scheduled for the instructor.

Note:

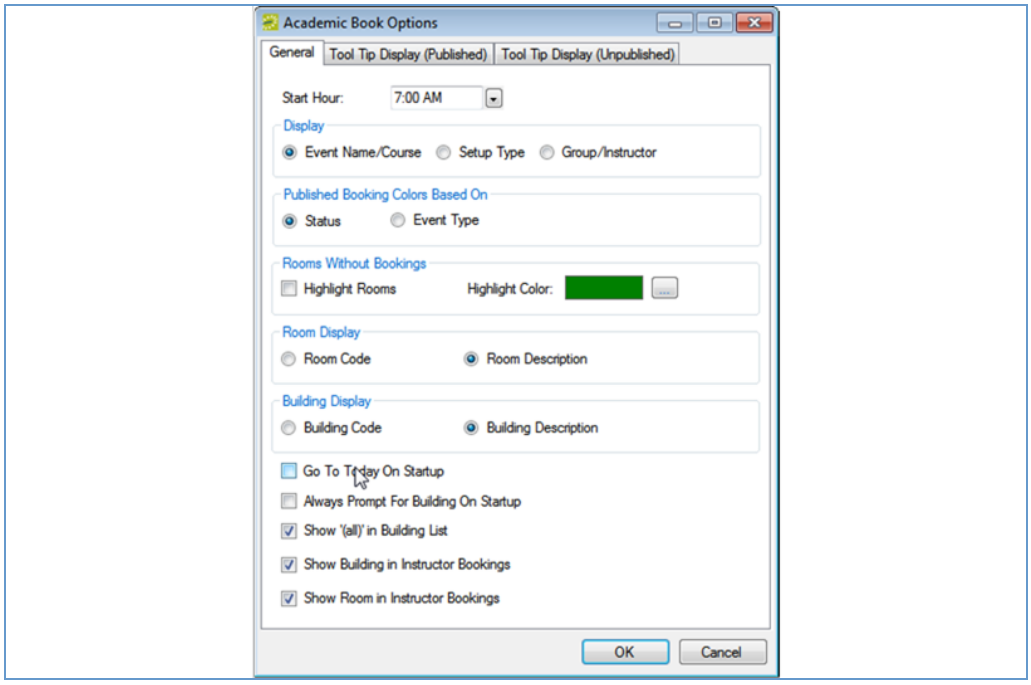
Your search is limited to the exact order of the characters in the string, but the search is not case-sensitive and it can appear anywhere in the search results. For example, a search string of and returns Anderson, Scott, Sanders, Barry, and so on.



Academic Book, courses grouped by instructor

Set Options for the Academic Book

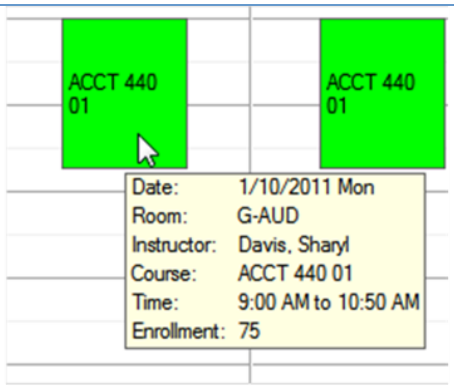
1. Click Options in the upper right hand corner of the Academic Book to open the Academic Book options dialog box. You use the options on this dialog box to specify such things as what is to be displayed in the book when it first opens, mouse actions in the book, and so on.



Academic Book Options dialog box, General tab

Option	Description
General tab	
Start Hour	The starting time for the Time grid that is displayed in the Academic Book.
Display	• Event Name/Course—Display the event name/course in the course entry. • Setup Type—Show the setup type and count in the course entry. • Group/Instructor—Show the group name/instructor name in the course entry.
Published Booking Colors Based On	For published courses, whether the fill color for a course entry is to be based on the Status color palette or on the Event Type color palette that has been determined in Configuration.
Rooms Without Bookings	The color with which rooms without bookings are highlighted in the Academic Book.
Room Display	• Room Code—Show the room code in the Room list when the courses are grouped by room. • Room Description—Show the room description in the Room list when the course are grouped by room.
Building Display	• Building Code—Show the building code in the Rooms list when the courses are grouped by room. • Building Description—Show the building description in the Rooms list when the coursed are grouped by room.
Go to Today on Startup	Not applicable.
Always Prompt for Building on Startup	Opens the Building dropdown list when the Academic Book first opens, which requires that you select a building, domain, or view before you can continue, as opposed to simply opening the building that you last viewed in the Academic Book.
Show (all) in Building list	Make (all) buildings an available option in the Building dropdown list, as opposed to having to choose a single building.
Show Building in Instructor Bookings	Show the Building Code in the course entry when courses are grouped by instructor (space permitting).

Option	Description
Show Room in Instructor Bookings	Show the Room Code in the course entry when courses are grouped by instructor (space permitting).
Tooltip Display (Unpublished)—Select the information that is to be displayed when the mouse pointer is placed on the entry for an unpublished course in the Academic Book.	
Tooltip Display (Published)—Select the information that is to be displayed when the mouse pointer is placed on the entry for a published course in the Academic Book.	

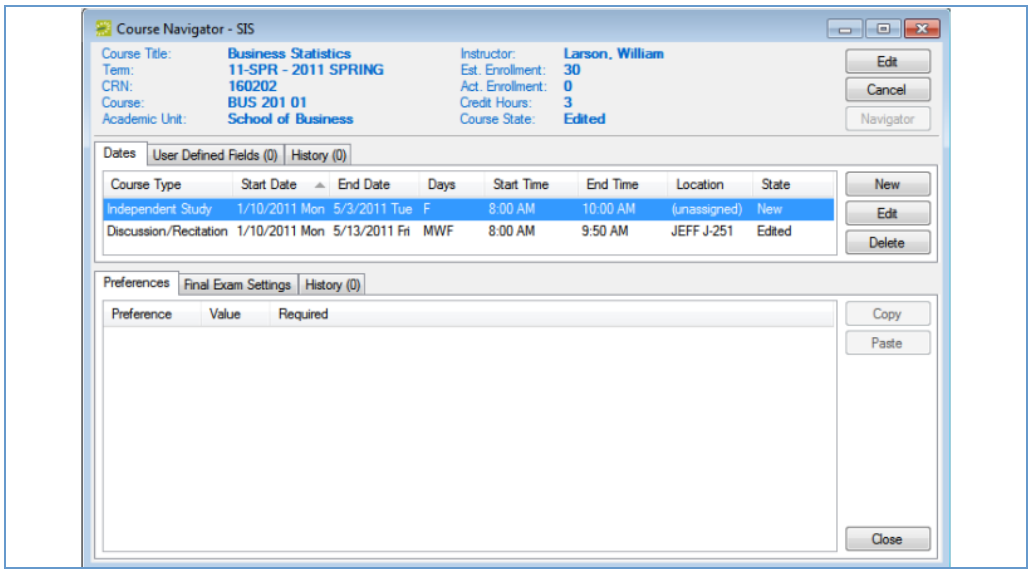


Tooltip for a course entry in the Academic Book

Open a Course in the Course Navigator

1. Double-click a course entry for a non-published course in the Academic Book to open the course in the Course Navigator.
2. Double-click a course entry for a published course in the Academic Book to open the course in the Navigator, select the course on the Course Info tab, and then click Course to open the course in the Course Navigator.

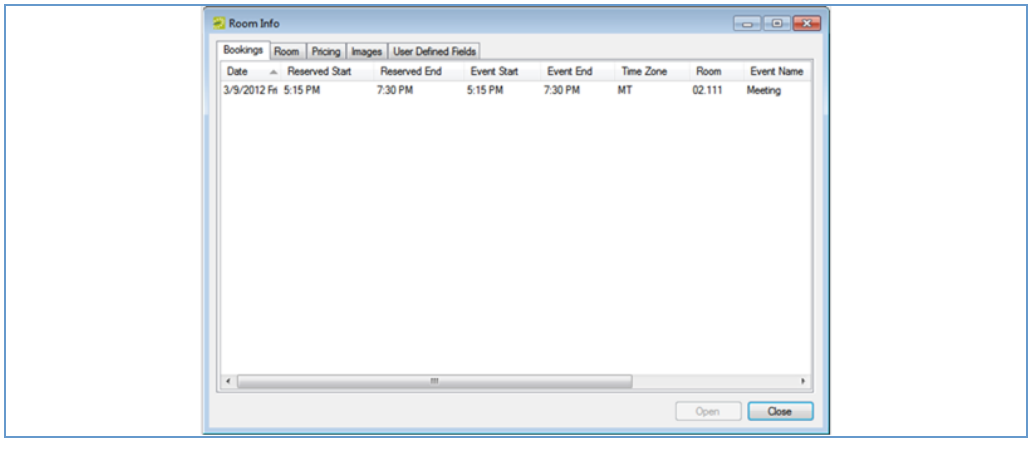
Note:
For detailed information about working with the Course Navigator, see Using the Course Navigator.



Course Navigator

Display the Details for a Room

To display details about a room, make sure that the Academic Book is in the Rooms view, and then right-click on any room in the Rooms list to open a Room Info dialog box that provides the following information on the appropriate tabs—the bookings for the room, the properties for the room, the pricing for the room, any images of the room and any user defined fields (UDFs) that are associated with the room.



Room Info dialog box

CHAPTER 43: Search with the Academic Browser

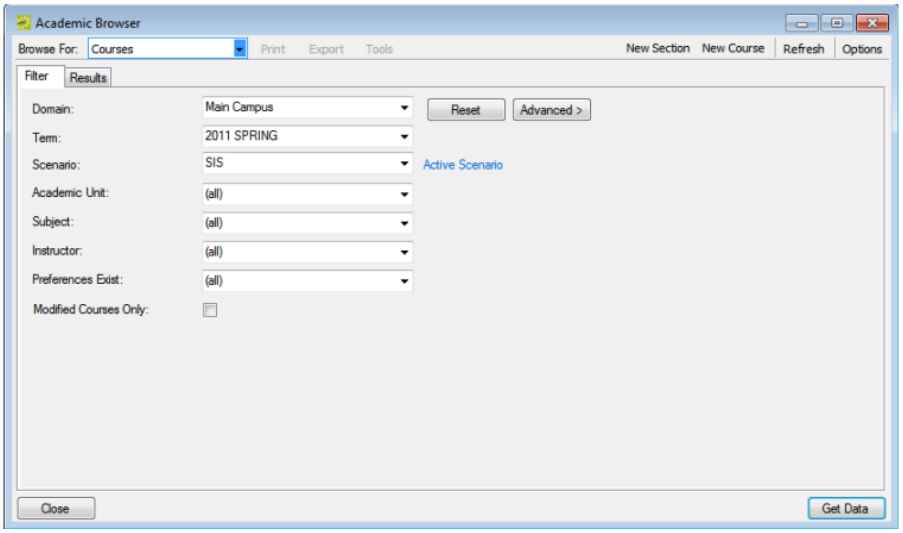
You can use the Academic Browser to search for courses or course dates. The results are displayed in a list view. When you carry out a search in the Academic Browser, you can carry out a basic search or an advanced search. A basic search is based on the basic information that you specify for a course when you first create it, such as the domain, the term, the academic unit, the subject, and so on. An advanced search is a field level search that is carried out at the course level, the course dates level, or the preference level or for published terms, at the reservation, booking or booking detail levels. For example, in an advanced search, you can specify criteria as granular as "courses with credit hours greater than 3.0." After the search results are returned, you have a variety of options for working with the results, including sorting and grouping information or using the Tools menu to perform functions. The actions that you can carry out in the Academic Browser depend upon the mode (Read Only, Define and Edit Courses, or Set Preferences) that is enabled for the academic term with which you are working in EMS Campus.

This topic will provide the information that will allow you to:

- Search in the Academic Browser
- Perform a Basic Search in the Academic Browser
- Perform an Advanced Search in the Academic Browser
- Set Favorite Fields for an Academic Browser Search

Search in the Academic Browser

1. Do one of the following to open the Academic Browser:
    - On the EMS Academic Planning toolbar, click the Academic Browser icon.
    - On the EMS Academic Planning menu bar, click Academic Planning > Configuration > Academic Browser.
2. The first time that the Academic Browser window opens, the Filter tab is set by default to a basic search; otherwise, the Filter tab is set to the search type (Basic or Advanced) that you last carried out.



Academic Browser, Basic Search options

3. Click the Basic/Advanced toggle to select the type of search that is to be carried out.

Perform a Basic Search in the Academic Browser

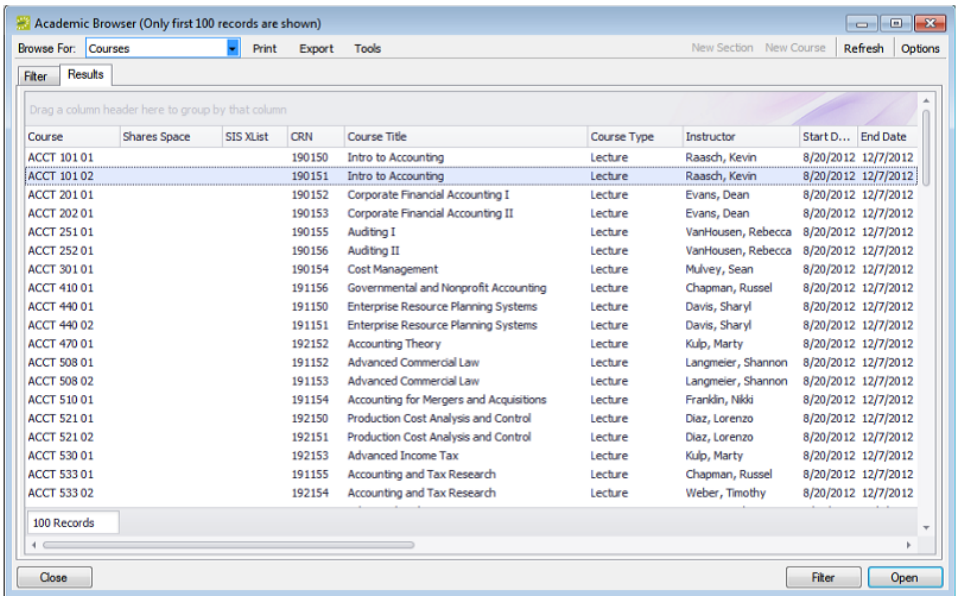
1. On the Browse For dropdown list, select the item for which to search.
2. Enter the search criteria.

Field	Description
Domain	The domain for the course or course date.
Term	The term for the course or course date.
Scenario	Displays results for the specific optimization scenario selected. The “SIS” scenario displays room assignment information from your SIS.
Academic Unit	The academic unit for the course or course date.
Subject	The subject for the course or course date.
Instructor	The instructor for the course or course date.
Preferences Exist	Used to identify the rooms for the courses/course dates that have/do not have room preferences/requirements specified.

Field	Description
Edited Courses Only	Used during the Define and Edit mode to identify courses or course dates that have changed (new, canceled, and/or edited courses/course dates).

3. Optionally, click Options and edit the default value for the additional search option Number of Records to Return.

4. Click Get Data or Refresh. The search results are displayed on the Results tab. If you have searched for courses, then the results include courses without course dates (meeting patterns). “Multiple” is displayed for those courses with more than one course date. If you have searched for course dates, courses without course dates are suppressed while courses with multiple meeting patterns are expanded. EMS schedules rooms only for courses with course dates.



Academic Browser window, Results tab

5. Optionally, do one or more of the following:

   - The Results tab is an EMS browser window. See Work with EMS Windows for all the features that are available for this tab.
   - To open a course in the Course Navigator, double-click the course entry on the Results tab.
   - Click Print to print the search results.
   - Click Export to export the search results to a Microsoft Excel spreadsheet.

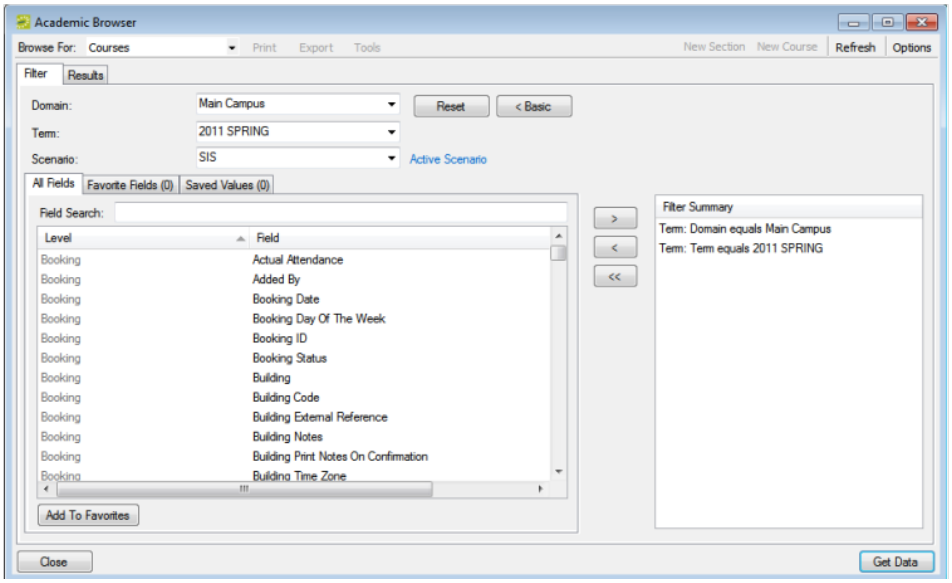
- In Define & Edit mode or Dual mode, use the New Course and New Section options as needed.
- Select a course, or CTRL-click to select multiple courses, and depending on the mode, the following options are available on the Tools menu:
- Set Preferences mode—Set **Course Preferences** (see Specify Room Preferences/Requirements) and **Clear Course Preferences**. Click **Clear Course Preferences** to clear all the current preferences/requirements for the selected courses in a single step.
- All Modes (including Read Only)—Shares Space, Does Not Share Space, Change Shares Space Parent (see Work with Shared Space) and Set Final Exam Settings (see Set a Final Exam Schedule).
- All Modes (including Read Only)—Unsync Selected Courses, which deletes the selected course records and the corresponding reservations and bookings from EMS.

> **Note:**
> Use this option sparingly; however, it might be required post-publish if an error occurred in your SIS or during publish.

- In the Browse For field, select a different item for which to search. The Results tab is refreshed with the search results based on the item that you selected and the search criteria on the Filter tab.
- Click Filter to return to the Filter tab, make any necessary changes to the search criteria and repeat the search.
- Click Refresh to re-query the database based on the current search criteria.

6. Click Close. Any changes that you made to the search results columns (position, width, and so on) remain in effect for any other searches that you carry out.

Perform an Advanced Search in the Academic Browser



Browser window, Advanced search options

1. On the Browse For dropdown list, select the item for which to search.
2. Select a domain, term, and/or scenario to search.
3. For each field level option by which to carry out the search:
   - Select the field level option, and then click the Move button (>).

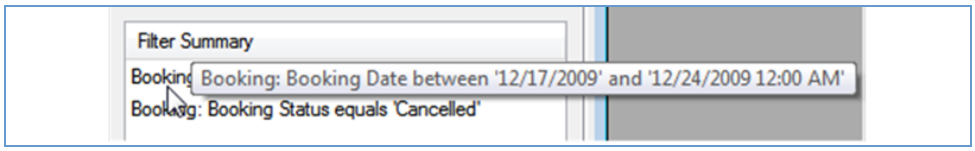
> **Note:**
> To filter the list of available fields, in the Field Search field, enter a search string. Your search is limited to the exact order of the characters in the string, but the string is not case-sensitive and it can appear anywhere in the search results. For example, a search string of add returns Added by, Date Added, and Group Address Line 1. The list of fields that meets your search criteria is dynamically updated as you enter your search criteria.

   - When prompted, enter a value or define the limits for the option, and then click OK.

   The option is moved to the Filter Summary list.

> **Note:**
> If you have specific fields and/or values by which you always want to carry out a search, then you can set up these fields to be your Favorite fields. See below.

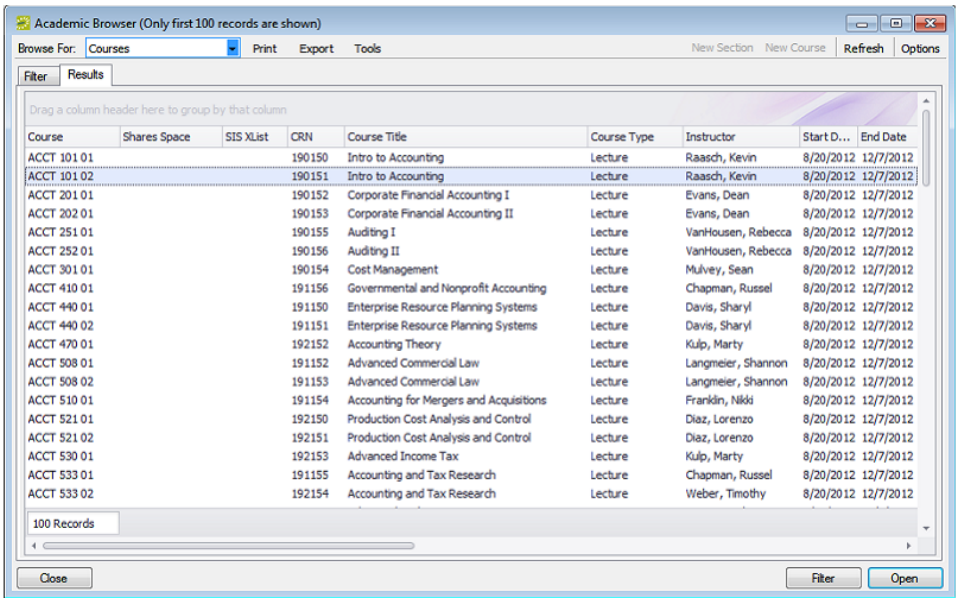
4. To view a selected field option in its entirety in the Filter Summary list, rest the mouse pointer on the entry. A tooltip showing the complete field option information opens.



Viewing a selected field option in the Filter Summary list

5. Optionally, click Options and edit the default value for the additional search option Number of Records to Return.

6. Click Get Data or Refresh. The search results are displayed on the Results tab. If you have searched for courses, then the results include courses without course dates (meeting patterns). "Multiple" is displayed for those courses with more than one course date. If you have searched for course dates, courses without course dates are suppressed while courses with multiple meeting patterns are expanded. EMS schedules rooms only for courses with course dates.



Academic Browser window, Results tab

7. Optionally, do one or more of the following:

   - The Results tab is an EMS browser window. See Work with EMS Windows for all the features that are available for this tab.

   - To open a course in the Course Navigator, double-click the course entry on the Results tab.

- Click Print to print the search results.
- Click Export to export the search results to a Microsoft Excel spreadsheet.
- In Define & Edit mode or Dual mode, use the New Course and New Section options as needed.
- Select a course, or CTRL-click to select multiple courses, and depending on the mode, the following options are available on the Tools menu:
- Set Preferences mode—Set Course Preferences (see Specify Room Preferences/Requirements) and Clear Course Preferences. Click Clear Course Preferences to clear all the current preferences/requirements for the selected courses in a single step.
- All Modes (including Read Only)—Shares Space, Does Not Share Space, Change Shares Space Parent (see Work with Shared Space).
- All Modes (including Read Only)—Unsync Selected Courses, which deletes the selected course records and the corresponding reservations and bookings from EMS.

> **Note:**
> Use this option sparingly; however, it might be required post-publish if an error occurred in your SIS or during publish.

- In the Browse for field, select a different item for which to search. The Results tab is refreshed with the search results based on the item that you selected and the search criteria on the Filter tab.
- Click Filter to return to the Filter tab, make any necessary changes to the search criteria and repeat the search.
- Click Refresh to requery the database based on the current search criteria.

8. Click **Close**. Any changes that you made to the search results columns (position, width, and so on) remain in effect for any other searches that you carry out.

Set Favorite Fields for an Academic Browser Search

If you have specific fields and/or values by which you always want to carry out an Academic Browser search, you do not have to filter the list of fields on the All Fields tab for every search. Instead, you can set up each of these fields to be a favorite field with a specific value or limit if needed.

1. Open the Academic Browser, and make sure that the Advanced search features are displayed.
2. For each field that you are setting up as favorite field, select the field on the All Fields tab, and then click Add to Favorites. The field is added to the Favorite Fields tab.

3. Optionally, after you define a value or define the limits for a field, click Save Value on the Filter dialog box. The next time that you carry out a search, you can simply open the Favorite Fields tab or the Saved Values tab to carry out a search based on your customized list of search fields.

CHAPTER 44: Specify Room Preferences/Requirements

Set Preferences is an optional mode in which the Domain Scheduler can solicit preferences from academic units about the type of rooms that would be suitable for each course that they teach. These preferences can then be used to run an optimization, or to have EMS automate room scheduling based on preferences and additional user-specified criteria. To enable and use Set Preferences Mode, the following steps are carried out:

1. The Domain Scheduler enables Set Preferences mode. See Enable/Disable a Term for Set Preferences Mode.
2. The academic units review courses and specify their room preferences and requirements using the EMS Campus Planning Interface (typical) or the EMS Campus desktop client (if granted access).
3. The Domain Scheduler verifies and reviews the room preferences and requirements that the academic units have specified. See Review and Verify Room Preferences.

After you place the term in Set Preferences mode, three options that can be used in conjunction with each other are available for completing the preferences and requirements phase. In addition, you can complete the phase independently, or you can solicit input from the academic units.

This topic will provide information that will allow you to:

- Use the Manage Terms Copy Preferences Tool—You can use the Manage Terms Copy Preferences tool to copy the preferences and requirements from a previous term.
- Use the Academic Browser Set Course Preferences Tool—You can use the Academic Browser Set Course Preferences tool to set preferences and requirements for multiple courses in a single step.
- Use the Course Navigator to Set Preferences and Requirements—You can use the use the Course Navigator to set preferences and requirements on a course by course basis.



Note:

If a course must take place in a specific room that you plan to exclude from optimization, you can pre-assign it to a specific room. This process is outlined during the Scenario phase. See Create Scenarios.

For any of these methods, the following caveats apply:

- An academic unit-level user can request any building, area, or view and up to three rooms that have been defined for the domain with which it is associated.

Note:

If needed, you can set the Lock Academic Unit Room Access system parameter to limit the users to their specific academic units. See System Parameters in the EMS Desktop Client Configuration Guide.

- An academic unit can require only those buildings and rooms that have been assigned to its unit within the Academic Planning > Configuration > Academic Units area of EMS Academic Planning. If the academic units specify requirements, then only a single room can be specified.
- Room types can be requested or required for all courses. By default the "limit by course type" selection is designated, but you can change it to honor a specific room type.

Note:

Configuration of the Course Types/RoomTypes matches is carried out in the Academic Planning > Configuration > Match Course Types/Room Types area of EMS Academic Planning. See the EMS Desktop Client Configuration Guide for detailed information.

- You can set features to **Preferred** or **Required**. The # of Rooms Available label that is displayed above the Features pane is dynamically updated based on the building, room type, and features selected.
- The Seat Fill Percentage, in conjunction with the estimated enrollment, is used to determine the size of the room needed for the class. For example, a Seat Fill Percentage of 50% and an estimated enrollment of 100 means that the course should be held in a room that can accommodate 200 people.

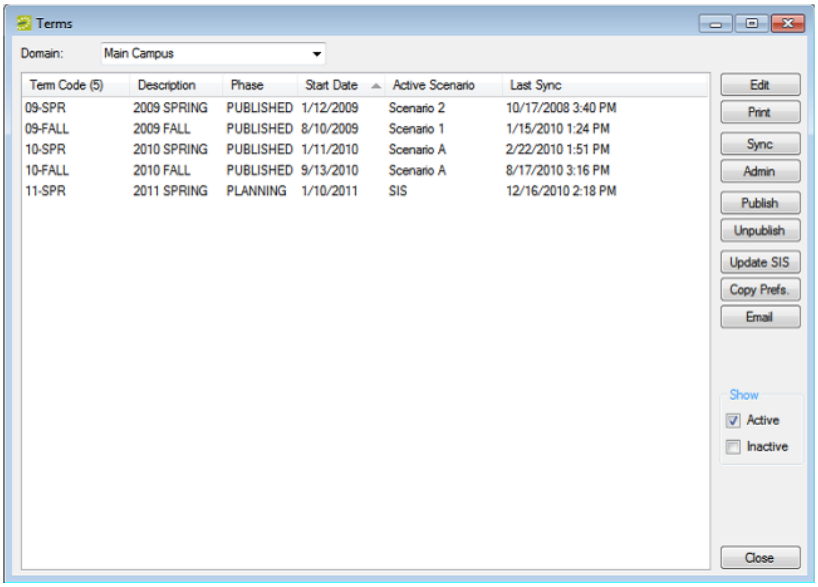
Note:

The Seat Fill Percentage is initially set to the default value that is specified in EMS (Campus) system parameters, but you can update the value on a per course date basis. See the EMS Desktop Client Configuration Guide.

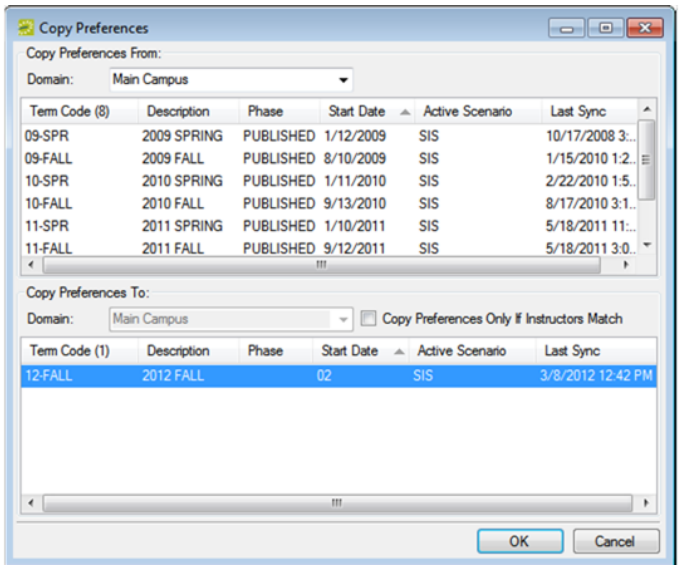
- Ignore Term Excluded Dates schedules bookings on all dates that adhere to the meeting pattern, regardless of the Excluded Dates that are marked on the term when the course dates are published.
- Publish In SIS Room (No Optimization) allows the course dates to avoid the optimization process. Bookings are published in the room that was carried over from the SIS.
- Require SIS Room flags buildings/rooms that come across from the SIS as Required. Courses with requirements still go through the optimization process.
- Requires Different Room (For Courses That Share Space) identifies a meeting pattern that should be in its own room despite the cross-listed or shared space status. You can set preferences for this room.
- Same Room (ALL Selected Course Dates are to be in the same Room) flags courses that should be in the same room but at different times when optimized.

Use the Manage Terms Copy Preferences Tool

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**. The Terms window opens.



2. Click **Copy Prefs**. The Copy Preferences dialog box opens.



3. In the Copy Preferences From pane, select the domain and term from which you want to copy room preferences and requirements.

4. In the Copy Preferences To pane, do the following:
   - Select the domain and term to which you want to copy your room preferences and requirements.

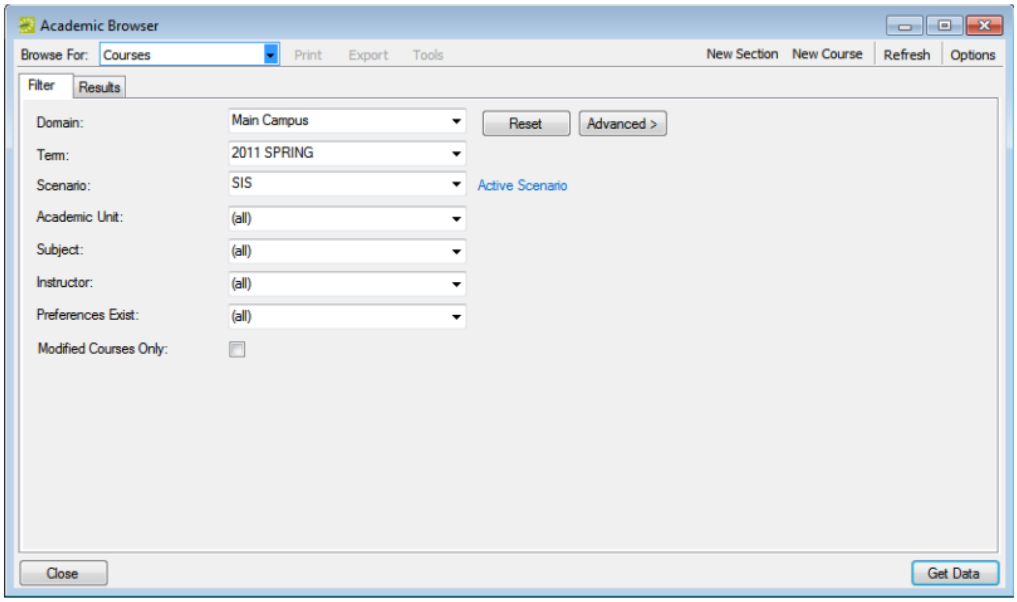
     Note:
     A term can be displayed in the To pane only if it is in Set Preferences mode.

   - Indicate if the preferences are to be copied only if the instructors match.
5. Click **OK**. A message opens, informing you that copying preferences will overwrite any existing preferences, and asking you if it is OK to continue.
6. Click **Yes**. The message closes. After the preferences are copied, you return to the Terms window.

Note:
Preferences are copied based on the Course Section (Math 101 01) and Course Type information (lecture or lab). If you have added new sections or changed course type designations on course dates within a section, then even after you complete this procedure, some courses still will not have preferences. Be sure to review your list of courses and set preferences where applicable.

Use the Academic Browser Set Course Preferences Tool

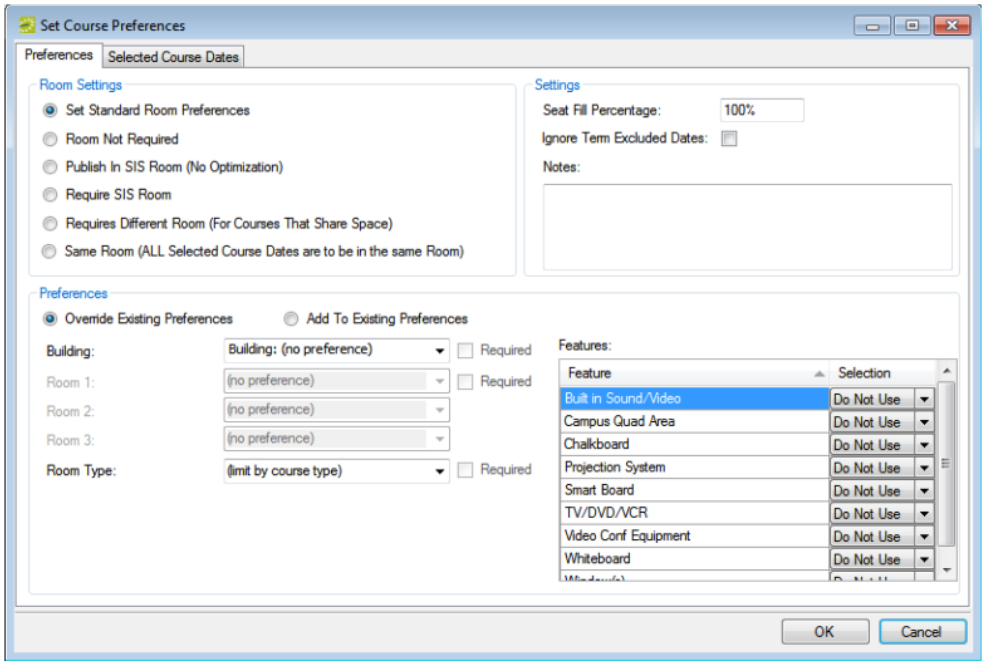
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the Filter tab.



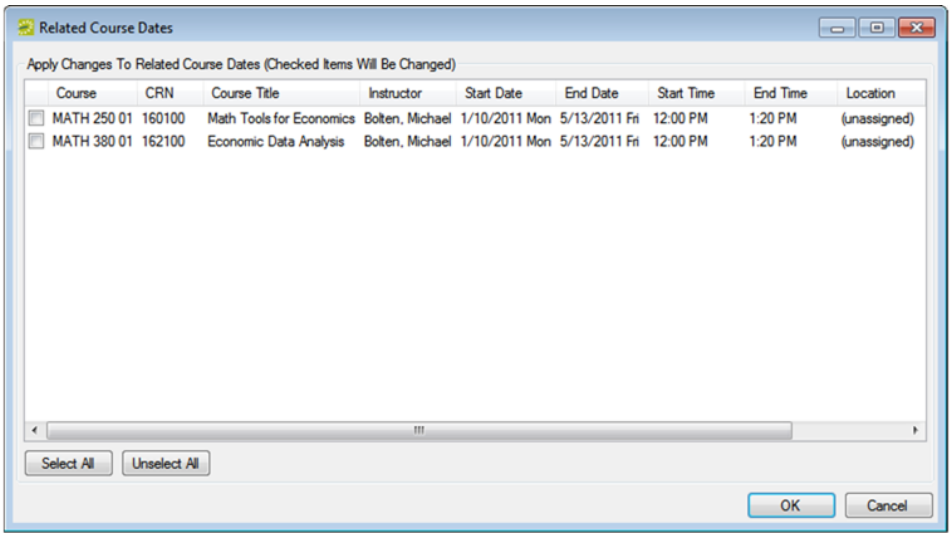
3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject and so on) as needed to provide assistance in locating the courses for which you want to set preferences and requirements, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

5. CTRL-click to select the courses for which you are setting the room preferences and requirements.
6. On the Tools menu, click **Set Course Preferences**. The Set Course Preferences dialog box opens.



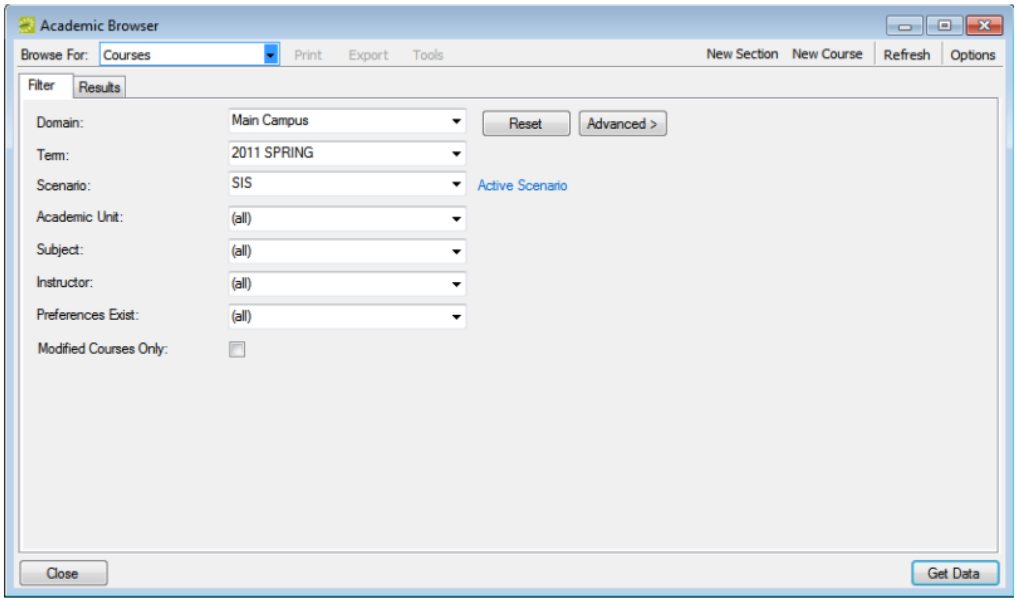
7. Indicate whether the preferences that you set are to override any existing preferences, or whether they are to be added to existing preferences.
8. Set your preferences for the selected courses.
9. Optionally, do one or both of the following:
   - In the Notes field, enter any pertinent or supporting information that substantiates or explains your preferences.
   - By default, the preferences/requirements that you specify are applied to all course dates for all selected courses. If the preferences/requirements are applicable for only specific course dates, open the Selected Course Dates tab, select the course dates for which these preferences/requirements are not applicable and then click Remove.
10. Click OK. Two results are possible:
    - If any of the selected courses are cross-listed and/or share space, and you did not select the corresponding cross-listed/shared space courses, then a Related Course Dates dialog box opens. This dialog box lists all the related courses that have not been selected. Go to Step 11.
    - If none of the selected courses are cross-listed and/or share space, then a message opens indicating whether the selected preferences will override any existing preferences, or be added to existing preferences and asking you if it is OK to continue.



11. Optionally, select any or all of the related courses for which you want to set the same preferences/requirements, or do not select any of these related courses, and then click OK. A message opens indicating whether the selected preferences will override any existing preferences, or be added to existing preferences and asking you if it is OK to continue.
12. Click **Yes**. The message closes and another message opens indicating that the preferences were set successfully.
13. Click **OK** to close the second message and return to the Academic Browser.

Use the Course Navigator to Set Preferences and Requirements

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the Filter tab.

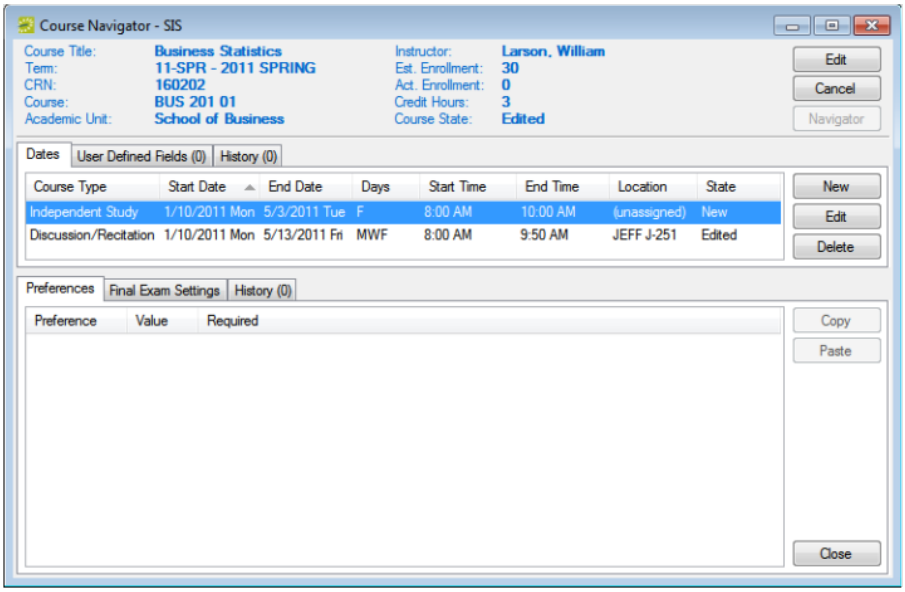


3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses for which you want to set preferences and requirements, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

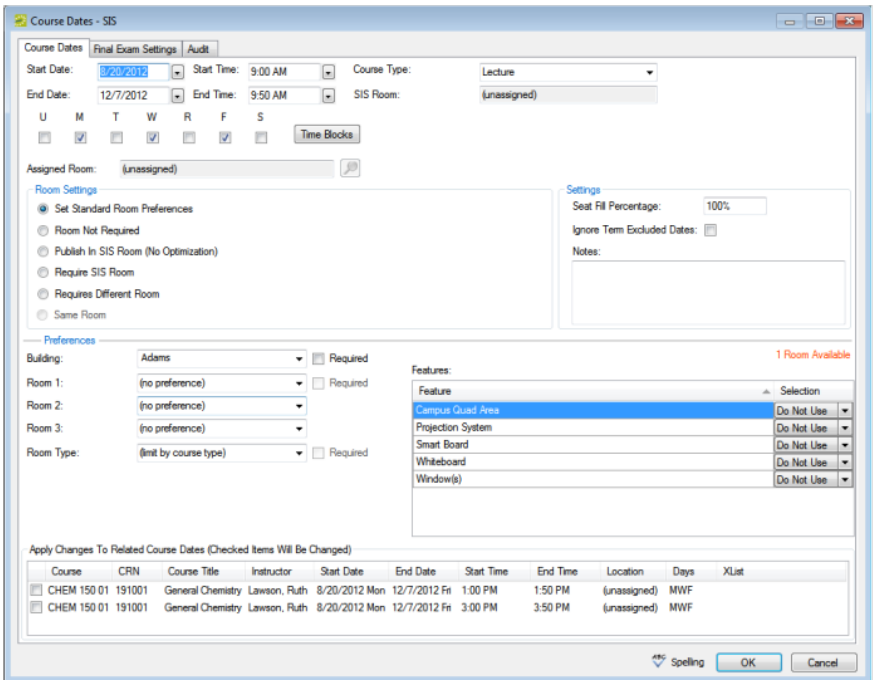
> **Note:**
> For detailed information about searching with the Academic Browser, see Search with the Academic Browser.

5. In the search results, double-click the course for which you are setting the preferences/requirements. The course opens in the Course Navigator.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



6. In the middle pane of the Navigator, select the specific course date for which you are setting preferences/requirements, and then click **Edit**. The Course Dates dialog box opens.



7. Set the preferences/requirements for the course as needed, and then click **OK**. The Course Dates dialog box closes and you return to the Course Navigator. The preferences/requirements that you set for the course date are displayed on the Preferences tab in the lower pane of the Navigator.

CHAPTER 45: Review and Verify Room Preferences

After room preferences and requirements are set, you can review the individual course preferences, verify that the preferences are complete, and quantify these preferences. You can also run the Course Preferences report and the Course Preferences Summary report to assist in this task.

Note:

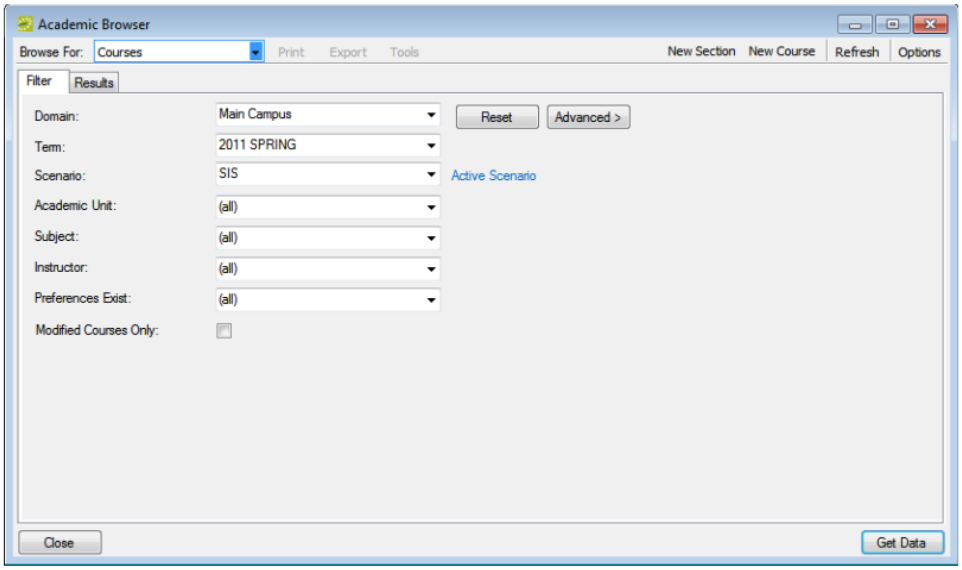
For detailed information about generating the Course Preferences and Course Preferences Summary reports and the information that is contained in each report, see Generate Academic Reports.

Prior to reviewing or reporting on preferences, you can make the term unavailable to the academic units. See Enable and Disable a Term for Set Preferences Mode.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**.

   The Academic Browser opens.

2. If needed, open the **Filter** tab.



3. On the Domain drop-down list, select the appropriate domain.

4. On the Term drop-down list, select the appropriate term.

5. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses for which you want to review preferences and requirements, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> To identify preferences and requirements for a Basic search, you should set **Preferences Exist** to **Yes**. For an Advanced search, you should select the Preferences Exist field (a Course Dates level field), and set the **Preferences Exist** filter to **Yes**. For detailed information about searching with the Academic Browser, see Search with the Academic Browser.

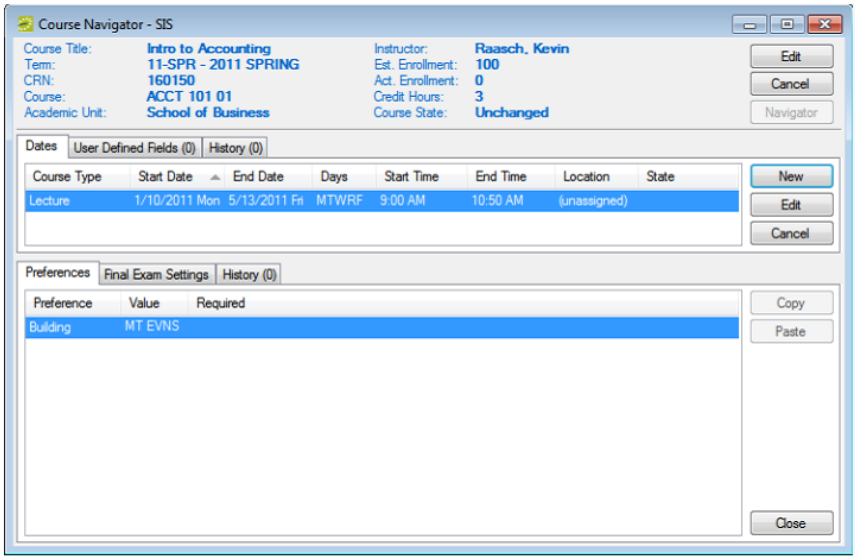
5. In the search results, double-click the course for which you are reviewing the preferences/requirements.

   The course opens in the Course Navigator.

6. In the middle pane of the Course Navigator, select the course date for which you are reviewing the preferences.

   The preferences for the selected course date are displayed in the bottom pane of the Course Navigator on the **Preferences** tab.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



CHAPTER 46: Overview of Importing an Academic Term

The first step in the academic planning phase is to import a term. Importing an academic term consists of the following three steps:

1. A new term is created in the Student Information System (SIS), either by rolling forward a previous term, or by creating it from scratch. The term is then synchronized into EMS. See Synchronizing an Academic Term.
2. The Domain Scheduler synchronizes course data from the SIS into EMS Academic Planning. See Synchronize Courses.
3. Synchronized courses are reviewed before the term is made available to academic units. See Searching with the Academic Browser and Using the Course Navigator.

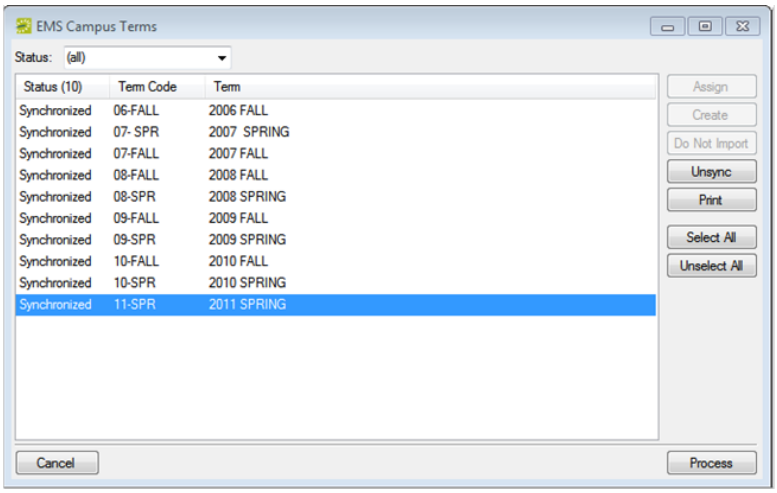
CHAPTER 47: Synchronize an Academic Term

When you synchronize your Student Information System (SIS) term data, all the SIS terms are flagged with a status of New. To create these terms in your EMS database, you select each term, click **Create**, and then **Process**.

To synchronize an academic term, follow these steps:

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Configuration** > **Synchronize Terms**.

   The EMS Academic Planning Terms window opens.



   EMS Campus Terms Window

2. Select the SIS term, or CTRL-click to select the multiple SIS terms that you are creating in your EMS database, click **Create**, and then click **Process**.

   A message opens indicating that the terms were successfully processed.

> **Note:**
> If you do not want to create an SIS term in your EMS database, select the term, and then click **Do Not Import**.

3. Click **OK** to close the message and return to the EMS Academic Planning Terms window.

   The status of the terms is set to Synchronized to indicate that the SIS data has been synchronized.

4. Click **Cancel** or **Close** (x) to close the window.

CHAPTER 48: Publish a Term

After the Domain Scheduler has finalized the assignment of courses to rooms, either with the help of the EMS room optimization process or by using the scenario that was pulled from the SIS, the next step is to publish the course schedule for the term in EMS Academic Planning. Publishing the course schedule causes the system to book the space in EMS, creating reservations and bookings. If the EMS Academic Planning system parameter, **Manually Update SIS**, is set to **No**, then the publishing process also updates course location information directly in the SIS; otherwise, the Domain Scheduler must manually update the SIS. Publishing an academic term consists of the following steps:

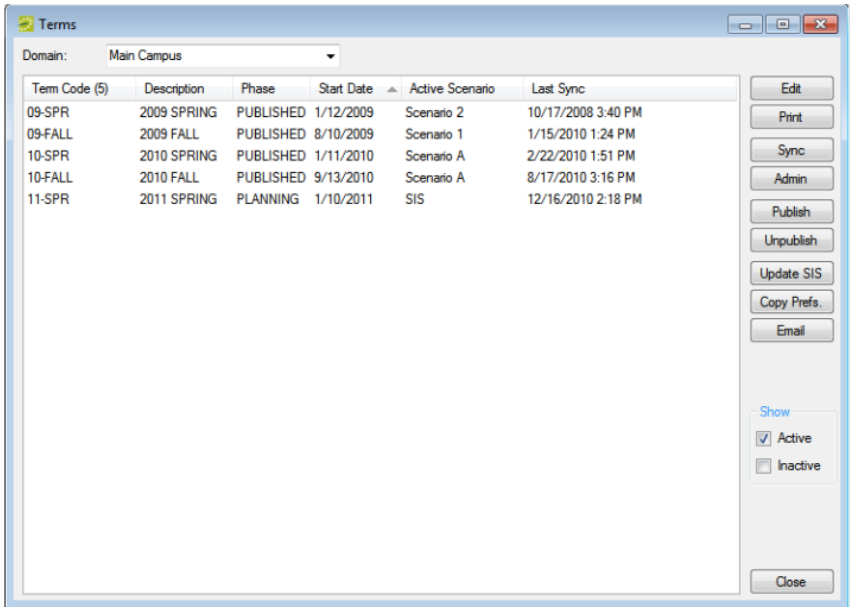
1. The Domain Scheduler publishes the term, which includes specifying statuses for courses in conflict and cross-listed courses.
2. If needed, the Domain Scheduler manually updates the course locations in the SIS. See Manually Update Course Locations in the SIS.
3. If needed, the Domain Scheduler can unpublish a previously published term. See Unpublish a Previously Published Term.

After you have finalized the assignment of courses to rooms, either with the help of the EMS room optimization process or by using the scenario that was pulled from the SIS, the next step is to publish the course schedule for the term in EMS Academic Planning. Publishing the course schedule causes the system to book the space in EMS, creating reservations and bookings.

Publish a Term

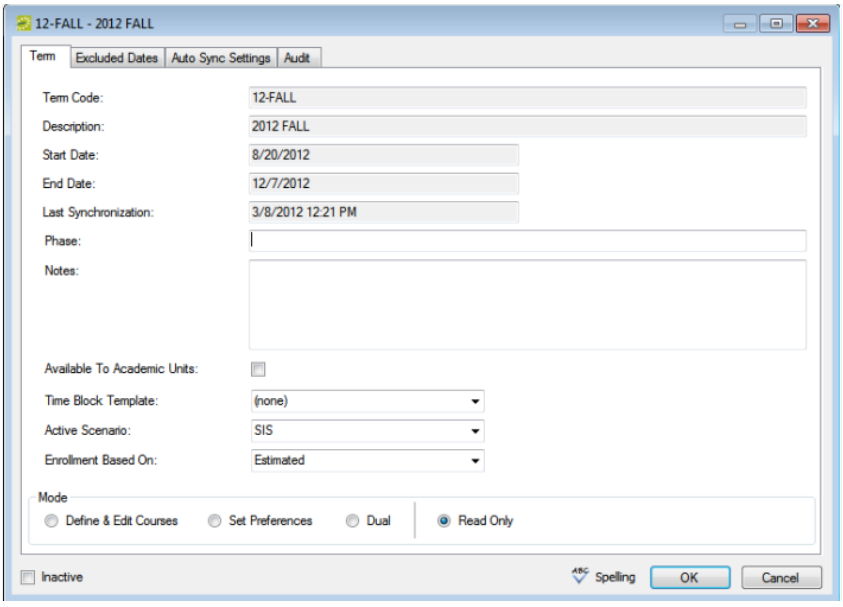
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**.

   The Terms window opens.



2. On the Domain drop-down list, select the domain for which the term is being published.
3. Select the term that is being published, and then click **Edit**.

   The Term dialog box opens. The Term tab is the active tab.



Term dialog box, Term tab

4. Do the following:

- Make sure that the **Mode** is set to **Read Only** and if the academic unit-level users are to have View access to the term, make sure that **Available to Academic Units** is selected.
- On the Active Scenarios drop-down list, select the scenario that is being published.

> **Note:**
> The SIS scenario publishes room assignments that were previously defined in the SIS.

5. Optionally, in the Phase field and the Notes field, enter any information that is pertinent to the published .

   For example, “Published” in the Phase field.

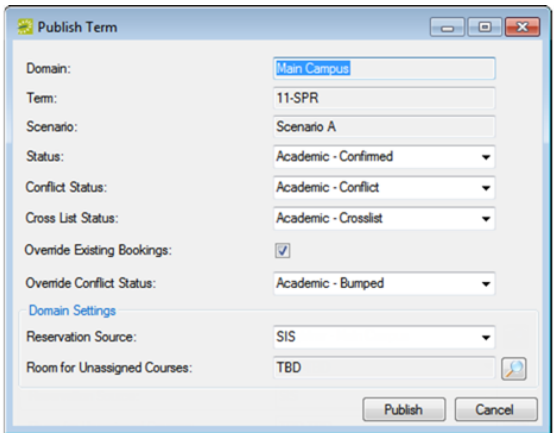
6. Open the **Excluded Dates** tab.
7. Select the dates that should be excluded during the publishing process.

   The Term dialog box closes. You return to the Terms window with the term that is to be published automatically selected.

> **Note:**
> This would include any dates where regularly scheduled classes do not take place, for example, breaks, holidays, and if applicable, final exams week.
>
> Bookings are not created for excluded dates, which means that rooms can be scheduled for events and meetings, if needed.

8. Click **Publish**.

   The Publish Term dialog box opens. The Domain field, the Term field, and the Scenario field are automatically populated with the values that you previously selected and you cannot edit them.



9. Select the statuses required for publishing the term.

Status	Description
Status	The status that is used to book all rooms for course reservations and bookings that are created during the publishing process. **Note:** The status should be a Booked Space type.
Conflict Status	If you are publishing course room placements that were assigned in your SIS (the SIS scenario), then potentially you could have room booking conflicts created. If a double booking is encountered during the publishing process, then the reservation and bookings for the conflicting course are published in this conflict status. **Note:** The status should be an Info Only type.
Cross List Status	The status that is used to book all cross-listed and shared space course reservations and bookings that are created during the publishing process. **Note:** The status should be an Info Only type.

Status	Description
Override Existing Bookings/Override Conflict Status	If another scheduling unit on campus, for example, the Student Union, is allowed to book events in academic space before the publishing process has taken place, then an event and course might be assigned to the same space. If Override Existing Bookings is selected and this situation is encountered during the publishing process, the event is "bumped" and its reservation and bookings are booked into this status. If Override Existing Bookings is not selected, then the conflicted bookings for the course are placed into the Override Conflict Status. **Note:** The Override Conflict Status should be an Info Only type.

10. Specify the Domain Settings for the term.

Setting	Description
Reservation Source	Select the reservation source that is used for the course reservations and bookings that are created during the publishing process.
Room for Unassigned Courses	Click the **Search** icon to open the Room Selector dialog box and select the room in which to book the courses that have not been assigned in the SIS or in an optimization scenario. **Note:** Unassigned courses are typically booked in a special To Be Determined (TBD) room. Some organizations create a specific TBD building and/or room to accommodate this situation. The room must be an override description room. See the EMS Desktop Client Configuration Guide for information about configuring a TBD building and/or room.

11. Click **Publish**.

    A message opens stating that publishing the term will set the term to Read Only and asking you if it is OK to continue.

12. Click **Yes**.

A Publishing progress dialog box opens. After the term is published, the progress dialog box closes, and a message opens indicating that the term was published successfully.

13. Click **OK** to close the message and return to the Terms window.

Note:

If any errors are encountered during the publishing process, or if the EMS Academic Planning system parameter **Manually Update SIS/ERP System After Publishing** is set to **Yes**, then you can access your course list and manually update the course locations in your SIS.

See Manually Update Course Locations in the SIS.

CHAPTER 49: Unpublish a Previously Published Academic Term

For a variety of reasons, you might need to unpublish a previously published term, for example, you accidentally published the term using the wrong scenario, or you forgot to mark excluded dates before you published the term.

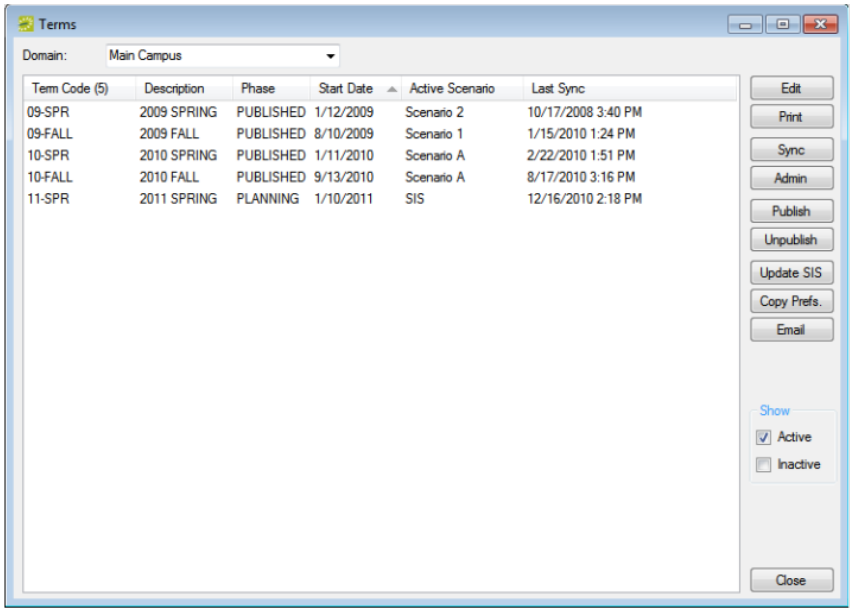
Important!

Even though you might have a valid reason for unpublishing a term, do not do so without great consideration. Unpublishing a term deletes all reservations and bookings that are associated with the term.

To unpublish a previously published academic term, follow these steps:

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms.**

   The Terms window opens.



2. On the Domain drop-down list, select the domain for which you are unpublishing the term.
3. Select the term that you are unpublishing, and then click **Unpublish**.

   A message opens indicating that unpublishing will remove all reservations and bookings for the selected term, and asking you if it is OK to continue.

4. Click **Yes**. The message closes.

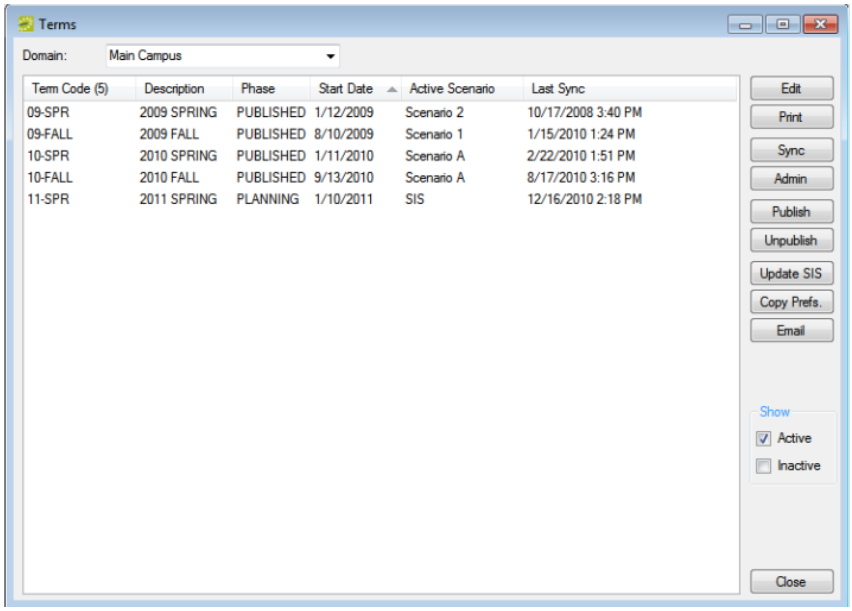
After the term is unpublished, a second message opens indicating that the term was successfully unpublished.

5. Click **OK** to close the second message and return to the Terms window.

CHAPTER 50: Enable/Disable a Term for Set Preferences Mode

To enter the academic units' room preferences and requirements, you must enable Set Preferences mode. Additionally, if you want to solicit these preferences and requirements from the academic units, you must make the term available to the academic units. Likewise, after the deadline has been reached for expressing room preferences and requirements, you must make the term unavailable to the academic units.

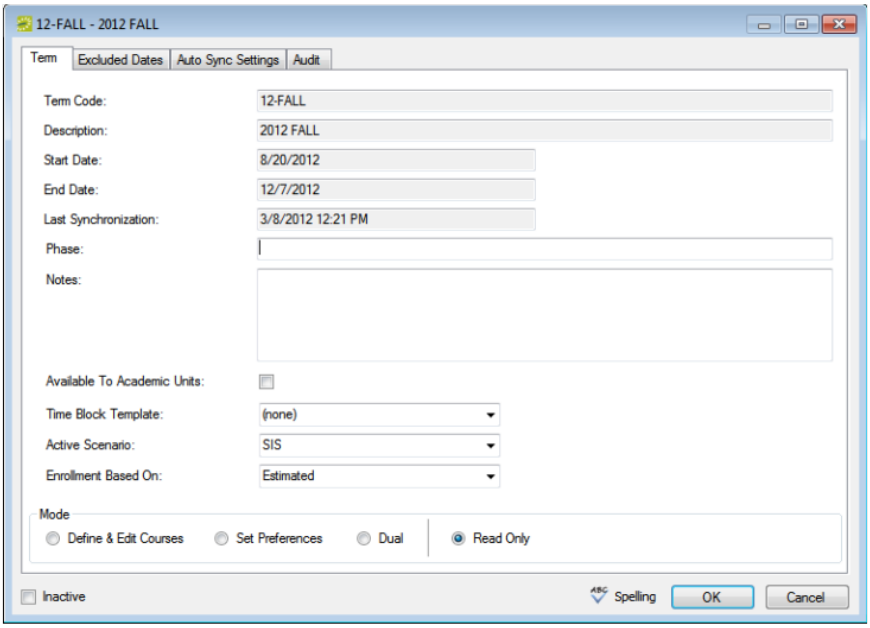
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**. The Terms window opens.



2. On the Domain drop-down list, select the appropriate domain.

3. Select the term for which you are setting the Set Preferences mode, and then click **Edit**. The Term dialog box opens on the Term tab.

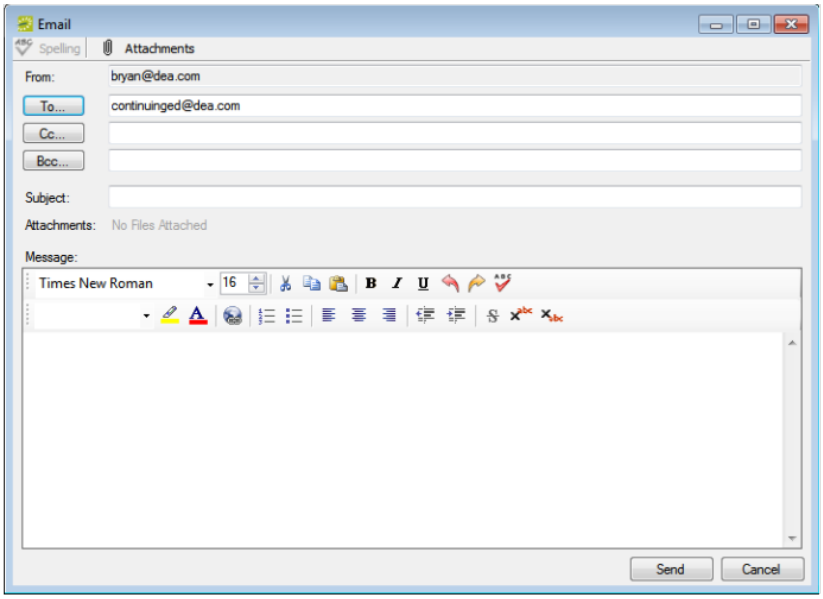
> **Note:**
> Remember, if you selected Dual mode, (see Specifying Room Preferences/Requirements) then the Set Preferences mode has already been enabled for this term.



4. Optionally, in the Phase and Notes fields, enter information that indicates to the Domain Scheduler what part of the academic scheduling process is currently taking place, for example, Enter Preferences, or Room Information along with any supporting information or instructions.

> **Note:**
> The Phase field and the Notes field are displayed in the EMS Campus Planning Interface.

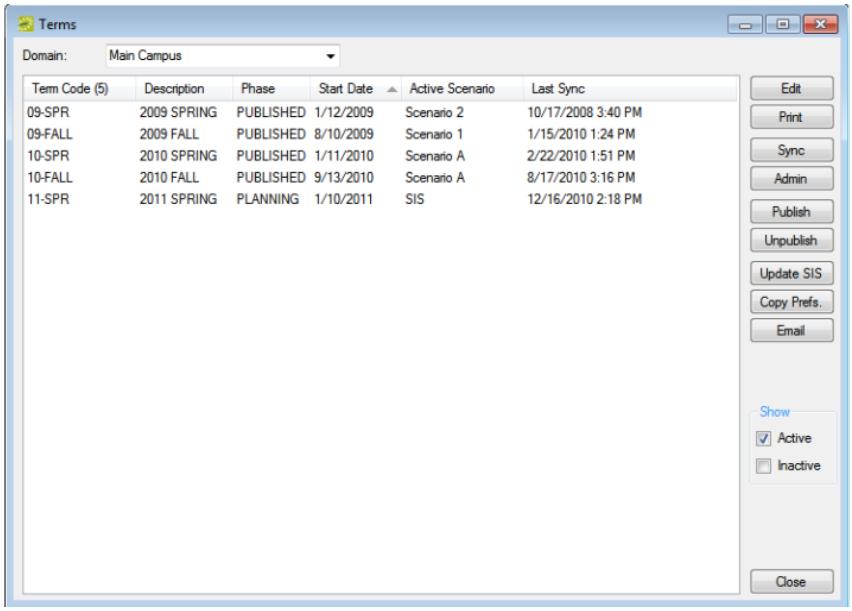
5. Do one of the following:
   - To give academic unit-level users access to the term, select **Available to Academic Units**.
   - To remove the users' access to the term, clear **Available to Academic Units**.
6. If you did not select Dual mode, then in the Mode section, select **Set Preferences**.
7. Click **OK** to close the Term dialog box and return to the Terms window, with the term still selected in the window.
8. On the Terms window, click Email to open an email that is pre-addressed to all academic unit-level users that have been defined in your EMS database. Complete and send the email as you normally would.


Email
Spelling
Attachments
From:
bryan@dea.com
To...
continuinged@dea.com
Cc...
Bcc...
Subject:
Attachments:
No Files Attached
Message:
Times New Roman
16
Send
Cancel

CHAPTER 51: Enable/Disable a Term for Define and Edit Mode

After you have imported a term and synchronized the courses for the term, you can set the mode to Define & Edit and make the term available to the academic units. You have the option of selecting Define and Edit mode, or Dual mode. Dual mode enables a term for both Define & Edit Mode and Set Preference mode at the same time. If you select Define and Edit mode, then the steps that you carry out during this mode are distinct and unique from the steps that you carry out in the next mode, which is the Set Preferences mode. If you select Dual mode, then you can carry out the steps for both modes at the same time.

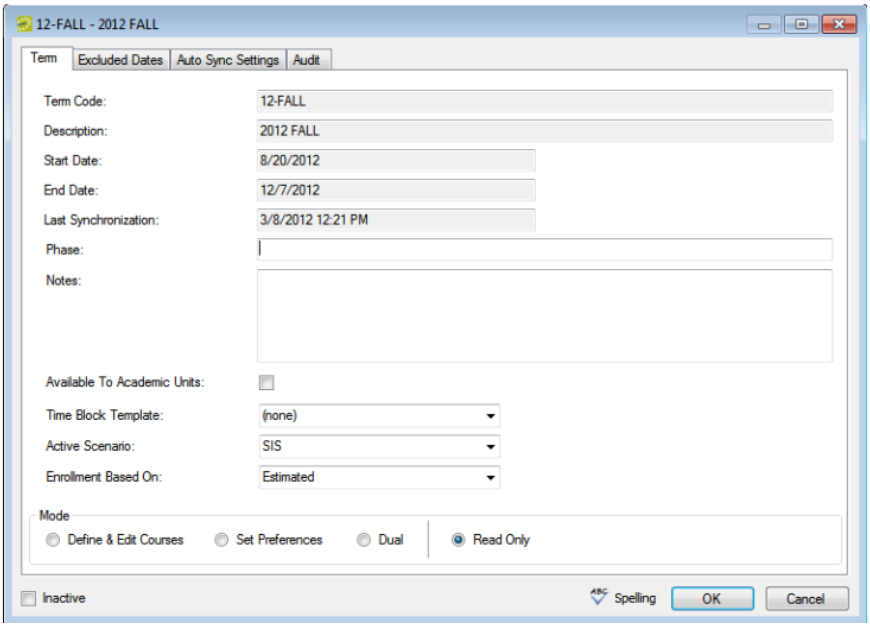
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**. The Terms window opens.



Terms Window

2. On the Domain drop-down list, select the appropriate domain.

3. Select the term for which you are setting Define & Edit mode, and then click **Edit**. The Term dialog box opens. The Term tab is the active tab.



Term Tab of the Term Dialog Box

4. Optionally, in the Phase and Notes fields, enter information that indicates to the academic units what part of the academic scheduling process is currently taking place, for example, “Course Review,” or “Planning” along with any supporting information or instructions.

> **Note:**
> If you are going to select Dual mode, then make sure to note that both course review/planning and setting preferences are currently taking place. Academic units can view this information in the EMS Campus Planning Interface.

5. Do one of the following:
   - If academic unit-level users are to have access to the term, select **Available to Academic Unit**s.
   - To remove the users’ access to the term, clear **Available to Academic Units**.

6. Optionally, if you have configured time block templates, select the appropriate template for this term.

> **Note:**
> At this stage, the only active scenario that is available is SIS, and you cannot change this value.

7. Select the enrollment that is to be compared to room capacity throughout the academic planning process.

8. In the Mode section, do one of the following:
   - To enable Define & Edit mode, select **Define & Edit Courses**.
   - To disable Define & Edit mode, select **Read Only or Set Preferences**.
   - To enable both Define & Edit mode and Set Preferences mode, select **Dual**.

9. Click **OK** to close the Term dialog box and return to the Terms window, with the term still selected in the window.

10. On the Terms window, click **Email** to open an email that is pre-addressed to all academic unit-level users that have been defined in your EMS database. Complete and send the email as you normally would.



SMTP Email Window

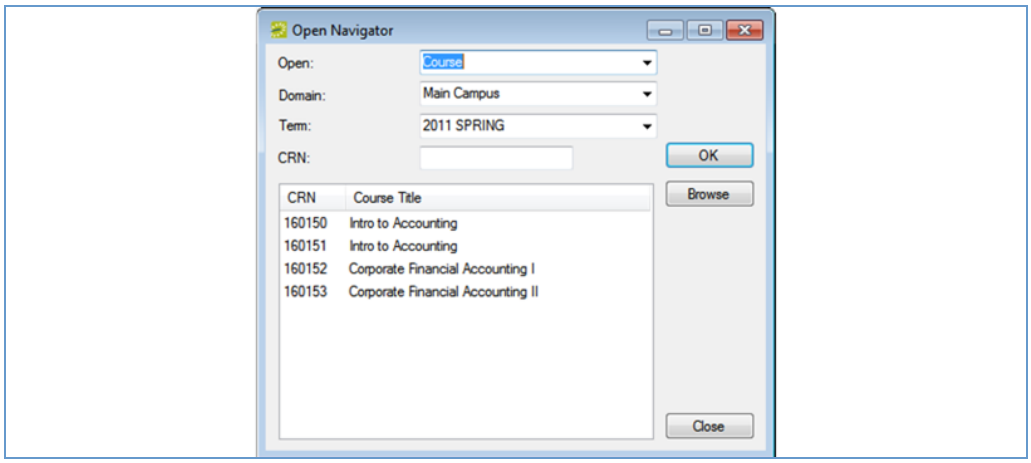
CHAPTER 52: Using the Course Navigator

The Course Navigator is a window in EMS Academic Planning that you use to view and manage all aspects of a course. You can access the Course Navigator from the Academic Browser, the Academic Book, and the EMS Navigator. Different tabs and panes on the Course Navigator provide different information about a course and course dates. The actions that you can carry out in the Course Navigator depend upon the mode (Read Only, Define and Edit Courses, Set Preferences, or Dual) that is enabled for the academic term with which you are working in EMS Academic Planning.

You can access the Course Navigator from the Academic Browser, the Academic Book, and the EMS Navigator.

- To access the Course Navigator from the Academic Browser, for an unpublished course, double-click the course in the search results to open the course in the Course Navigator.
- To access the Course Navigator from the Academic Book, for a published course, double-click the course entry in the Academic Book to open the course in the Navigator, and then click Course on the Course Info tab to open the course in the Course Navigator.
- To access the Course Navigator from the EMS Navigator, do the following in the order indicated:

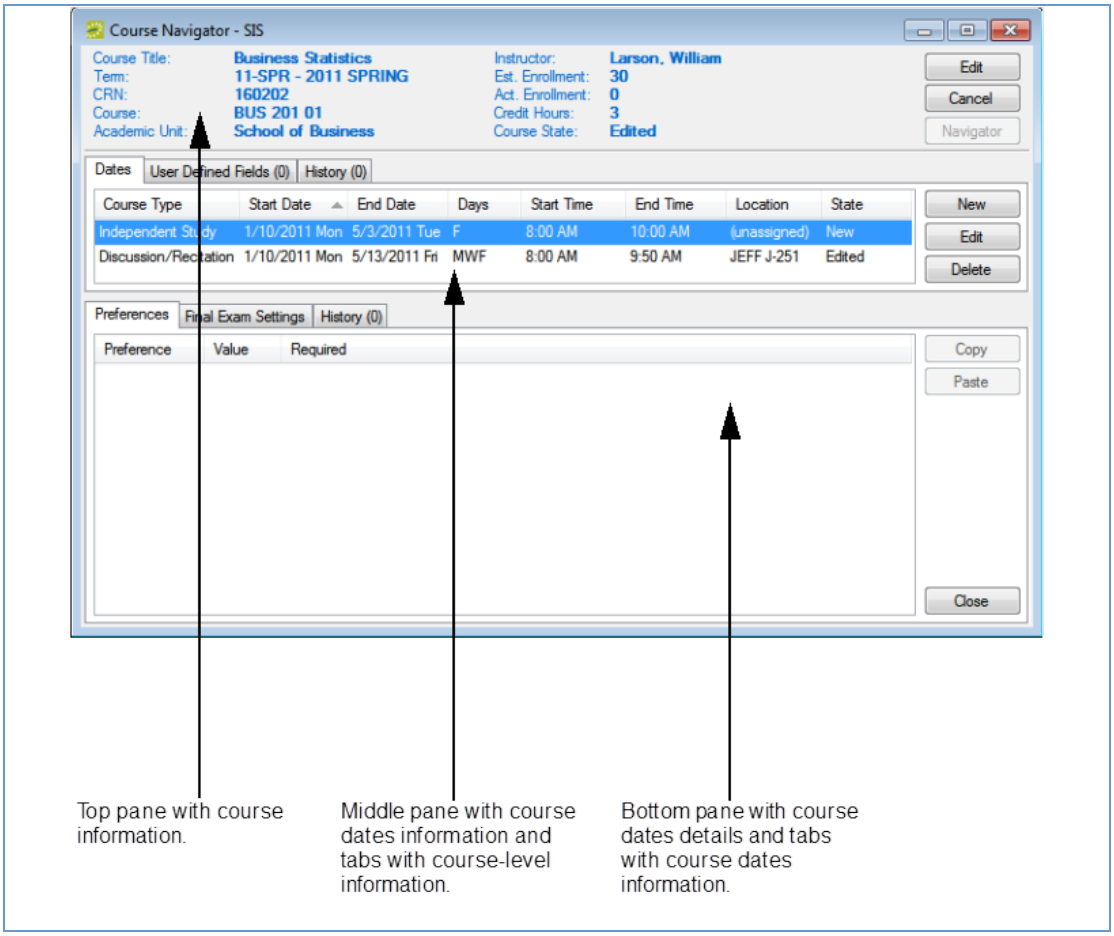
1. On the toolbar, click the **Navigator** icon to open the Open Navigator dialog box.
2. On the Open drop-down list, select **Course** to open a Domain drop-down list and a Term drop-down list.



3. Select a domain and a term.
4. In the CRN field, enter the CRN (course reference number) for the course.
5. Click **OK**.

- If the course is a non-published course, then the course opens in the Course Navigator.
- If the course is a published course, then the course opens in the Navigator. Select the course on the Course Info tab, and then click Course to open the Course in the Course Navigator.

Course Navigator Window Layout



The top pane of the Course Navigator displays information about a selected course—the course title, the course term, the current course state (New, Edit, Unchanged, or Canceled), and so on. The middle pane of the Course Navigator displays information about each of the course dates for the course. To view the indicated information for a course date, select a course date in the middle pane of the Course Navigator, and then open the appropriate tab (Dates, User Defined Fields, Shares Spaces, Preferences, or Final Exam Settings). The History tabs in the middle and lower pane provide audit information for course records and course date records. To view changes made to course-level information, open the History tab in the middlepane of the Course Navigator. To view changes made to course date-level information, select a course date in the middle pane, and then open the History tab in the bottom pane of the Course Navigator.

CHAPTER 53: Available Actions in the Course Navigator

The actions that you can carry out in the Course Navigator depend upon the mode (Read Only, Define and Edit Courses, Set Preferences) that is enabled for the academic term with which you are currently working with in EMS Campus.

Mode	Available Actions
Read Only	The default mode in which the Navigator is placed if you have not selected any other mode. No actions are available.
Define and Edit	• Add course dates • Edit a course • Edit course dates • Cancel course dates • Cancel courses **Note:** These changes require an update in the SIS. See Enable/Disable a Term for Define and Edit Mode for more information.
Set Preferences	Set preferences for a course on a course date by course date basis.

CHAPTER 54: Add and Review Courses

After the Domain Scheduler has imported a term and synchronized the courses for the term, he/she has the option of selecting the mode for the term. Each mode is optional, but each mode provides mode-specific functionality so that the mode can be carried out. Organizations use the Define & Edit mode to solicit information about new, changed, or canceled courses, or course dates for a term. Additionally, courses that share space can be indicated. After the academic units enter this information, the Domain Scheduler can run reports and based on the information in the reports, make the selected modifications in the SIS.

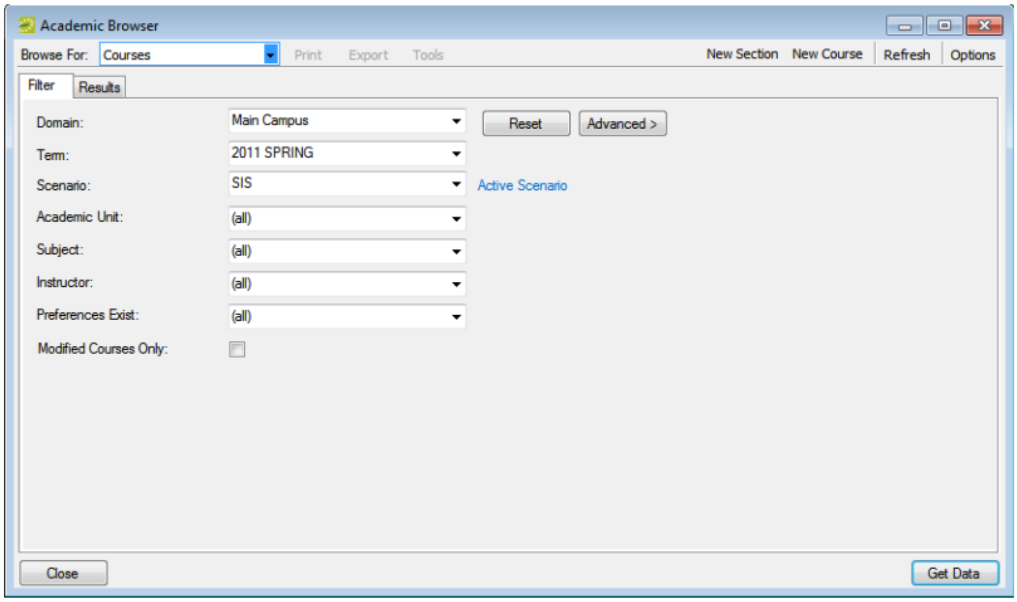
1. The Domain Scheduler enables Define & Edit Mode. See Enable/Disable a Term for Define and Edit Mode.
2. Academic units review the course schedule data, make change requests as appropriate for new, edited, and/or canceled courses, and mark those courses that share space. See Reviewing and Editing Courses and Working with Shared Space.
3. The Domain Scheduler generates and reviews the Course Change report, enters the needed modifications into the SIS, and resynchronizes the courses. See Synchronize Courses.
4. The Domain Scheduler reviews and/or indicates the shared space settings. See Working with Shared Space.

This topic will provide the information that will allow you to:

- Review Courses
- Add a New Course in EMS Campus
- Add a New Section for a Course
- Add a Course Date in EMS Campus

Review Courses

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the **Filter** tab.



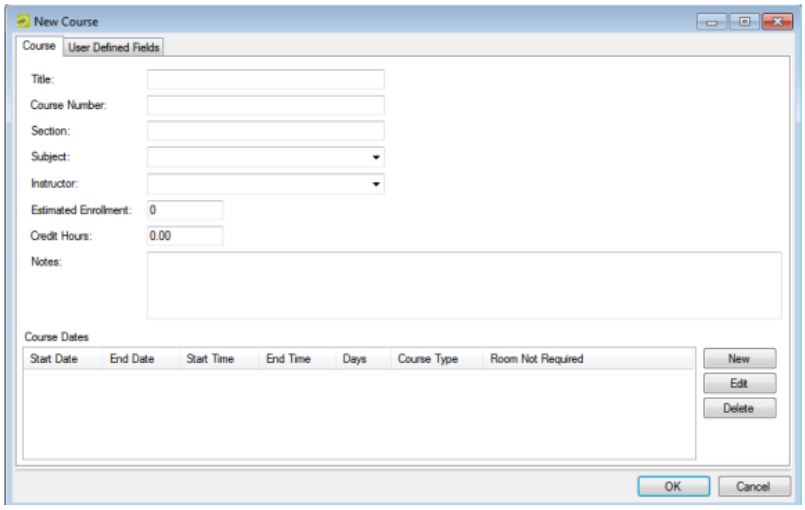
3. Ensure the **Browse For** option is set to **Courses**.
4. On the Domain drop-down list, select the appropriate domain and then on the Term drop-down list, select the appropriate term.
5. Continue to either Add a New Course in EMS Campus, add a new section, or add a course date in EMS Campus.

Add a New Course in EMS Campus

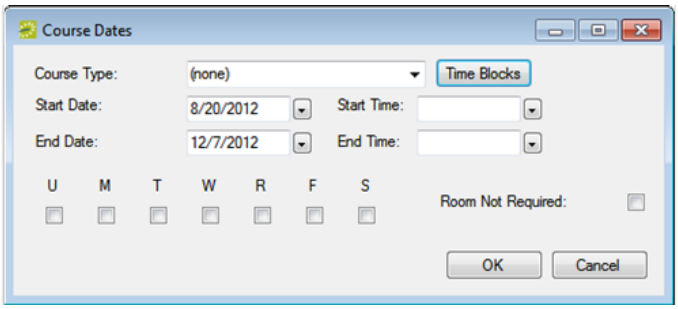
1. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating an existing course, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

2. Click **New Course**. The New Course dialog box opens. The Course tab is the active tab.



3. Complete the required information—title, course number, section, subject, instructor, estimated enrollment, credit hours, course type—on the Course tab.
4. For each course meeting pattern (days and times) that you are adding to the new course, do the following:
   - In the Course Dates section, click **New** to open the Course Dates dialog box and on the Course Type drop-down list, select the course type.
   - Do one of the following:
   - Manually enter the meeting pattern information (start and end dates, start and end times, and meeting days) for the course.
   - Click Time Blocks to open the Time Blocks dialog box, and then select a time block from a list of time blocks that have been made available for the term.



Note:

Make sure to select Room Not Required if the course does not require a room, for example, an independent study class, a research class, and so on.

Depending on how your EMS administrator has configured EMS Academic Planning, only the Time Blocks option might be available to you.

5. Optionally, in the Notes field, enter any information about the course that might be relevant to the Domain Scheduler.
6. Open the User Defined Fields tab, and for any user-defined questions that are displayed on the tab, do the following:
   - Select the question, and then click Set Value to open a dialog box in which you can enter the answer to the question.
   - Click OK to close the dialog box and return to the User Defined Fields tab.

> **Note:**
> User-defined fields, or UDFs, are typically used by a Domain Scheduler to solicit additional user-supplied information about a course.

7. Click **OK** to close the New Course dialog box and return to the Academic Browser.
8. Click **Refresh**. "New" is displayed for the course state.

> **Note:**
> If you have selected Dual mode for the term, then you can set preferences during this step as well. See Specifying Room Preferences/Requirements.

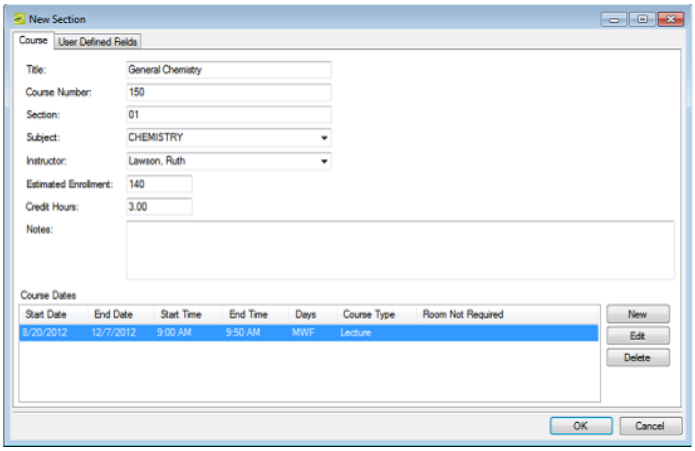
Add a New Section for a Course

To add a new section of an existing course, you must copy an existing course, and then edit the section number and any other pertinent information.

1. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating an existing course, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

2. Select the course that is to be copied, and then click **New Section**. The New Section dialog box opens. The fields are automatically populated with the information for the copied course.



3. Edit the section number and any other pertinent information as needed, and then click **OK**. A message opens indicating that the course was created successfully.

> **Note:**
> Depending on how your EMS administrator has configured EMS Academic Planning, only the Time Blocks option might be available to you.

4. Click **OK** to close the message and return to the Academic Browser.

> **Note:**
> If you have selected Dual mode for the term, then you can set preferences during this step as well. See Specifying Room Preferences/Requirements.

Add a Course Date in EMS Campus

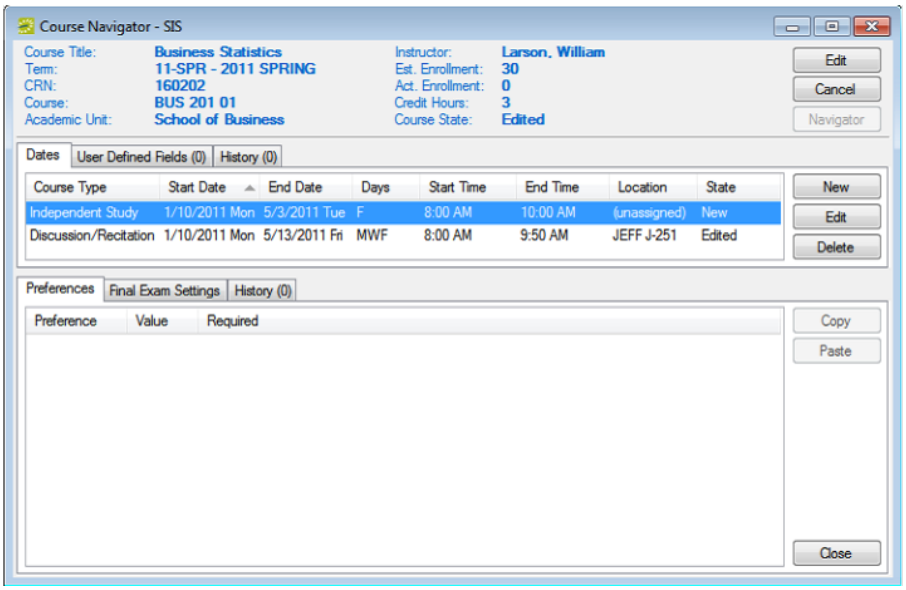
To add a new date to a course in EMS Academic Planning, you must find the course using the Academic Browser, and then edit the course date and other pertinent information in the Course Navigator.

1. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the course, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

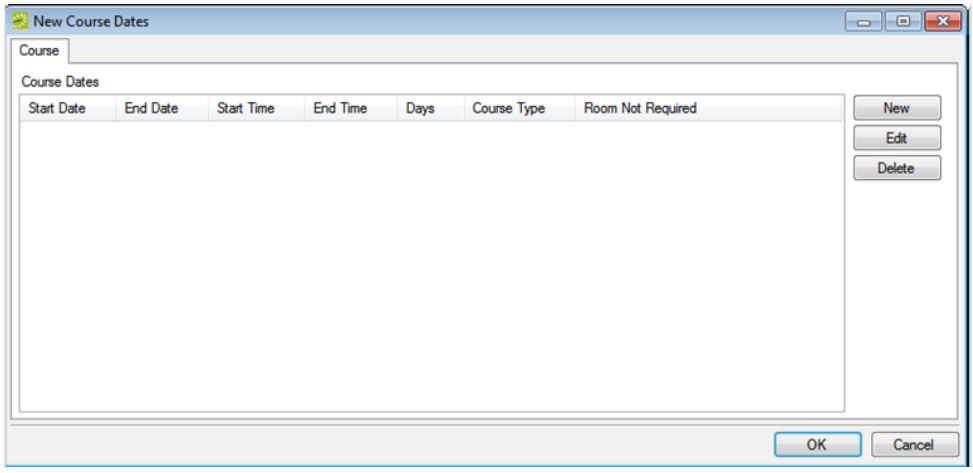
2. In the search results, double-click the course to which you are adding a course date. The course opens in the Course Navigator.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.

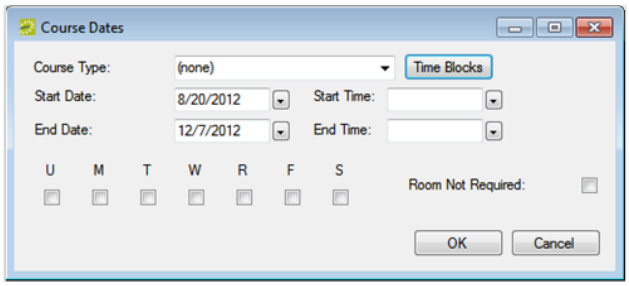


Course Navigator

3. Click **New**. The New Course Dates dialog box opens.



4. For each new course meeting pattern (days and times) that you are adding to the course, do the following:
   - On the New Course Dates dialog box, click **New** to open the Course Dates dialog box and on the Course Type drop-down list, select the course type.
   - Manually enter the meeting pattern information (start and end dates, start and end times, and meeting days) for the course.
   - Click Time Blocks to open the Time Blocks dialog box, and select a time block from a list of time blocks that have been made available for the term.



Course Dates Dialog Box

> **Note:**
> Make sure to select Room Not Required if the course does not require a room, for example, an independent study class, a research class, and so on.

Depending on how your EMS administrator has configured EMS Academic Planning, only the Time Blocks option might be available to you.

If you have selected Dual mode for the term, then you can set preferences during this step as well.
See Specifying Room Preferences/Requirements.

5. Click **OK** to close the Course Dates dialog box, and then click OK to close the New Course Dates dialog box and return to the Course Navigator. The state for each newly added course date is set to “New” in the middle pane of the Course Navigator.

CHAPTER 55: Edit or Cancel Courses

When you are defining and editing courses, you have the option of selecting Define and Edit mode, or Dual mode. Dual mode enables a term for both Define & Edit Mode and Set Preference mode at the same time. If you select Define and Edit mode, then the steps that you carry out during this mode are distinct and unique from the steps that you carry out in the next mode, which is the Set Preferences mode. Although these two modes are presented as distinct modes and discussed in two separate sections in this manual, if you select Dual mode, then the steps listed in both these sections are applicable at the same time.

After a term has been made available to the academic units, the academic units can begin reviewing their courses and requesting additions, deletions, and modifications as appropriate using the EMS Campus Planning Interface (typical) or the EMS Campus desktop client (if granted access).

This topic will give you information that will allow you to:

- Edit a Course in EMS Campus
- Edit a Course Date in EMS Campus
- Cancel a Course Date in EMS Campus
- Cancel a Course in EMS Campus

Edit a Course in EMS Campus

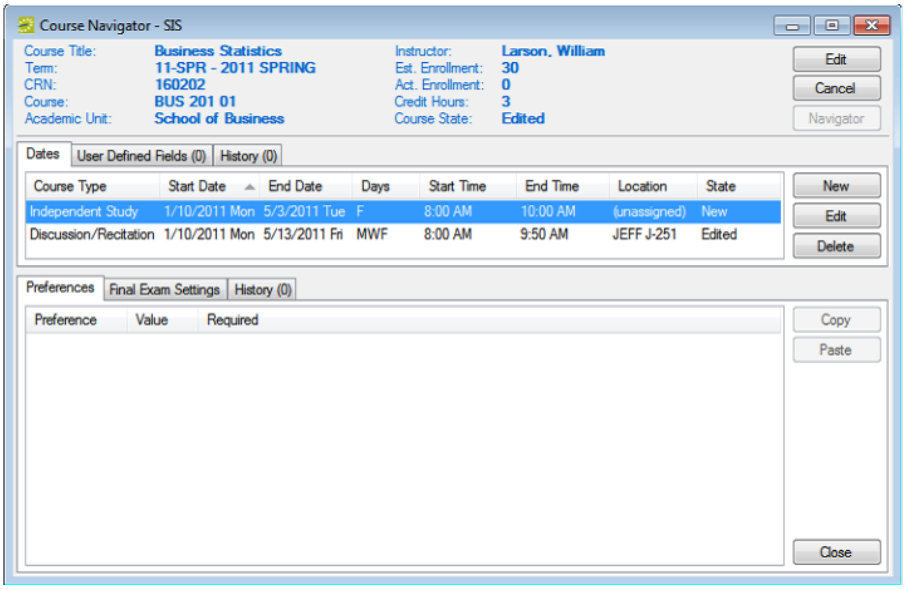
To edit a course in EMS Campus, you must find the course using the Academic Browser, and then edit the course information in the Course Navigator.

1. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the course, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

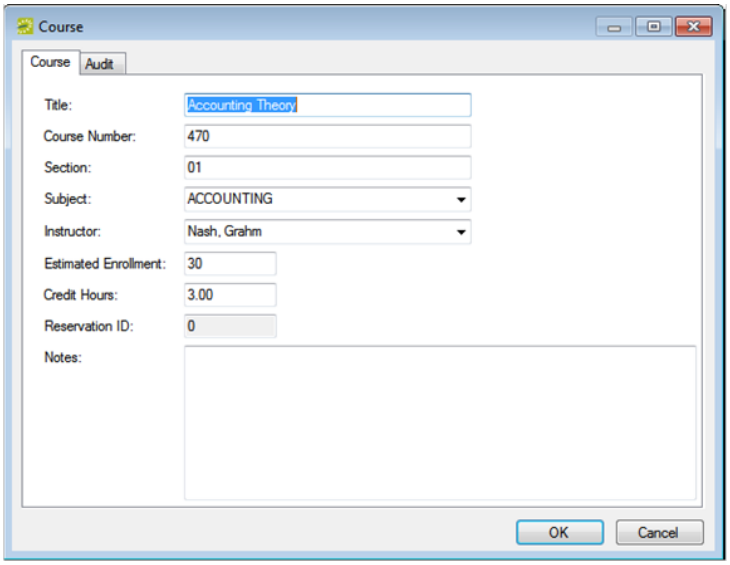
2. In the search results, double-click the course that you are editing. The course opens in the Course Navigator.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



Course opened in the Course Navigator

3. Click **Edit** in the top pane of the Navigator. The Course dialog box opens.



4. Edit the course information as needed, and then click OK to close the Course dialog box and return to the Course Navigator. The course state is set to “Edited” in the top pane of the Course Navigator.

Edit a Course Date in EMS Campus

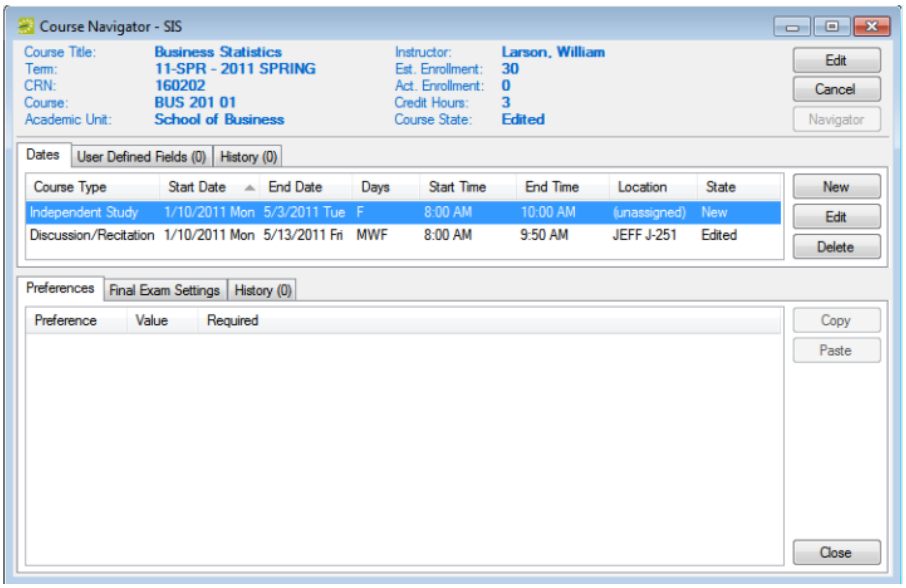
To edit a course date in EMS Campus, you must find the course using the Academic Browser, and then edit the course date in the Course Navigator.

1. Set any other criteria (academic unit, subject and so on) as needed to provide assistance in locating the course, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

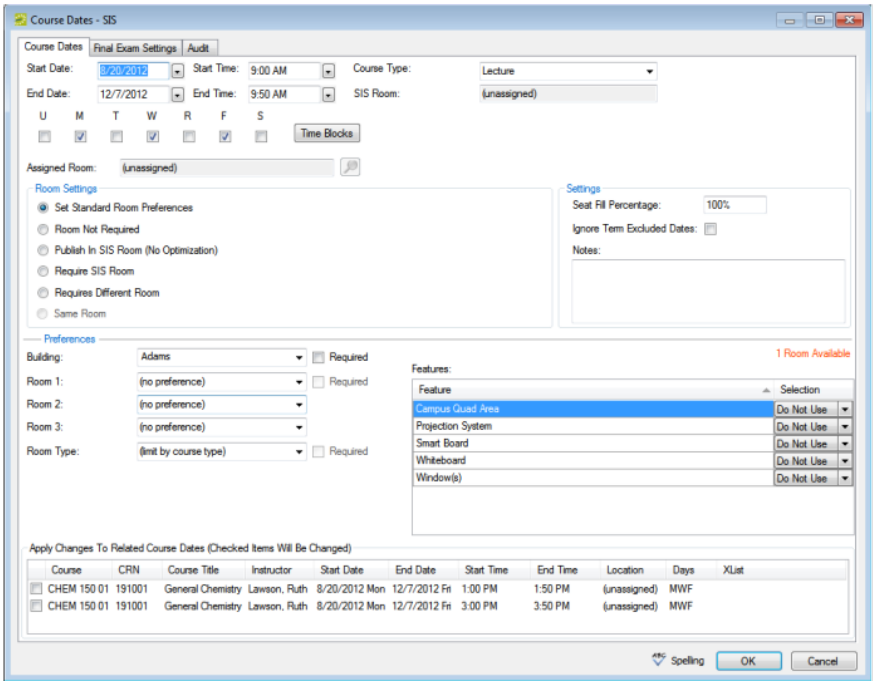
2. In the search results, double-click the course for which you are editing the course date. The course opens in the Course Navigator.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



Course opened in the Course Navigator

3. In the middle pane of the Course Navigator, select the course date record that you are editing, and then click Edit. The Course Dates - (SIS) dialog box opens.



4. Edit the course dates as needed.

- To edit the course dates, do one of the following:
- Manually edit the start/end dates, start/end times, course type, and/or the days that the course meets.

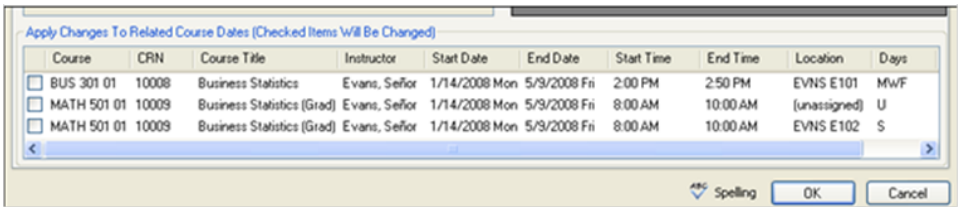
Note:

Depending on how your EMS administrator has configured EMS Campus, only the Time Blocks option might be available to you. (You cannot manually edit the course days and times.)

The Seat Fill Percentage is initially set to the default value that is specified in EMS (Campus) system parameters, but you can update the value on a per course date basis. See System Parameters in the EMS Desktop Client Configuration Guide.

- Click Time Blocks to open the Time Blocks dialog box, and select a time block from a list of time blocks that have been made available for the term.
- The room assigned to this course in the SIS is listed in the SIS Room text box. You cannot edit this value; however, make sure to select Room Not Required if this course date does not require a room (for example, independent study, research, and so on).
- The Seat Fill Percentage, in conjunction with the estimated enrollment, is used to determine the size of the room needed for the class. For example, a Seat Fill Percentage of 50% and an estimated enrollment of 100 means that the course should be held in a room that can accommodate 200 people.

- If you are editing a course date for a course that is cross-listed or sharing space with another course, you are provided with an option in the bottom pane of the Course Dates dialog box to apply your changes to the related course dates. To apply changes to the cross-listed courses, check the appropriate course date listings.



5. Click **OK** to close the Course dialog box and return to the Course Navigator. The course date state is set to "Edited" in the middle pane of the Course Navigator.

> **Note:**
> If you have selected Dual mode for the term, then you can set preferences during this step as well. See Specifying Room Preferences/Requirements.

Cancel a Course Date in EMS Campus

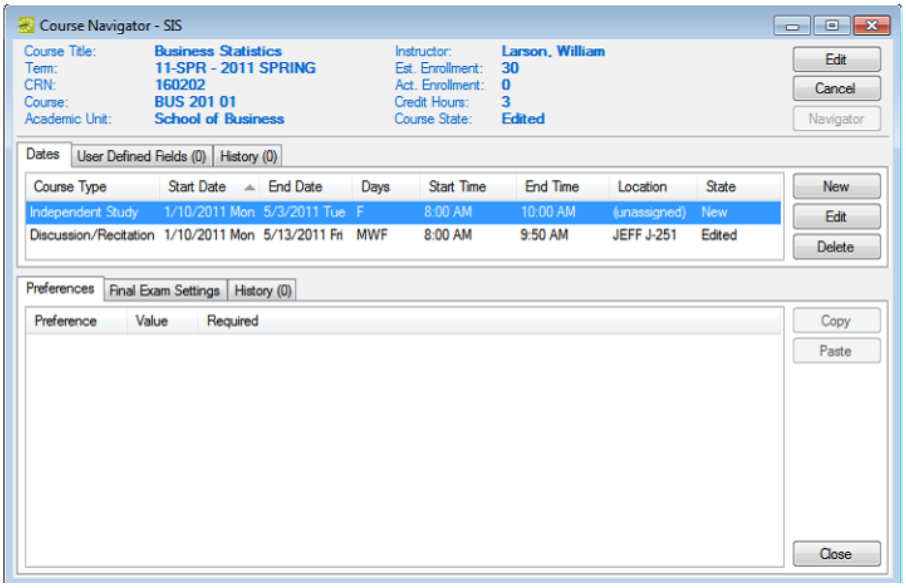
To cancel a course date in EMS Campus, you must find the course using the Academic Browser, and then cancel the course date in the Course Navigator.

1. Set any other criteria (academic unit, subject and so on) as needed to provide assistance in locating the course, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

2. In the search results, double-click the course for which you are canceling a course date. The course opens in the Course Navigator.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



3. In the middle pane of the Course Navigator, select the course date record that you are canceling, and then in the top pane of the Navigator, click Cancel. A dialog box opens, asking you if it is OK to cancel the selected course.
4. Click Yes to close the dialog box and return to the Course Navigator. The course date state is set to "Canceled" in the middle pane of the Course Navigator.

Note:

To reverse a course date cancellation, select the canceled course date in the Course Navigator, and then click **Uncancel**.

Cancel a Course in EMS Campus

To cancel a course in EMS Campus, you must find the course using the Academic Browser, and then cancel the course in the Course Navigator.

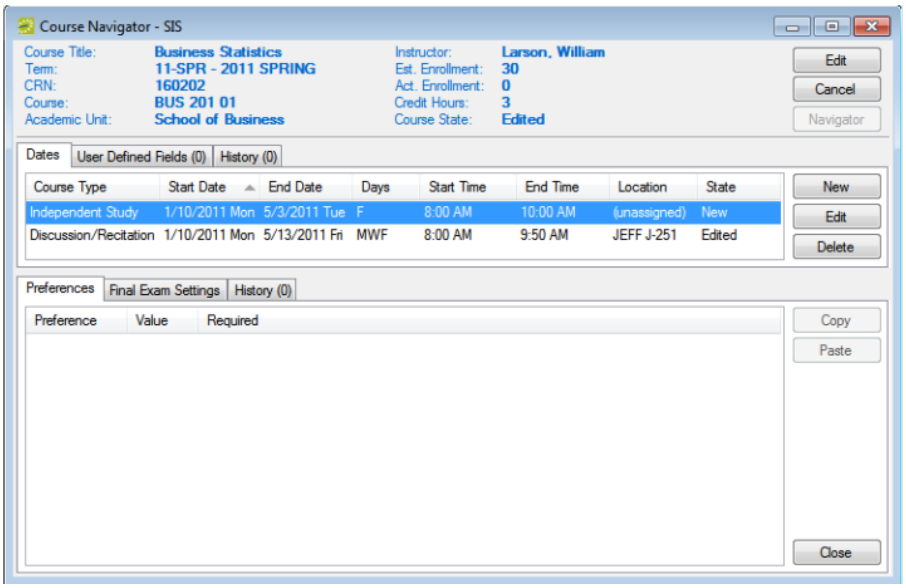
1. Set any other criteria (academic unit, subject and so on) as needed to provide assistance in locating the course, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

Note:

For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

2. In the search results, double-click the course that you are canceling. The course opens in the Course Navigator.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



3. In the top pane of the Navigator, click **Cancel**. A dialog box opens, asking you if it is OK to cancel the selected course.
4. Click **Yes** to close the dialog box and return to the Course Navigator. The course state is set to "Canceled" in the top pane of the Course Navigator. The state for every course date that is displayed in the middle pane of the Course Navigator is also set to "Canceled."

> **Note:**
> To reverse a course cancellation, open the canceled course in the Course Navigator, and then in the top pane of the Course Navigator, click **Uncancel**.

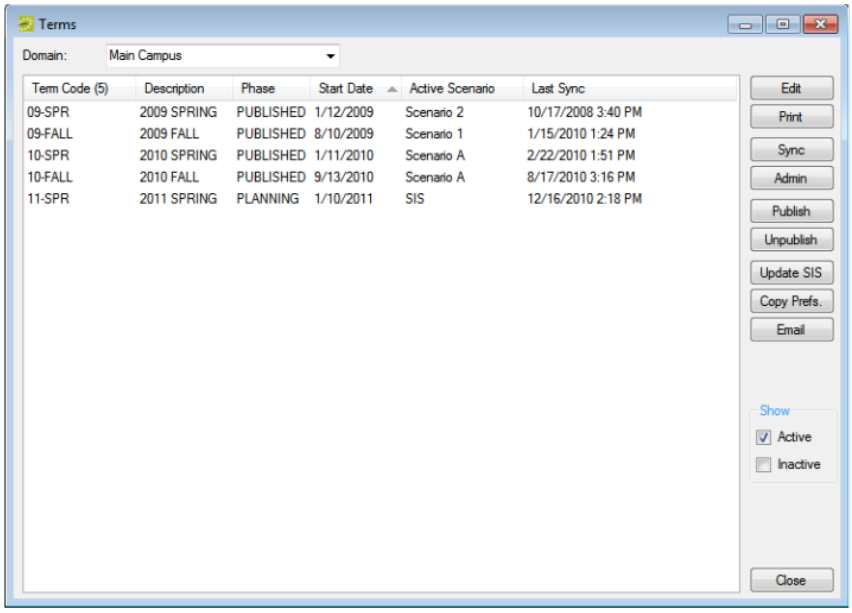
CHAPTER 56: Synchronize Courses

After you synchronize terms, the term record that is created in EMS is initially empty. You must then synchronize the courses.

To synchronize courses, complete these steps:

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**.

   The Terms window opens.



2. On the Domain drop-down list, select the domain for which you are synchronizing the term.

3. Select the term for which you are synchronizing the courses, and then click **Sync**.

   A Synchronizing Courses dialog box opens that shows the progress of the course synchronization. When the courses are synchronized, a dialog box opens with the message that the courses were synchronized.

4. Click **OK** to close the message and return to the Terms window.

Note:

After you synchronize the courses, you can review them in the Academic Browser.
See Searching with the Academic Browser.

CHAPTER 57: Identify New, Edited, or Canceled Courses

After the academic units have made their modifications to the course schedule, you must identify and compile a list of modifications and enter the approved changes in the Student Information System (SIS). EMS Academic Planning flags course changes using a field named Course State. New, edited, and canceled courses are marked as "New," "Edited," and "Canceled," respectively. Typically, you generate the Course Changes report to view and identify the requested course changes; however, if further clarification is needed, then you can use the Academic Browser and/or Course Navigator.

Note:

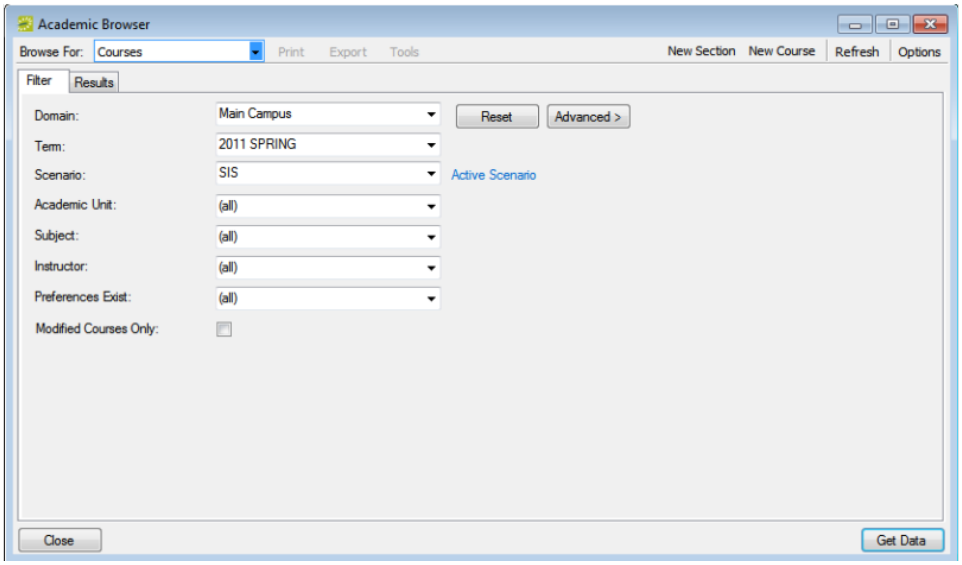
For detailed information about generating the Course Changes report, and the information that is contained in the report, see Generating Academic Reports.

Note:

Prior to reviewing the modifications, you can remove access to the term from your academic units. See Enable/Disable a Term for Set Preferences Mode.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.

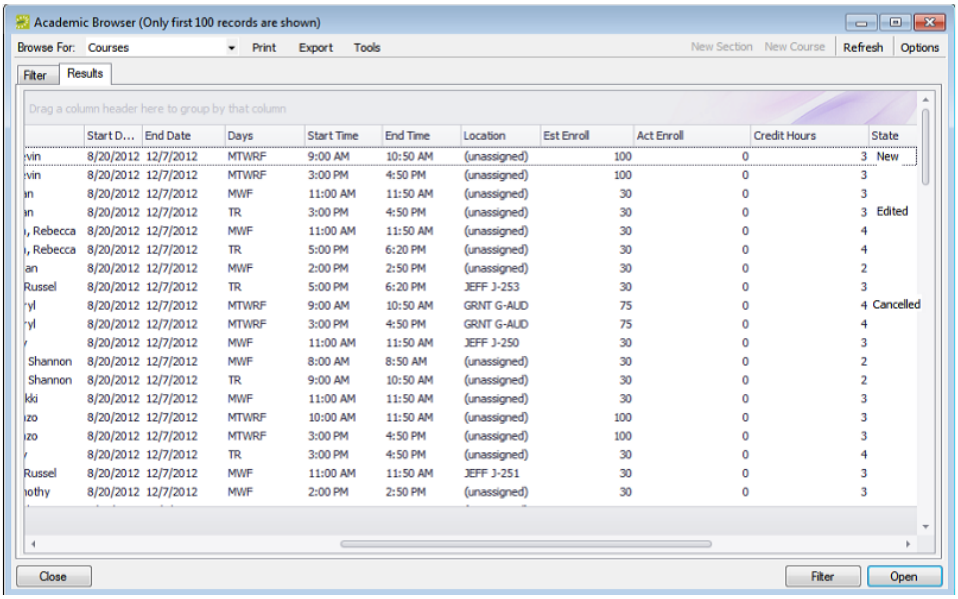
2. If needed, open the **Filter** tab.



3. On the Domain drop-down list, select the appropriate domain and on the Term drop-down list, select the appropriate term.

4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses that you are reviewing, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab. Use the information in the State column to identify the change made to each course that is listed.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.



Academic Browser search results with State column shown

5. Optionally, double-click a course to open the course in the Course Navigator and view more detailed information about the course. See Using the Course Navigator.

6. After generating the list of course modifications, you must manually enter the approved course changes in the SIS. After data entry is complete, the scheduler must carry out the Sync Courses process (see Synchronize Courses) to ensure that EMS Campus and the SIS are synchronized.

CHAPTER 58: Review and Verify Room Preferences

After room preferences and requirements are set, you can review the individual course preferences, verify that the preferences are complete, and quantify these preferences. You can also run the Course Preferences report and the Course Preferences Summary report to assist in this task.

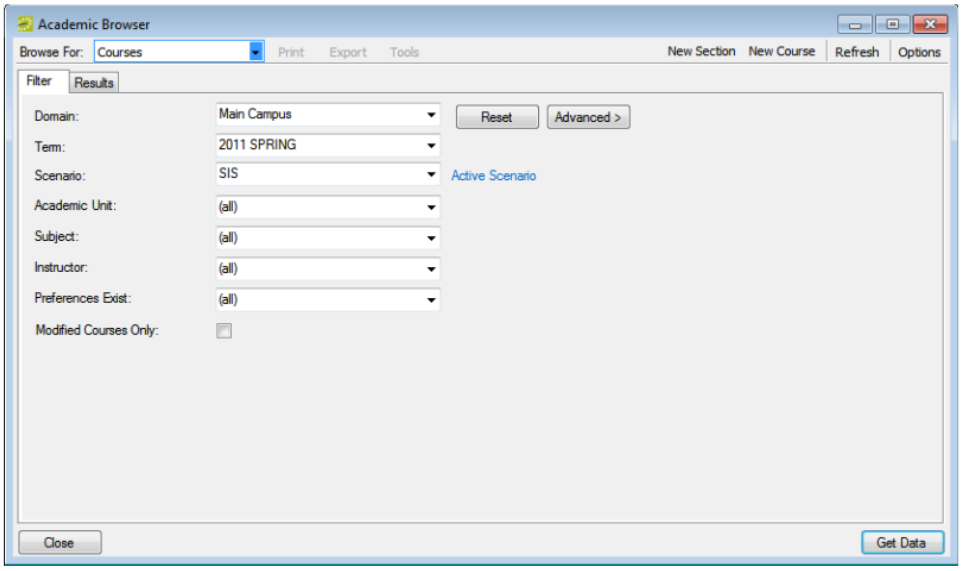
> **Note:**
> For detailed information about generating the Course Preferences and Course Preferences Summary reports and the information that is contained in each report, see Generate Academic Reports.

Prior to reviewing or reporting on preferences, you can make the term unavailable to the academic units. See Enable and Disable a Term for Set Preferences Mode.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**.

   The Academic Browser opens.

2. If needed, open the **Filter** tab.



3. On the Domain drop-down list, select the appropriate domain.

4. On the Term drop-down list, select the appropriate term.

5. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses for which you want to review preferences and requirements, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> To identify preferences and requirements for a Basic search, you should set **Preferences Exist** to **Yes**. For an Advanced search, you should select the Preferences Exist field (a Course Dates level field), and set the **Preferences Exist** filter to **Yes**. For detailed information about searching with the Academic Browser, see Search with the Academic Browser.

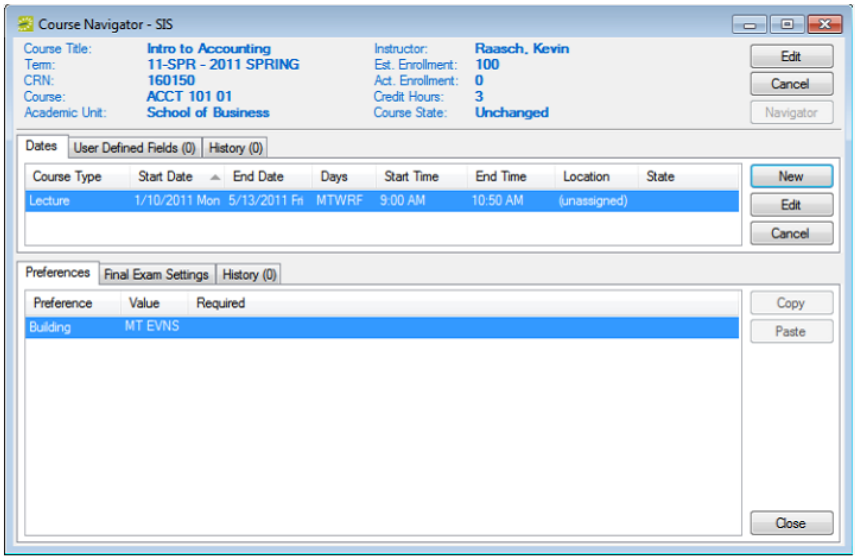
5. In the search results, double-click the course for which you are reviewing the preferences/requirements.

   The course opens in the Course Navigator.

6. In the middle pane of the Course Navigator, select the course date for which you are reviewing the preferences.

   The preferences for the selected course date are displayed in the bottom pane of the Course Navigator on the **Preferences** tab.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



CHAPTER 59: Specify Room Preferences/Requirements

Set Preferences is an optional mode in which the Domain Scheduler can solicit preferences from academic units about the type of rooms that would be suitable for each course that they teach. These preferences can then be used to run an optimization, or to have EMS automate room scheduling based on preferences and additional user-specified criteria. To enable and use Set Preferences Mode, the following steps are carried out:

1. The Domain Scheduler enables Set Preferences mode. See Enable/Disable a Term for Set Preferences Mode.
2. The academic units review courses and specify their room preferences and requirements using the EMS Campus Planning Interface (typical) or the EMS Campus desktop client (if granted access).
3. The Domain Scheduler verifies and reviews the room preferences and requirements that the academic units have specified. See Review and Verify Room Preferences.

After you place the term in Set Preferences mode, three options that can be used in conjunction with each other are available for completing the preferences and requirements phase. In addition, you can complete the phase independently, or you can solicit input from the academic units.

This topic will provide information that will allow you to:

- Use the Manage Terms Copy Preferences Tool—You can use the Manage Terms Copy Preferences tool to copy the preferences and requirements from a previous term.
- Use the Academic Browser Set Course Preferences Tool—You can use the Academic Browser Set Course Preferences tool to set preferences and requirements for multiple courses in a single step.
- Use the Course Navigator to Set Preferences and Requirements—You can use the use the Course Navigator to set preferences and requirements on a course by course basis.



Note:

If a course must take place in a specific room that you plan to exclude from optimization, you can pre-assign it to a specific room. This process is outlined during the Scenario phase. See Create Scenarios.

For any of these methods, the following caveats apply:

- An academic unit-level user can request any building, area, or view and up to three rooms that have been defined for the domain with which it is associated.

Note:

If needed, you can set the Lock Academic Unit Room Access system parameter to limit the users to their specific academic units. See System Parameters in the EMS Desktop Client Configuration Guide.

- An academic unit can require only those buildings and rooms that have been assigned to its unit within the Academic Planning > Configuration > Academic Units area of EMS Academic Planning. If the academic units specify requirements, then only a single room can be specified.
- Room types can be requested or required for all courses. By default the "limit by course type" selection is designated, but you can change it to honor a specific room type.

Note:

Configuration of the Course Types/RoomTypes matches is carried out in the Academic Planning > Configuration > Match Course Types/Room Types area of EMS Academic Planning. See the EMS Desktop Client Configuration Guide for detailed information.

- You can set features to **Preferred** or **Required**. The # of Rooms Available label that is displayed above the Features pane is dynamically updated based on the building, room type, and features selected.
- The Seat Fill Percentage, in conjunction with the estimated enrollment, is used to determine the size of the room needed for the class. For example, a Seat Fill Percentage of 50% and an estimated enrollment of 100 means that the course should be held in a room that can accommodate 200 people.

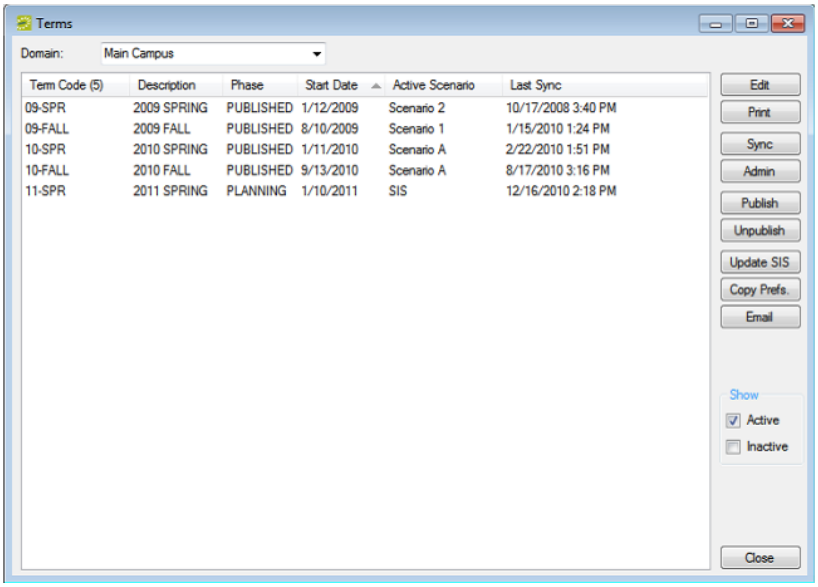
Note:

The Seat Fill Percentage is initially set to the default value that is specified in EMS (Campus) system parameters, but you can update the value on a per course date basis. See the EMS Desktop Client Configuration Guide.

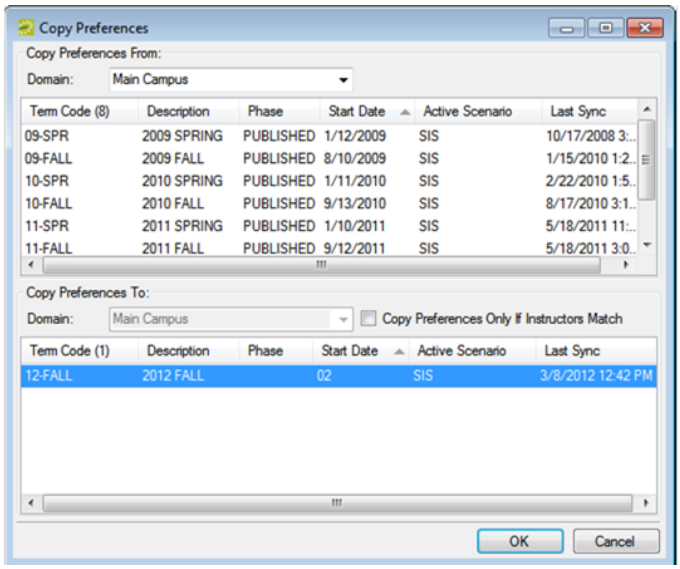
- Ignore Term Excluded Dates schedules bookings on all dates that adhere to the meeting pattern, regardless of the Excluded Dates that are marked on the term when the course dates are published.
- Publish In SIS Room (No Optimization) allows the course dates to avoid the optimization process. Bookings are published in the room that was carried over from the SIS.
- Require SIS Room flags buildings/rooms that come across from the SIS as Required. Courses with requirements still go through the optimization process.
- Requires Different Room (For Courses That Share Space) identifies a meeting pattern that should be in its own room despite the cross-listed or shared space status. You can set preferences for this room.
- Same Room (ALL Selected Course Dates are to be in the same Room) flags courses that should be in the same room but at different times when optimized.

Use the Manage Terms Copy Preferences Tool

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**. The Terms window opens.



2. Click **Copy Prefs**. The Copy Preferences dialog box opens.



3. In the Copy Preferences From pane, select the domain and term from which you want to copy room preferences and requirements.

4. In the Copy Preferences To pane, do the following:
   - Select the domain and term to which you want to copy your room preferences and requirements.

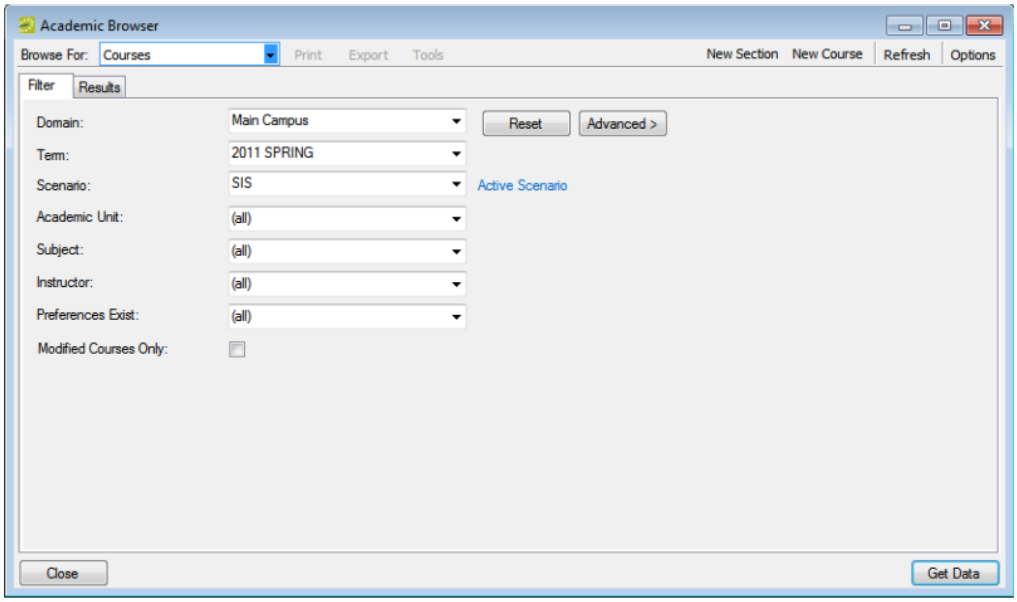
     Note:
     A term can be displayed in the To pane only if it is in Set Preferences mode.

   - Indicate if the preferences are to be copied only if the instructors match.
5. Click **OK**. A message opens, informing you that copying preferences will overwrite any existing preferences, and asking you if it is OK to continue.
6. Click **Yes**. The message closes. After the preferences are copied, you return to the Terms window.

Note:
Preferences are copied based on the Course Section (Math 101 01) and Course Type information (lecture or lab). If you have added new sections or changed course type designations on course dates within a section, then even after you complete this procedure, some courses still will not have preferences. Be sure to review your list of courses and set preferences where applicable.

Use the Academic Browser Set Course Preferences Tool

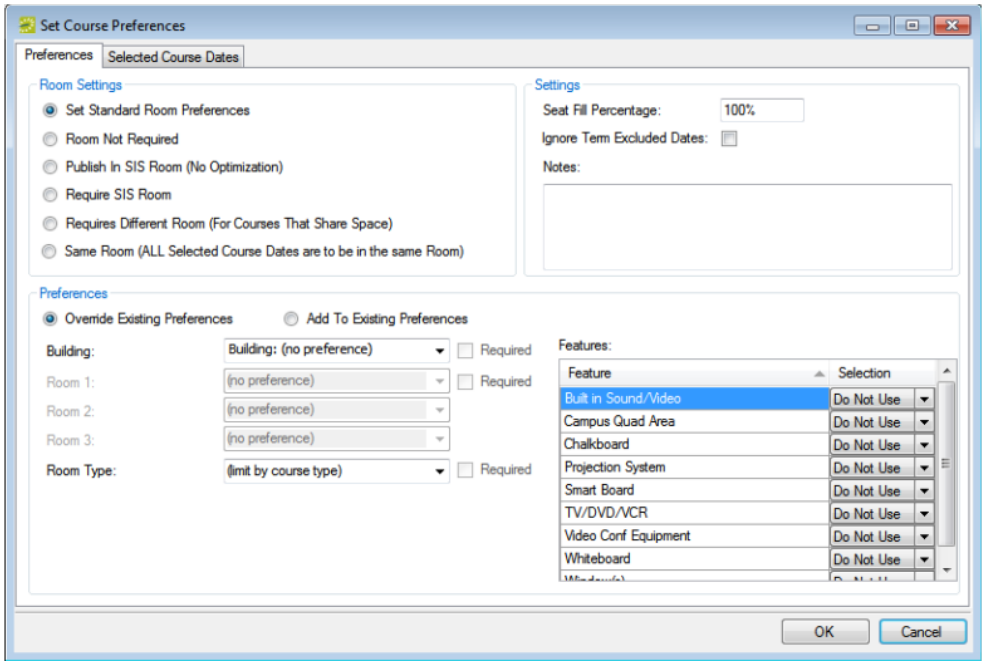
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the Filter tab.



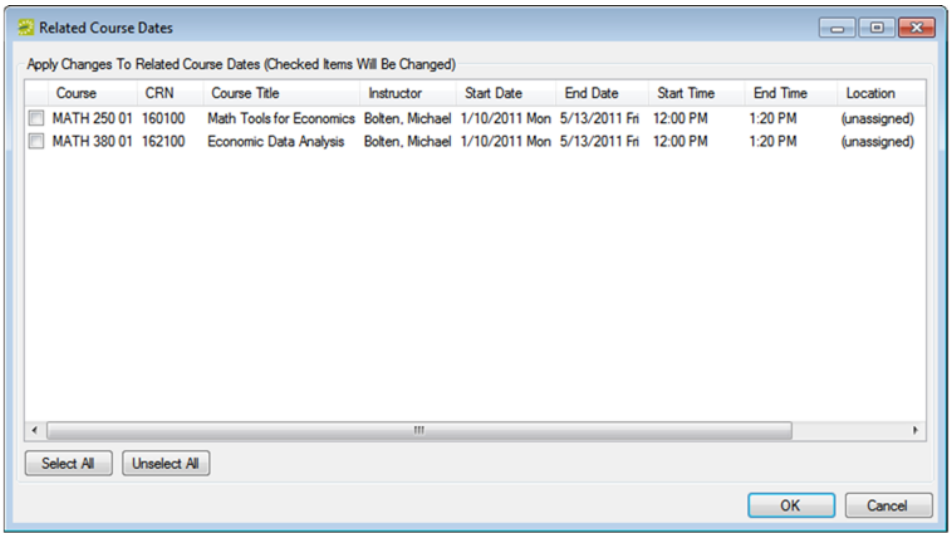
3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject and so on) as needed to provide assistance in locating the courses for which you want to set preferences and requirements, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

5. CTRL-click to select the courses for which you are setting the room preferences and requirements.
6. On the Tools menu, click **Set Course Preferences**. The Set Course Preferences dialog box opens.



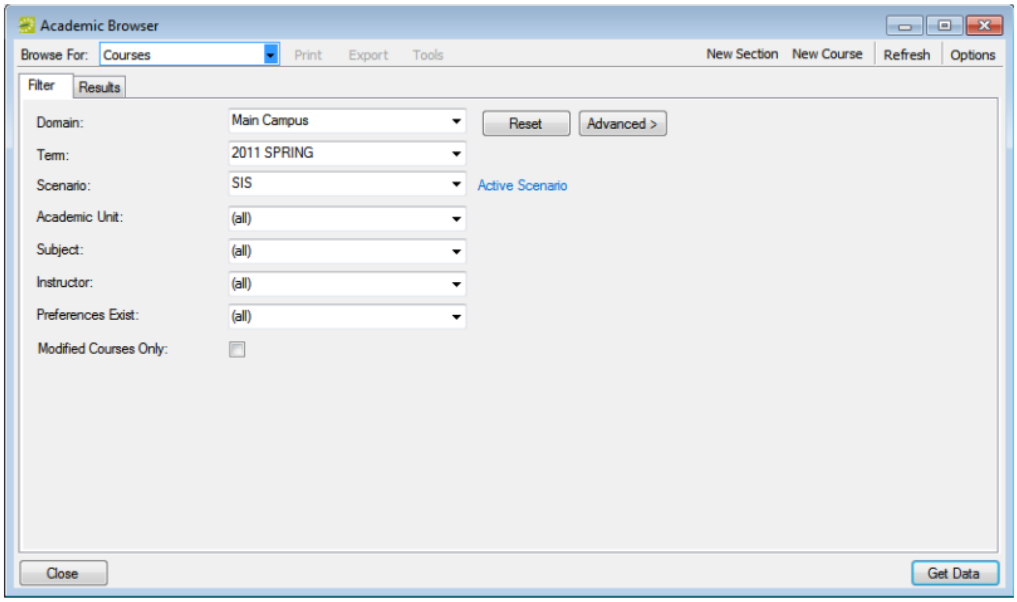
7. Indicate whether the preferences that you set are to override any existing preferences, or whether they are to be added to existing preferences.
8. Set your preferences for the selected courses.
9. Optionally, do one or both of the following:
   - In the Notes field, enter any pertinent or supporting information that substantiates or explains your preferences.
   - By default, the preferences/requirements that you specify are applied to all course dates for all selected courses. If the preferences/requirements are applicable for only specific course dates, open the Selected Course Dates tab, select the course dates for which these preferences/requirements are not applicable and then click Remove.
10. Click OK. Two results are possible:
    - If any of the selected courses are cross-listed and/or share space, and you did not select the corresponding cross-listed/shared space courses, then a Related Course Dates dialog box opens. This dialog box lists all the related courses that have not been selected. Go to Step 11.
    - If none of the selected courses are cross-listed and/or share space, then a message opens indicating whether the selected preferences will override any existing preferences, or be added to existing preferences and asking you if it is OK to continue.



11. Optionally, select any or all of the related courses for which you want to set the same preferences/requirements, or do not select any of these related courses, and then click OK. A message opens indicating whether the selected preferences will override any existing preferences, or be added to existing preferences and asking you if it is OK to continue.
12. Click **Yes**. The message closes and another message opens indicating that the preferences were set successfully.
13. Click **OK** to close the second message and return to the Academic Browser.

Use the Course Navigator to Set Preferences and Requirements

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the Filter tab.

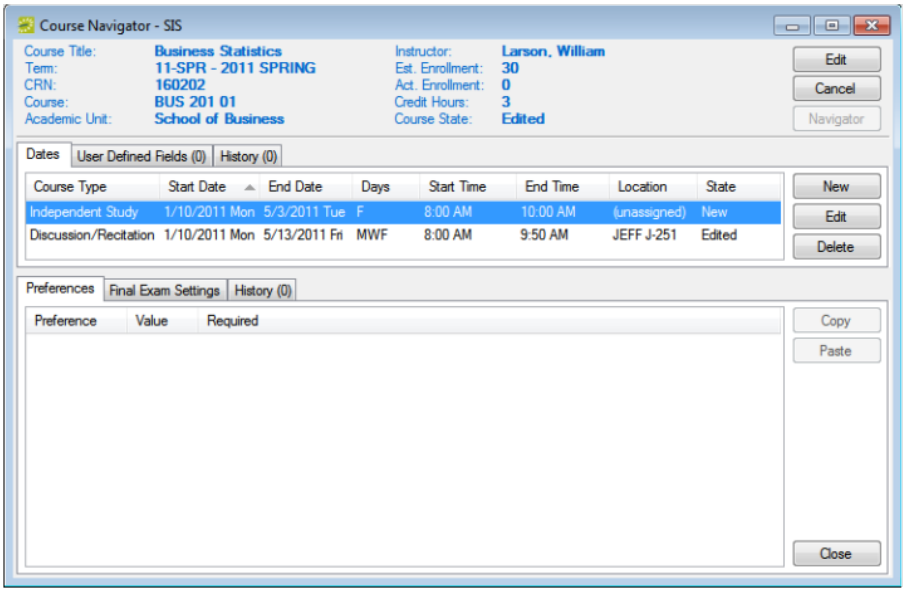


3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses for which you want to set preferences and requirements, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

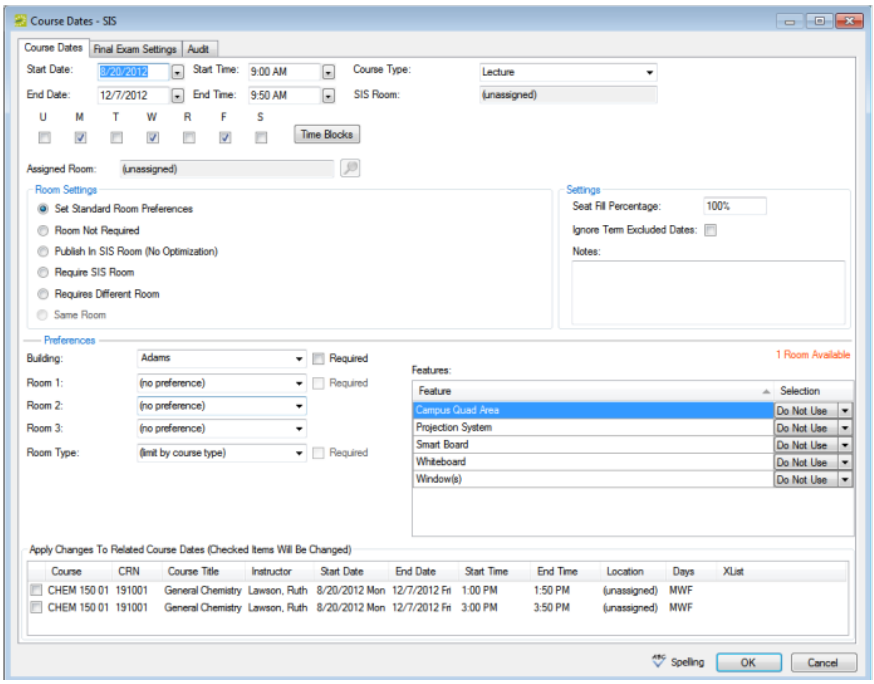
> **Note:**
> For detailed information about searching with the Academic Browser, see Search with the Academic Browser.

5. In the search results, double-click the course for which you are setting the preferences/requirements. The course opens in the Course Navigator.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.



6. In the middle pane of the Navigator, select the specific course date for which you are setting preferences/requirements, and then click **Edit**. The Course Dates dialog box opens.



7. Set the preferences/requirements for the course as needed, and then click **OK**. The Course Dates dialog box closes and you return to the Course Navigator. The preferences/requirements that you set for the course date are displayed on the Preferences tab in the lower pane of the Navigator.

CHAPTER 60: Overview of Room Assignments and Optimization

After the Domain Scheduler reviews and verifies the room preferences and requirements, room assignments must take place. If the room assignment process has already occurred outside of EMS within the SIS, the Domain Scheduler could simply publish the course schedule in EMS without any further effort. In most situations, however, courses will need to be assigned a room through the optimization process before the term can be published. To optimize the room assignments, and then assign rooms, the Domain Scheduler carries out the following steps either separately or in any combination as necessary to best suit their working needs:

1. **Pre-assignment**—The Domain Scheduler manually assigns a selection of courses to rooms. Typically, the manual assignment takes place if these rooms are to be excluded in an optimization scenario after pre-assignment. For instance, if only a swimming course should be assigned to "Pool," then the Domain Scheduler could manually pre-assign Swimming and then exclude the pool in the optimization scenario. See About Creating Scenarios and Optimization and Create Scenarios.
2. **Optimization**—The EMS system automatically assigns rooms to courses based on room preferences, requirements, and weighted criteria. See About Creating Scenarios and Optimization and Create Scenarios.
3. **Locking In Assignments**—After carrying out an optimization scenario, the Domain Scheduler locks in desired room assignments, and then re-optimizes the remaining portion of the optimization scenario. See Assign Rooms.



Note:

The information in this section is presented as an ordered series of standalone procedures; however, the Domain Scheduler can carry out any of the procedures either separately or in any combination as necessary to best suit his/her working needs. This allows the Domain Scheduler to test a number of potential scenarios and compare placement results using various tools before choosing the final scenario for publishing.

CHAPTER 61: Assign Rooms

After you have completed pre-assignment of rooms and/or room optimization, four options are available to resolve room assignments:

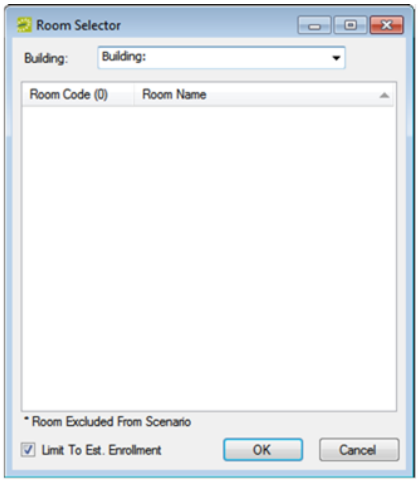
1. **Assign**—the Assign option lists all rooms regardless of availability or preferences. It is intended to provide a means for you to quickly assign a room without going through the search process.
2. **Search**—the Search option initially lists any preferences and requirements that were specified during the Set Preferences mode. You can use these preferences as a basis for a room search or you can specify and/or clear other criteria to complete the room search.
3. **Unassign**—the Unassign option removes the Assigned status for a course. You can then use the Assign option or the Search option to assign a different room to the course. The Unassign option is available after you assign a room to a course, or search for a room, and then assign it to a course.
4. **Swap**—the Swap option allows you to swap the room assignments of two courses. The swap option is only available after selecting two courses that have identical meeting patterns and that have been assigned to rooms.

This topic will provide information that will allow you to:

- Assign Rooms to Courses
- Search for Rooms to Assign to a Course

Assign Rooms to Courses

1. Select the course, or CTRL-click to select the multiple courses to which a room is to be assigned.
2. On the Preassign Rooms window, or the Resolve Room Assignments window, click Assign. The Room Selector dialog box opens.



Room Selector Dialog Box

3. On the Building drop-down list, select (all) buildings or select a specific building that contains the rooms that you are considering for assignment. The rooms are displayed in the dialog box. By default, only those rooms that can meet the enrollment expectations, regardless of availability are displayed. Rooms that are excluded from the scenario are marked with an asterisk (*), but you can override these rooms.
4. Optionally, to display all rooms in the Room Selector dialog box, clear the Limit to Est. Enrollment option.
5. Select a room, and then click OK. If the room could not be assigned to one or more courses because of a conflict, then a message opens indicating this. Click OK to close the message, and repeat this step until you successfully assign a room to the courses.
6. Repeat Step 2 through Step 5 until you have successfully assigned rooms to all courses for the term. After you have assigned a room to a course, at any time, you can do any of the following:
    - To change a room assignment for a course, select a course for which a room has been assigned, and then click Unassign. You can then repeat Step 2 through Step 5 to assign a room to the course.
    - Courses that were pre-assigned are listed as Locked In. To re-optimize any portion of the course assignments, select one or more assigned courses (CTRL-click to select multiple courses), and then click Lock In to lock in these additional courses, and then rerun your optimization scenario.
    - To swap the room assignments of two courses, CTRL-click to select two courses with identical meeting patterns, and then click Swap.

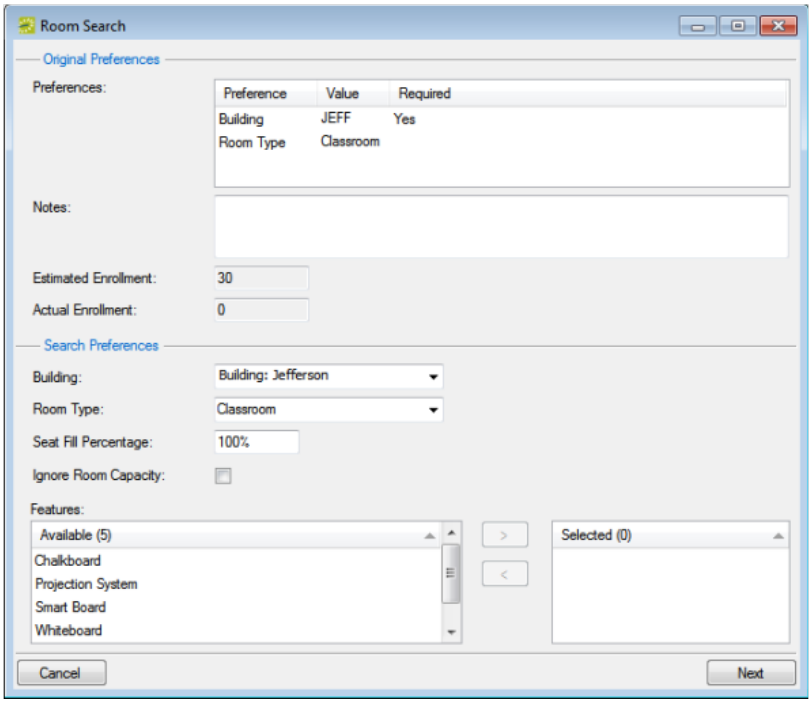


Note:

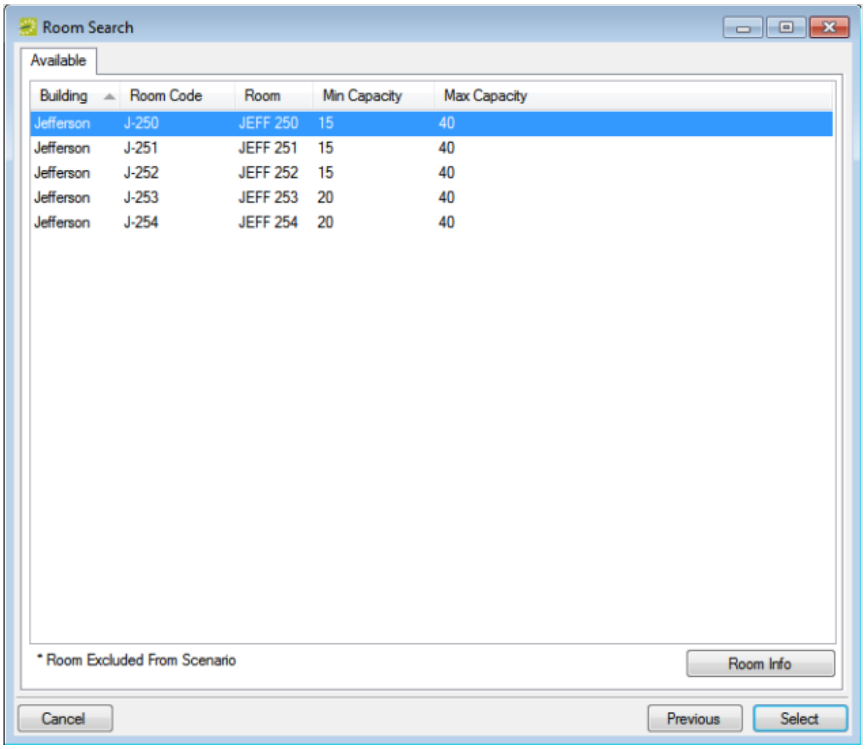
You can open the Resolve Room Assignments window at any time by clicking Resolve on the Scenarios window. The system does not require all courses to be assigned to rooms. Those courses that are left unassigned are placed in a special TBD room when publishing and can be assigned post-publish.

Search for Rooms to Assign to a Course

1. Select the course to which a room is to be assigned.
2. On the Pre-assign Rooms window, or the Resolve Room Assignments window, click Search. The Room Search dialog box opens. The preferences or requirements that the academic unit specified for the selected course during the Set Preferences mode are displayed at the top of the dialog box. By default, these preferences are included in the search criteria.



3. In the Search Preferences (lower) pane of the dialog box, edit the search criteria as needed, and then click Next. The Room Search dialog box is updated with a list of rooms that meet your search criteria. Rooms that have been excluded from the scenario are marked with an asterisk (*).



Room Search Dialog Box

4. Optionally, to view information about a room, select the room, and then click Room Info; otherwise, go to Step 5. The Room Info dialog box opens. The dialog box displays information about the room, including the room's properties, the setup type, the room's features, and so on. After you are done viewing the room's information, click Close to close the Room Info dialog box.
5. On the Room Search dialog box, select the room that is to be assigned to the course, and then click Select. The room is assigned to the course. You remain on the Pre-assignment window or the Resolve Assignments window. If the room is assigned from the Preassigned window, then it is also marked as Locked In.

Note:
If there are rooms that meet your search criteria, but they have already been scheduled by other courses, then a Conflicts tab opens. Open the tab to review a list of these rooms.

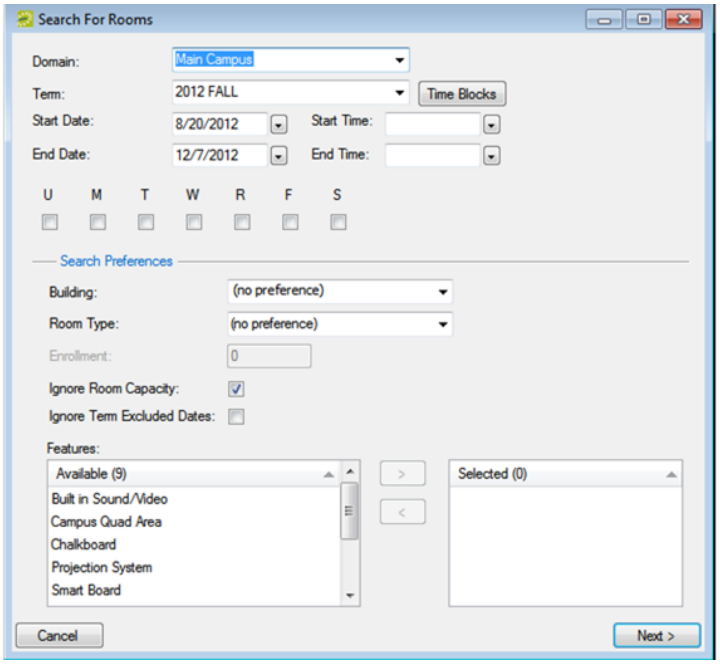
6. Repeat this procedure as needed to assign rooms to courses. After you have assigned a room to a course, at any time, you can do one or both of the following:
   - If you want to change a room assignment for a course, select a course for which a room has been assigned, and then click Unassign. You can then repeat Step 2 through Step 5 to assign a room to the course.
   - Courses that were pre-assigned are listed as Locked In. If you would like to re-optimize any portion of the course assignments, select one or more assigned courses (CTRL-click to select multiple courses), and then click Lock In to lock in these additional courses, and then rerun your optimization scenario.
   - To swap the room assignments of two courses, CTRL-click to select two courses with identical meeting patterns, and then click **Swap**.

Note:
You can open the Resolve Room Assignments window at any time by clicking Resolve on the Scenarios window. The system does not require all courses to be assigned to rooms. Those courses that are left unassigned are placed in a special TBD room when publishing and can be assigned post-publish.

CHAPTER 62: Using the Search for Rooms Tool

After you publish a term, there are times when you need to identify which rooms are available for a particular meeting pattern and set of criteria. For example, an academic unit might need to add a new section for a course or an instructor might be looking to change the times for a course. The Search for Rooms tool significantly simplifies the process of searching for classrooms in these situations.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Search For Rooms**. The Search For Rooms dialog box opens.

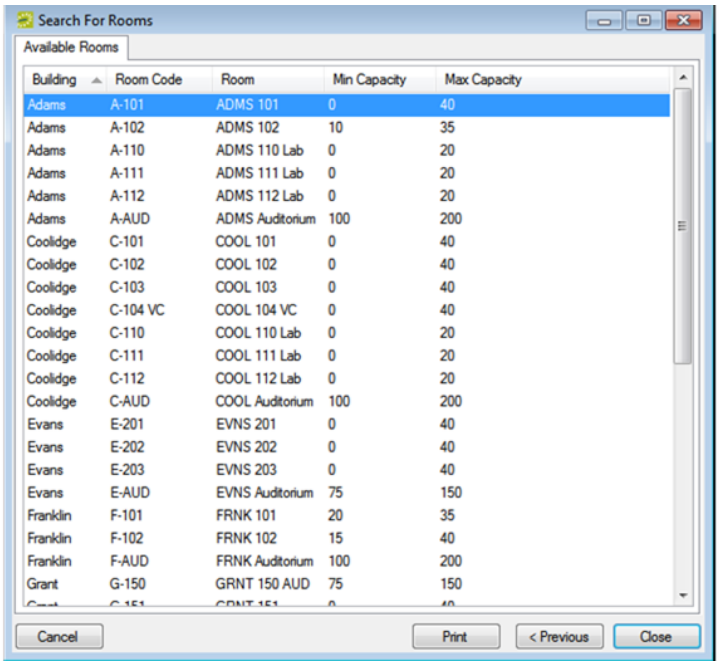


2. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
3. Do one of the following:
   - Manually enter the meeting pattern information (start and end dates, start and end times, and meeting days) for the course.
   - Click Time Blocks to open the Time Blocks dialog box, and then select a time block from a list of time blocks that have been made available for the term.
4. Enter your search criteria.

Option	Description
Building	The default value is (no preference). You can select a specific building, area, or view.

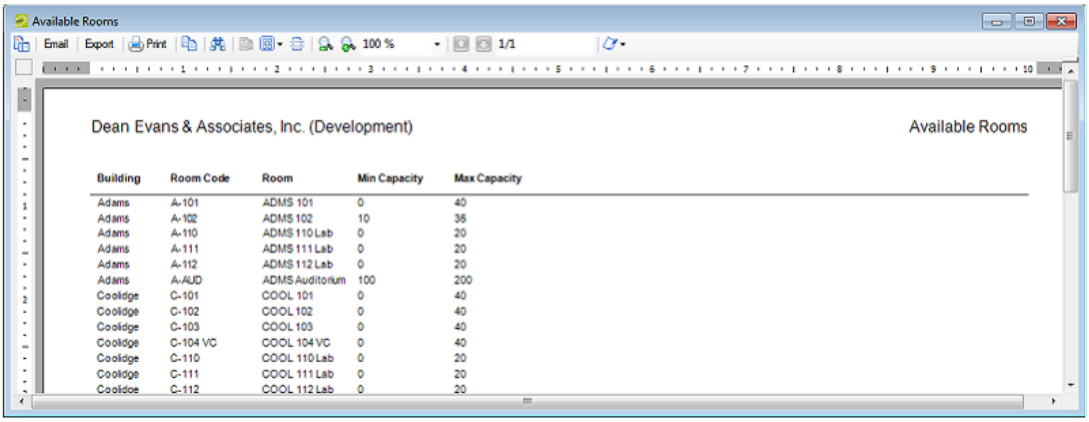
Option	Description
Room Type	The default value is (no preference), but you can select from a list of pre-configured types.
Enrollment Ignore Room Capacity	Available only if Ignore Room Capacity is not selected. You can enter a specific room capacity by which to search.
Ignore Term Excluded Dates	Not selected by default. Select this option to search for rooms that are available even on dates that have been marked as “Excluded” for the term.

5. In the Available list, select the feature, or CTRL-click to select the multiple features that the rooms are to have, and then click the Move button (>) to move the selected features to the Selected list.
6. Click Next. The Search for Rooms dialog box opens with up to three tabs displayed:
   - Available Rooms tab. By default, the Available tab is always displayed and it is always the active tab.This tab displays all the rooms that meet all your search criteria.
   - Academic Conflicts tab. The Academic Conflicts tab is displayed only if there are rooms that meet all your search criteria but they are in academic conflict (a course has already been scheduled in a room for the selected day and time pattern). Optionally, you can open the Academic Conflicts tab to view the list of rooms that are in academic conflict.
   - Event Conflicts tab. The Event Conflicts tab is displayed only if there are rooms that meet all your search criteria but they are in event conflict (a non-academic event has already been scheduled in a room for the selected day and time pattern). Optionally, you can open the Event Conflicts tab to view the list of rooms that are in event conflict.



Search For Rooms dialog box, Available tab

7. Optionally, you can do one or more or all of the following on this tab:
   - Use the Scroll feature to scroll the list of available rooms, and then click Close to close the dialog box.
   - Click Previous to return to the Search For Rooms dialog box, modify your search criteria, and repeat the search.
   - Click Print to open an onscreen preview of the list of available rooms. The preview window contains options for printing a hard copy of the room list, emailing the list, and so on.



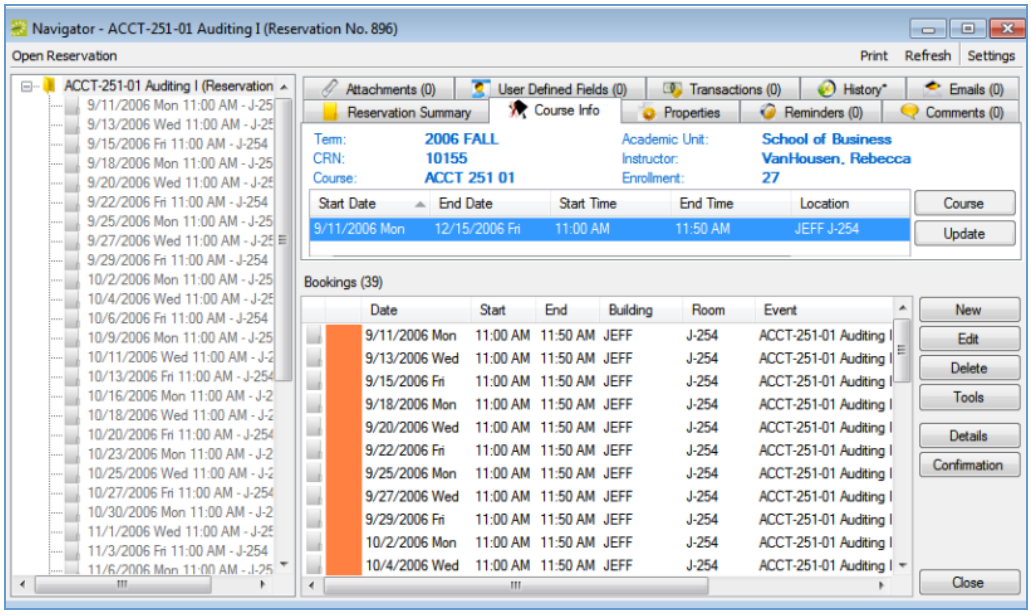
CHAPTER 63: Review Reservations and Resolve Room Assignments

After a course has been published, you can use the EMS Navigator (referred to simply as the Navigator) or the Reservation Book (referred to simply as the Book) to manage it just like any other EMS reservation and/or booking. The Course Info tab on the Navigator displays the course and the course date records for the course as it exists in your SIS. If you open a course in the Navigator that is cross-listed or shares space with another course, the Navigator displays both sets of reservations and bookings. You can review the reservations that have been made for a course and if needed, change the course room (location) for one or more of its bookings. If courses have an identical meeting pattern, you can also swap rooms (locations) between courses.

> **Note:**
> If you select a course date record, on the Course Info tab, and then click Course, the course opens in the Course Navigator.

This topic will provide information that will allow you to:

- Change the Course Rooms (Locations) for One or More Bookings
- Swap Rooms Between Courses



Course Navigator

> **Note:**
> After a term has been published, you can continue using the Academic Browser, the Academic Book and/or the Course Navigator to locate courses; however, for automation reasons, after a term is published, you should make room changes in EMS Academic Planning and not in your SIS.

In a typical process, you would want to locate and review the following types of courses immediately after publishing:

- **Courses in conflict**—Use the Browser to search for bookings in the academic conflict status that you designated, for example, Academic Conflict (see Search with the Browser). You can change the location to resolve the conflict (see Change the course rooms (locations) for one or more bookings), or if the conflict was intentional, you can change the status to the academic share status that you designated, for example, Academic Shared (see Edit a Booking in the Navigator).

  > **Note:**
  > When you manually update the status to Shared, the courses are not linked in the same way as when marking them as Shared Space prior to publishing; however, manually updating the status does not result in these course being "cleared" from your Conflict list.

- **Courses or events that were overridden by publishing**—Use the Browser to search for bookings in the status that you designated for override bookings, for example, Academic Bumped. (See Search with the Browser.) You might want to move these bookings to another location.

- **Courses that were left unassigned**—Use the Browser to search for bookings in the TBD room (See Search with the Browser.) You might want to move these courses to an actual room.

> **Note:**
> You can also use the Advanced search features in the Academic Browser to locate and review the three types of courses that are listed above after publishing. See Search with the Academic Browser.

Change the Course Rooms (Locations) for One or More Bookings

1. Open the course reservation in the Navigator.
2. Do one of the following:

- To update a course location for a **single** booking, see Edit a Booking in the Navigator.
- To update course locations for **multiple** bookings, see .

> **Note:**
> The course location in the SIS does not update automatically unless all bookings that are specific to a meeting pattern within a reservation are changed to an identical alternate location. If for some reason, you want to manually update the SIS with a new location that was not assigned to all bookings, select the course date record on the Navigator Course Info tab, and then click the **Update** button.

Swap Rooms Between Courses

If courses have an identical meeting pattern, you can also swap rooms between courses.

1. Open the Reservation Book. See View and Edit Reservations in the Reservation Book.
2. In the Reservation Book, locate your course bookings.
3. Right-click one of the two bookings that you want to swap, and on the context menu that opens, click **Swap Rooms With Another Course**.
4. Select the second of your two bookings. A message opens asking you if you are sure that you want to swap rooms for the two courses.
5. Click **Yes**. The message closes. After the locations are swapped, the Reservation Book is updated to reflect the swap.

CHAPTER 64: Work with Shared Space

The shared space designation is used for two or more courses that are not cross-listed in the SIS, but that have matching patterns and are meant to be held in the same room. The shared space designation links the courses together for the set preferences, optimization, publishing, and final exam scheduling functions. Shared space is assigned in a parent-child relationship. If needed, you can change the parent designation. In addition, if a course that is cross-listed in the SIS is not meant to be held in the same room, or if courses that are marked as shared space are no longer meant to share space, then you can reverse the shared space designation. You can also review shared spaced designations.

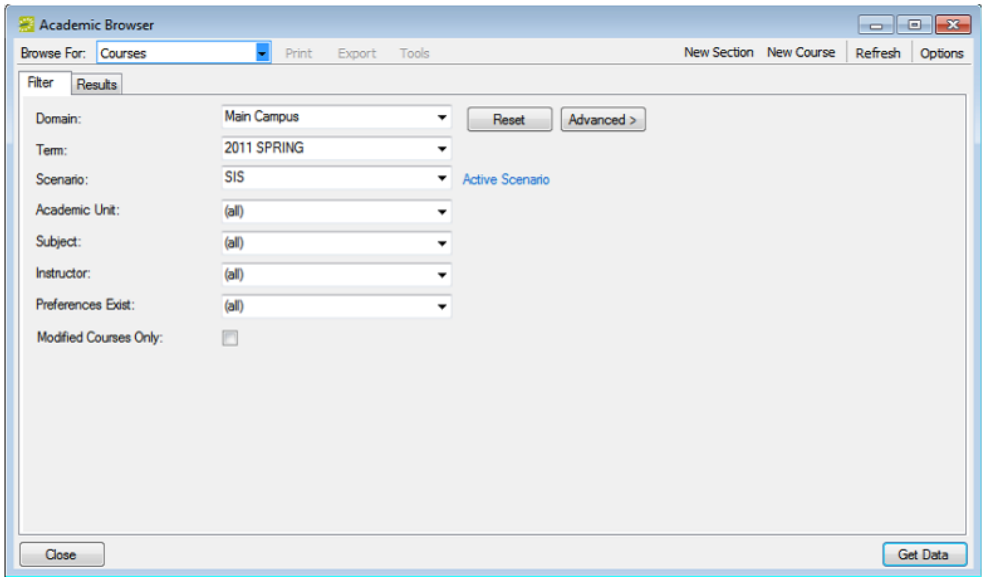
Academic units that have the appropriate permissions can indicate shared space using the EMS Campus Planning Interface. You might want to review these shared space settings before working with shared space.

This topic will provide information that will allow you to:

- Assign Shared Space to Courses
- Change the Parent Designation for Shared Space/Cross-listed Spaces
- Reverse the Shared Space Designation
- Review Shared Space Designations

Assign Shared Space to Courses

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the **Filter** tab.



3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses that are to share space, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

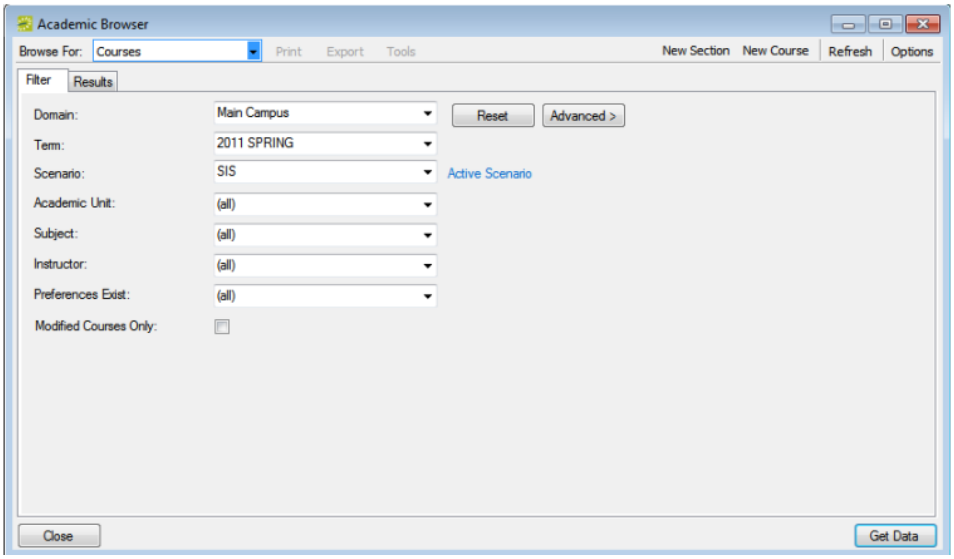
> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

5. CTRL-click to select the courses that are to share space.
6. On the Tools menu, click **Shares Space**. A message opens asking you if you are sure that the selected courses are to share space?
7. Click **Yes**. The message closes and you return to the Academic Browser. The Shares Spaces designation is indicated in the browser. The parent item is indicated with *Parent, and the child item is indicated with the parent's Course Number and Section Number.

Change the Parent Designation for Shared Space/Cross-listed Spaces

When you set the shared space designation for courses, EMS Academic Planning arbitrarily specifies one of the courses as the parent course. The academic unit that controls the parent course is the unit that sets the preferences for the shared courses in the Set Preferences mode. If the academic unit that you want to set the preferences in the Set Preferences mode is not currently the parent course, then you can change the parent designation for the courses. Also, after you publish courses, you can change the room only for the parent course and the child course "just follows along." If the course on which you want to base the room change is not currently the parent course, then you can change the parent designation for the courses.

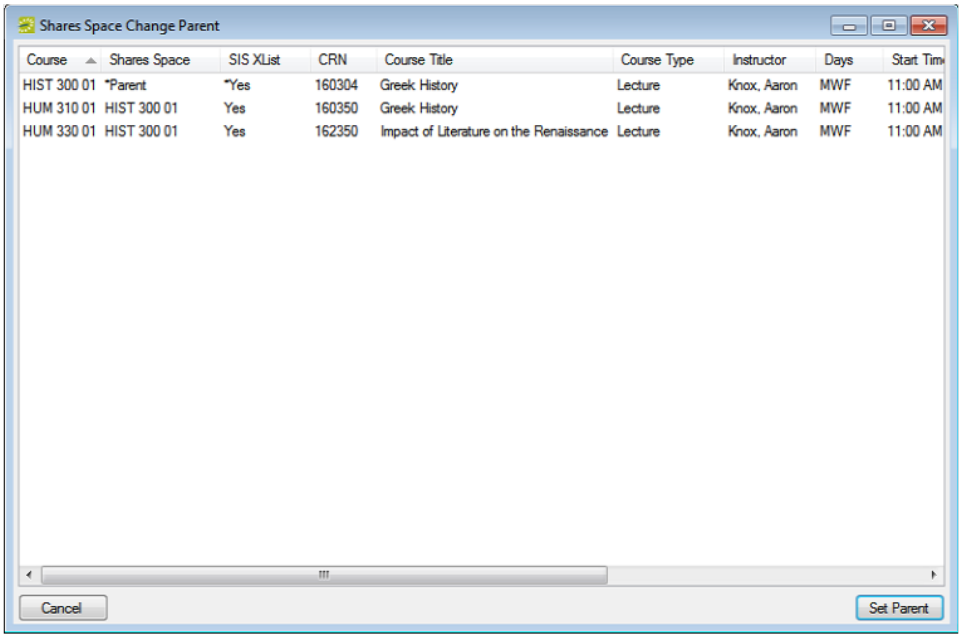
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the **Filter** tab.



3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the shared spaces courses, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

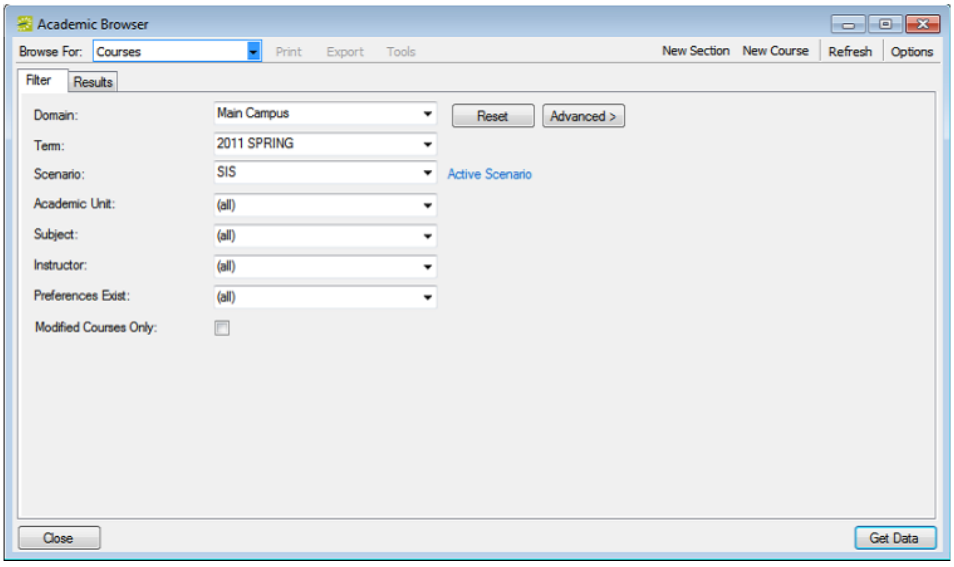
5. CTRL-click to select the parent course and the child courses.
6. On the Tools menu, click **Change Shared Space Parent**. The Shares Space Change Parent dialog box opens. This dialog box lists the parent class and all its child classes that share space.



7. Select the course that is to be the new parent, and then click Set Parent. A Set Parent dialog box opens, indicating that the selected course will be set as the parent for all the listed courses, and asking you if it is OK to continue.
8. Click **Yes**. The Set Parent dialog box closes. You return to the Academic Browser with the new parent designation indicated in the browser.

Reverse the Shared Space Designation

1. On the EMS Academic Planning menu bar, click Academic Planning > Courses > Academic Browser. The Academic Browser opens.
2. If needed, open the Filter tab.



3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses that are to no longer share space, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab.

Note:

For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

5. CTRL-click to select the courses that are to no longer share space.
6. On the Tools menu, click **Does Not Share Space**. A message opens asking you if you are sure that the selected courses are to no longer share space.
7. Click **Yes**. The message closes. You return to the Academic Browser, with the Shared Space designation removed for the selected courses.

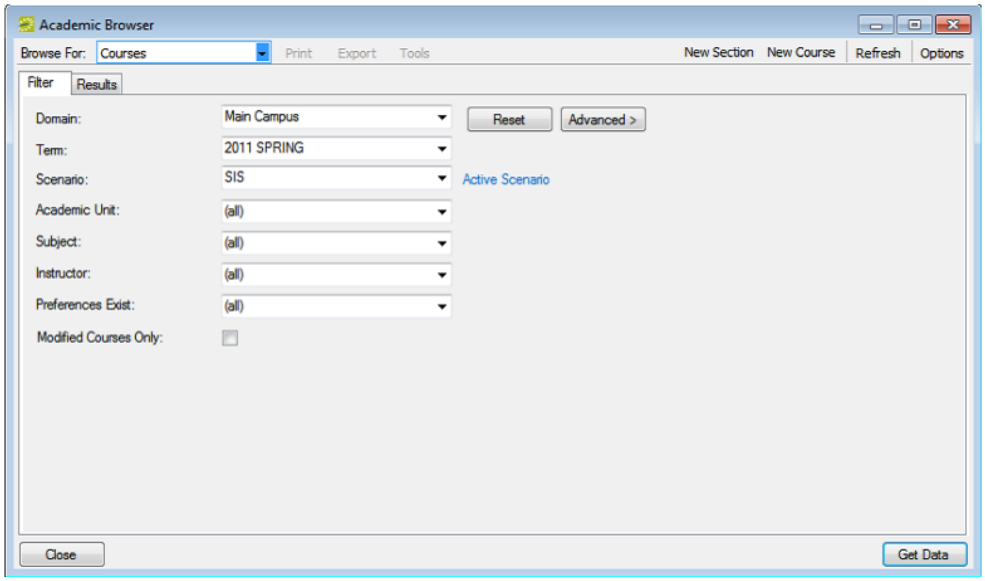
Note:

Academic units might designate shared space that they can review in the EMS Campus Planning Interface.

Review Shared Space Designations

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.

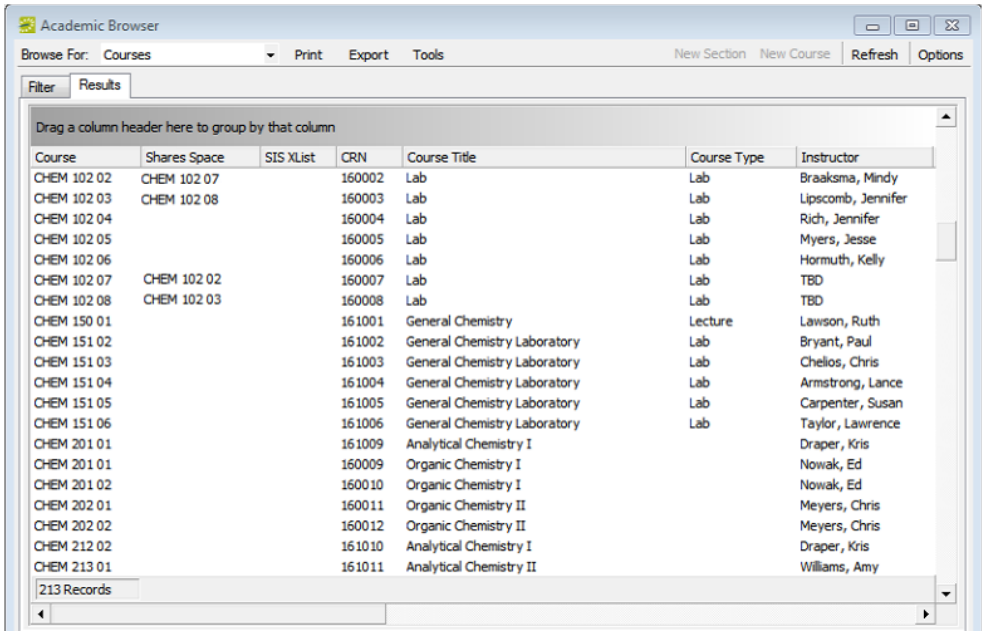
2. If needed, open the Filter tab.



3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses that you are reviewing, and then click Get Data. The courses that meet your search criteria are displayed on the Results tab. Use the information in the Shared Space column to identify and review the courses that share space. You can also click the column heading to sort by shared space.

Note:

For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.



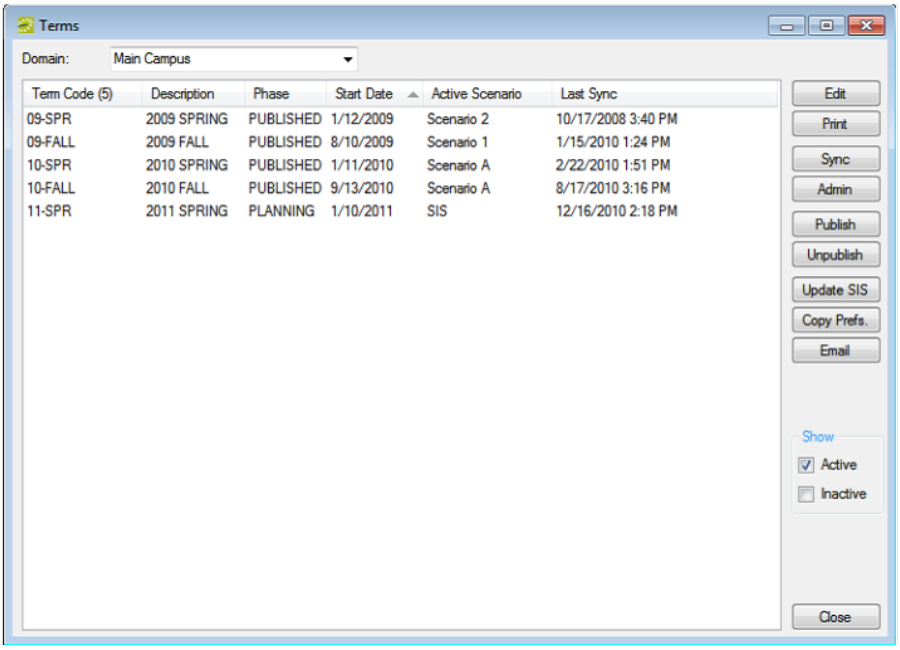
Course	Shares Space	SIS XList	CRN	Course Title	Course Type	Instructor
CHEM 102 02	CHEM 102 07		160002	Lab	Lab	Braaksma, Mindy
CHEM 102 03	CHEM 102 08		160003	Lab	Lab	Lipscomb, Jennifer
CHEM 102 04			160004	Lab	Lab	Rich, Jennifer
CHEM 102 05			160005	Lab	Lab	Myers, Jesse
CHEM 102 06			160006	Lab	Lab	Hormuth, Kelly
CHEM 102 07	CHEM 102 02		160007	Lab	Lab	TBD
CHEM 102 08	CHEM 102 03		160008	Lab	Lab	TBD
CHEM 150 01			161001	General Chemistry	Lecture	Lawson, Ruth
CHEM 151 02			161002	General Chemistry Laboratory	Lab	Bryant, Paul
CHEM 151 03			161003	General Chemistry Laboratory	Lab	Chelios, Chris
CHEM 151 04			161004	General Chemistry Laboratory	Lab	Armstrong, Lance
CHEM 151 05			161005	General Chemistry Laboratory	Lab	Carpenter, Susan
CHEM 151 06			161006	General Chemistry Laboratory	Lab	Taylor, Lawrence
CHEM 201 01			161009	Analytical Chemistry I		Draper, Kris
CHEM 201 01			160009	Organic Chemistry I		Nowak, Ed
CHEM 201 02			160010	Organic Chemistry I		Nowak, Ed
CHEM 202 01			160011	Organic Chemistry II		Meyers, Chris
CHEM 202 02			160012	Organic Chemistry II		Meyers, Chris
CHEM 212 02			161010	Analytical Chemistry I		Draper, Kris
CHEM 213 01			161011	Analytical Chemistry II		Williams, Amy

Academic Browser search results showing Shared Space designation

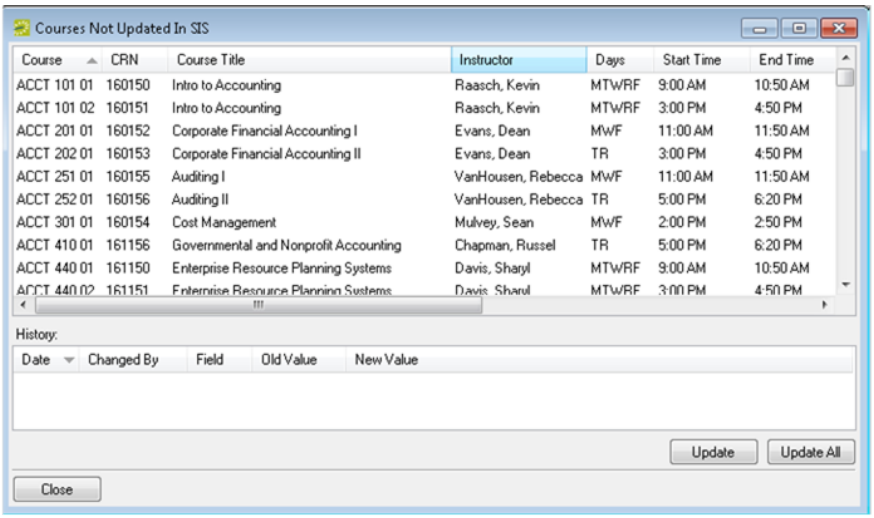
CHAPTER 65: Manually Update Course Locations in the SIS

If any errors are encountered during the publishing process, or if the EMS Academic Planning system parameter Manually Update SIS/ERP System After Publishing is set to "Yes," then you can access your course list and manually update the course locations in your SIS.

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**. The Terms window opens.



2. On the Domain dropdown list, select the domain for which you are manually updating the course locations.
3. Select the term for which you are manually updating the course locations, and then click Update SIS. The Courses Not Updated in SIS window opens. This window lists all the courses that were not updated in the SIS along with an accompanying reason. If the reason is an error, you must resolve the error before you can continue with the manual publishing. If "Manual Publish" required is listed, then you can continue with this procedure.



Courses Not Updated in the SIS window

4. Select the course record or CTRL-click to select multiple records that you are updating, and then click Update, or click Update All to update all records in a single step. A message opens indicating that the updates were successful.
5. Click **OK** to close the message and return to the Terms window.

CHAPTER 66: About Creating Scenarios and Optimization

You create scenarios to test room assignments that have been given to courses for a term. In EMS, you can create two types of scenarios—a pre-assignment scenario and an optimization scenario. A pre-assignment scenario is a scenario in which a selection of courses are manually assigned to rooms, typically because the assigned rooms are to be excluded in an optimization scenario. In pre-assignment scenarios, the assignments are automatically considered "locked in." An optimization scenario is a scenario in which EMS automatically assigns rooms to courses based on room preferences, requirements, and weighted criteria. The EMS optimization process can support 100% optimization, incremental optimization by academic unit, and/or a combination of pre-assignment and automated optimization.

This topic provides information on the following:

- Scenario Settings
- Standard Weights
- Preference Weights
- Evaluating Optimization Scenarios

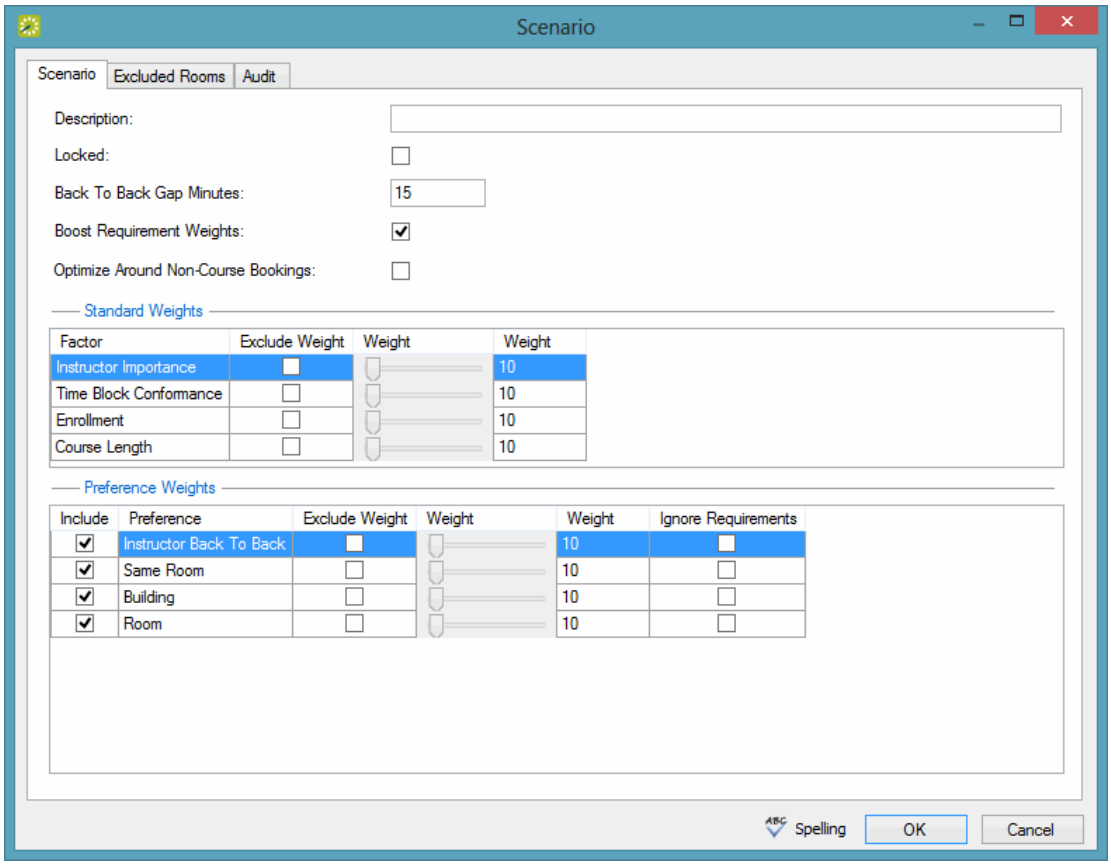
The optimization process assigns rooms to courses in three passes.

1. The first optimization pass queries the term for all courses with requirements. These courses are scored based on the weightings (importance) assigned to the requirements and processed in order of highest to lowest score. Any course with a requirement that cannot be accommodated remains unassigned and the room assignment must be manually resolved.

2. The second optimization pass queries the term for all courses with preferences. Courses are processed from highest to lowest score. If an available room cannot be identified for a course with preferences, the optimization process begins to drop preferences (lowest weight first) from consideration in an effort to find and assign an available room. Using the Ignore Requirements option demotes a requirement to a preference and sends any class with the dropped requirement to this second optimization pass.

3. The third and final optimization pass assigns rooms to all remaining courses without preferences. If the Include option for a preference is cleared, then any class with this preference is demoted to this third optimization pass.

Throughout the optimization process, the optimizer considers room capacity (the course's adjusted enrollment must fit within a room's capacity), looks for the best seat fill (a room with a capacity that most closely accommodates the estimated enrollment), and the best room utilization (completely filling one room before moving on to another) to achieve the best room optimization possible. You use the options that are available to you on the Scenario dialog box to create scenarios.



Scenario Dialog Box

Scenario Settings

- **Locked—**When this is checked no users will be able to use the "Optimize" or "Preassign" buttons on the Scenarios screen for the corresponding scenario. Once unchecked those functions become available again.
- **Back To Back Gap Minutes—**When an instructor has back to back courses, the EMS Campus Optimizer can be weighted to try to keep instructors in the same room. What determines whether an instructor is back to back is the amount of time in between the courses. With the optimizer, the amount of time required for courses to be considered back to back can be designated in minutes. This allows users to control the amount of time between courses that would be considered important for instructors to remain in the same room.
- **Boost Requirement Weights—**When checked, this will increase the specified weight on courses with requirements by 50 percent for each applicable slider criteria. For example, if a feature of Whiteboard has a slider weight of 500 and Course 1 has whiteboard marked as a preference, its score would result in 500 points. If Course 2, has whiteboard as a requirement, it's score would result in 750 points (50%

higher).

- **Optimize Around Non-Course Bookings—**This option will force the optimizer to take into account bookings that are already in EMS when finding rooms. This feature will only work with bookings in a "Booked Space" status-type. Searching or assigning rooms after the optimization has run (or during pre-assign) with this option checked will also show the spaces as in use.

Standard Weights

- **Instructor Importance** — Instructor Importance is assigned in the Academic Planning (Configuration > Instructors) area of EMS Academic Planning. Preferences belonging to those instructors who are marked as "Important" receive priority over those instructors who are not marked as important.
- **Time Block Conformance** — Ranks those courses that conform to the time block template for the term higher than those courses that do not.
- **Enrollment** — Enrollment uses a combination of the assigned weight and the following EMS Academic Planning system parameters to determine the courses that are assigned rooms first.
- **Course Length** — Course Length factors in the number of meeting occurrences for a class. For example, a class that meets five times per week might be given room assignment priority over a class that only meets twice per week.

Preference Weights

- **Instructor Back to Back** — Instructors who are teaching back to back courses (two or more classes in the same day) are ranked higher than instructors who are not teaching back to back courses.
- **Same Room** — Ranks courses that have been identified as using the same room during Set Preferences mode higher than those courses that do not use the same room.
- **Building** — Any courses that have a building preference will receive this weight.
- **Room** — Any courses that have a room preference will receive this weight.
- **Small Class Size** (if less than xx students) — Determines what constitutes a "small" class.
- **Small Class Size Weight Adjustment** — Adds/subtracts this number from the Enrollment weighting that is set in the optimization scenario.
- **Large Class Size** (if more than xx students) — Determines what constitutes a "large" class.
- **Large Class Size Weight Adjustment** — Adds/subtracts this number from the Enrollment weighting that is set in the optimization scenario.

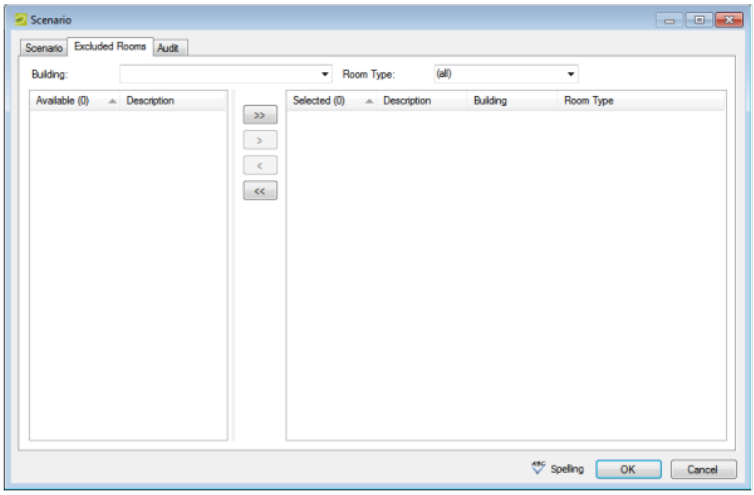
For example, with all other weightings set to zero, consider the following configuration for these four settings:

- Weight assigned to Enrollment in scenario = 500
- Small Class Size (if less than xx students) = 10
- Large Class Size (if more than xx students) = 750
- Large Class Size Weight Adjustment = +100
- Instructor Importance = 400

The following three courses would be scored and ranked for room assignment as shown below:

Course	Instructor Importance	Instructor Importance Score	Estimated Enrollment	Class Size	Enrollment Score	Class Adjustment Size	Final Score	Room Assignment Rank
A	Yes	400	100	Large	500	+100	1000	1
B	No	0	50	Medium	500	+0	500	3
C	Yes	400	5	Small	500	-100	800	2

Also, when you are creating a scenario, all the rooms in your domain are eligible to hold a course. If there are rooms offline for the term that you are scheduling, or there are rooms that should not be considered for the scenario, you can exclude them from the scenario on the Excluded Rooms tab of the Scenario dialog box.



Finally, although the process for your organization might vary, a typical approach for using scenarios to optimize room assignments is to first create a pre-assignment scenario to partially complete the assignment of rooms to courses for a term. You would then copy this pre-assignment scenario and edit the weighted values as needed to make an optimization scenario, and then run this optimization scenario to continue with the assignment of rooms to courses. You can create as many optimization scenarios as

needed (either by copying an existing scenario or creating one “from scratch”) and then use various tools to compare placement results before you choose your final scenario for publishing.

See Also: Evaluate Optimization Scenarios (below)

Evaluate Optimization Scenarios

You can test an unlimited number of potential scenarios and compare results using various tools before you choose your final scenario for publishing. Both the Academic Browser and the Academic Book contain an Scenario drop-down list from which a specific scenario can be selected for viewing and evaluation.

See Also: Search with the Academic Browser and Use the Academic Book.

The Scenarios window contains a Print option that provides access to the following reports that can be used to for evaluating scenarios—Scenario Results, Scenario Exceptions, Unmet Preferences, and Preferences Summary. Additional reports within the Academic Planning > Reports area are also available, including Classroom Optimization, Hourly Classroom Utilization, and Course Preferences.

See Also: Generate Academic Reports.

CHAPTER 67: Create Scenarios

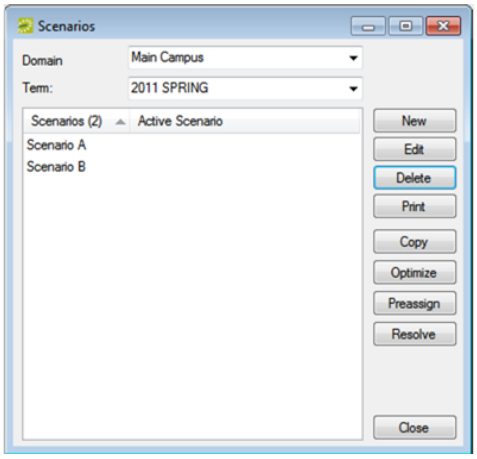
Although the process for your organization might vary, a typical approach for using scenarios to optimize room assignments is to first create a pre-assignment scenario to partially complete the assignment of rooms to courses for a term. You would then copy this pre-assignment scenario and edit it as needed to make an optimization scenario, and then run this optimization scenario to continue with the assignment of rooms to courses. You can create as many optimization scenarios as needed, either by copying an existing scenario or creating one "from scratch."

This topic provides information on the following:

- Create a Pre-assignment Scenario
- Create an Optimization Scenario

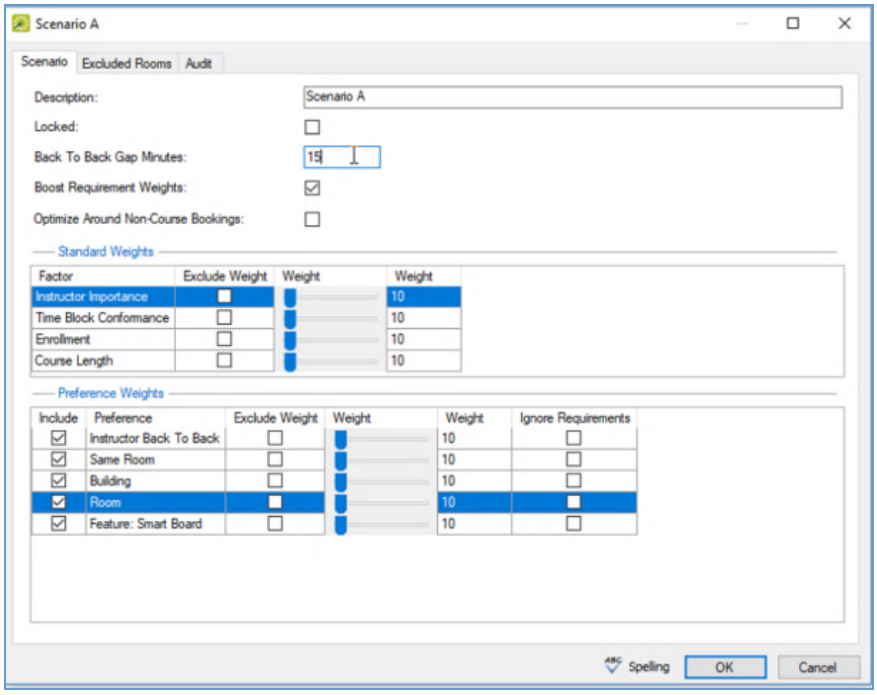
Create a Pre-assignment Scenario

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Optimization Scenarios**. The Scenarios window opens. This window lists all the scenarios (pre-assignment and optimization) that are currently configured in your EMS database.



2. On the Domain drop-down list, select the domain for which you are creating the scenario, and on the Term drop-down list, select the term.

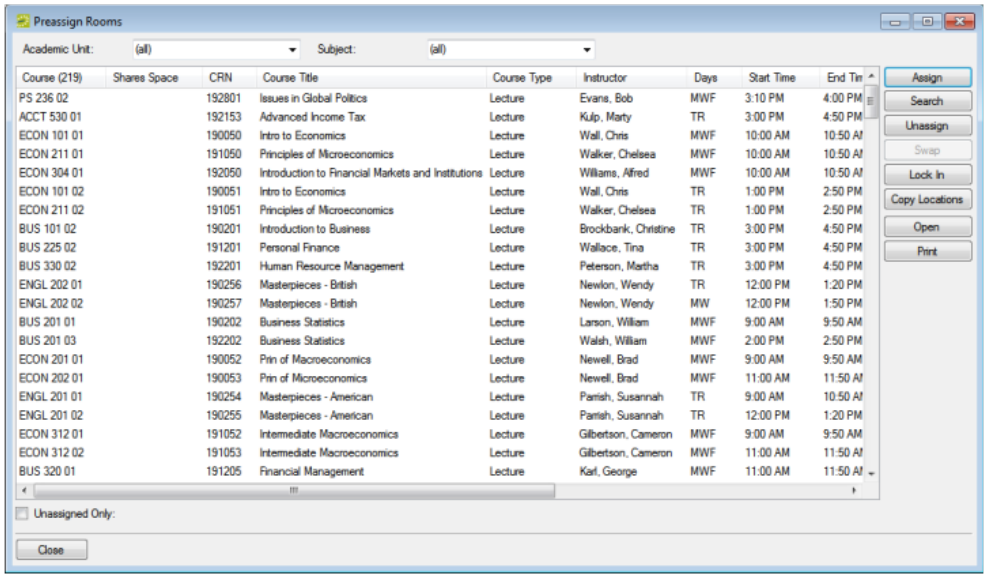
3. Click **New**. The Scenario dialog box opens. The Scenario tab is the active tab.



4. In the Description field, enter a name or description for the scenario, for example, Pre-assignment.

> **Note:**
> The description can be a maximum of 30 characters, including spaces. Because all assignments in a pre-assignment scenario are manual, you do not need to set any weighted criteria or exclude any rooms.

5. Click **OK**. The Scenario dialog box closes. You return to the Scenarios window with the newly created scenario automatically selected.
6. Click **Preassign**. A message opens informing you that preassigning will set this term to Read Only and asking you if it is OK to continue.
7. Click **Yes**. The message closes and an Initializing Scenario progress dialog box opens. After the scenario is initialized, the progress dialog box closes, and the Preassign Rooms window opens. This window lists all the courses for the selected term and domain. Any courses that were previously preassigned are listed as Locked In.

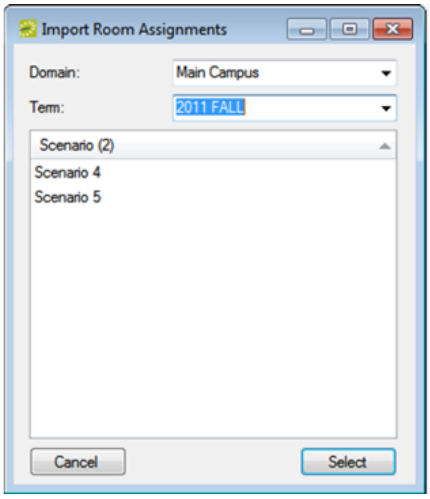


8. Optionally, do one or both of the following; otherwise, go to the next step.
   - To view a course in the Course Navigator, double-click the course.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.

   - To filter this list, do one or more of the following:
   - On the Academic Unit drop-down list, select an academic unit.
   - On the Subject drop-down list, select a subject.
   - At the bottom of the window, select Unassigned Only.
   - Click on a column heading to sort by the heading.
9. If you do not want to copy pre-assignments that you have carried out in a previous scenario, continue to Assign Rooms; otherwise, do the following:

- Click **Copy Locations** to open the Import Room Assignments dialog box.

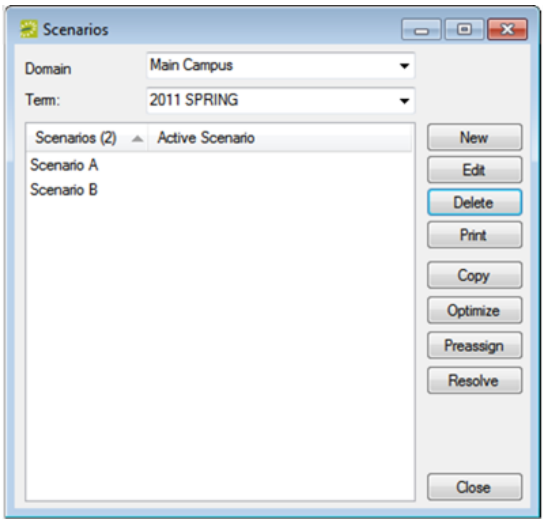


- Select the appropriate Domain and Term from which you want to copy the pre-assignments.
- Select the appropriate scenario to copy, and then click Select.
  Where possible, the locations are copied for the courses that are displayed in the Preassign Rooms window. If a location was successfully copied for a course, then (unassigned) is no longer displayed in the Locations column. Instead, the copied room assignment is displayed. If a location could not be copied for a course, then (unassigned) is still displayed in the Locations column.

10. Continue to Assign Rooms.

Create an Optimization Scenario

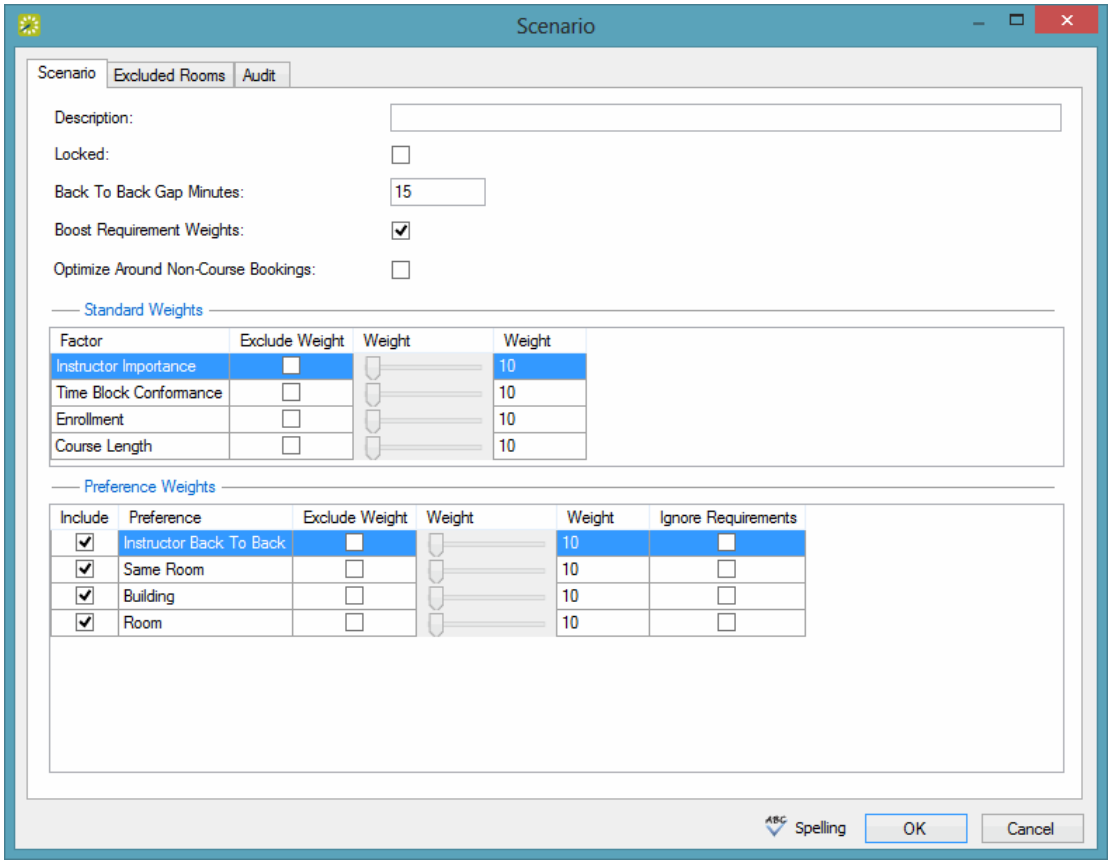
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Optimization Scenarios**. The Scenarios window opens. This window lists all the scenarios (pre-assignment and optimization) that are currently configured in your EMS database.



2. On the Domain drop-down list, select the domain for which you are creating the scenario, and on the Term drop-down list, select the term.

> **Note:**
> The remainder of this procedure describes how to create an optimization scenario "from scratch." You can also create an optimization scenario by copying an existing scenario. Select the scenario that you want to copy, and then click **Copy**. Remember, a common approach for using scenarios to optimize room assignments is to first create a pre-assignment scenario to partially complete the assignment of rooms to courses for a term. You would then copy this pre-assignment scenario and edit it as needed to make an optimization scenario.

3. Click **New**. The Scenario dialog box opens. The Scenario tab is the active tab.



4. In the Description field, enter a name or description for the scenario, for example, Scenario A.

> **Note:**
> The description can be a maximum of 30 characters, including spaces.

5. Do one or more of the following to set the weighted criteria:
   - By default, all preferences are included in the scenario. Clear the Include option for the preferences that you are excluding from the weighted criteria.

> **Note:**
> Only the features that were selected during Set Preferences mode are displayed—this is not an exhaustive list of all your features.

   - For the preferences that you are including, use the Importance slider bar to specify a weight for each preference, or enter a number in the Importance field.

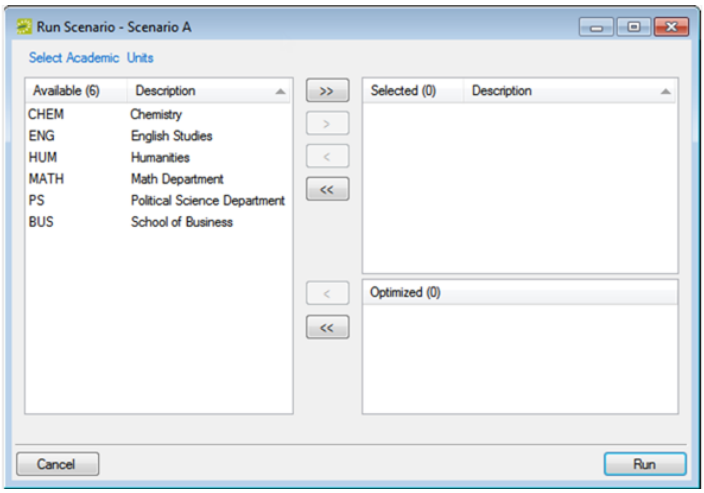
> **Note:**
> Weights are arbitrary numbers that simply indicate the relative importance of one criterion to another. The importances do not have to add up to a particular "whole," for example, 100. For a detailed discussion about setting weighted criteria, see About Creating Scenarios and Optimization.

- Some preferences might have been marked as Required by some academic units during the Set Preferences mode. Select Ignore Requirements as needed for any and all of the preferences.

6. Open the Excluded Rooms tab, and specify the rooms that should not be assigned to a course in this scenario (for example, rooms that have previously been assigned using a pre-assignment scenario) by doing the following:
   - On the Building drop-down list, select (all) buildings, or select a specific building.
   - On the Room Type drop-down list, leave the default value of (all), or select a specific room type.
   - In the Available list, select the room, or CTRL-click to select multiple rooms, and then click the Move (>) button to move the rooms to the Selected list.

> **Note:**
> If needed, you can repeat these steps for specific buildings until you have selected all the rooms in specific buildings that should be excluded.
>
> If a room assignment has been previously "locked in" on a course, the room assignment is maintained for the course, even if the room is excluded from the scenario.

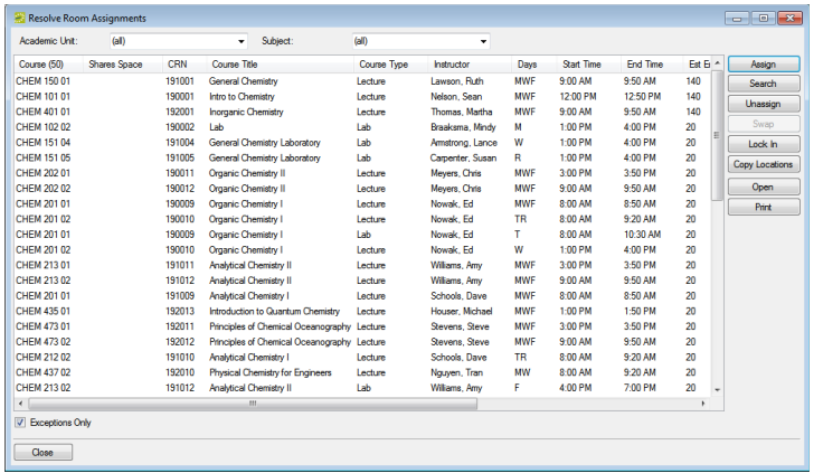
7. Click **OK**. The Scenario dialog box closes. You return to the Scenarios window with the newly created scenario automatically selected.
8. Click **Optimize**. The Run Scenario dialog box opens. This dialog box lists all the academic units that have courses for the selected term and domain.



9. In the Available list, select the academic unit for which to run the optimization scenario, or CTRL-click to select multiple units, and then click the Move (>) button to move the units to the Selected List.
10. Click **Run**. A message opens informing you that optimizing will set this term to Read Only for the selected academic units and asking you if it is OK to continue.
11. Click **Yes**. The message closes and an Initializing Scenario progress dialog box opens. After the scenario is initialized, the progress dialog box closes. An Optimization Results dialog box opens on top of the Resolve Room Assignments window. This dialog box indicates that the optimization was complete and it also indicates the number of courses assigned, the percent of total courses assigned, and the number of exceptions (the number of courses that could not be assigned).

> **Note:**
> At any time, if you need to review this information, click **Print** > **Scenario Results**.

12. Click **OK**. The Optimization Results dialog box closes and the Resolve Room Assignments window is now the active window. By default, this window lists only those courses for which rooms could not be assigned. Courses can remain unassigned for the following reasons:
    - Conflicts with another course: A course or courses that were ranked higher in preference criteria was assigned the room that this course required. Select the course to review the list of conflicting courses.
    - No space can hold course: The course had requirements that were so specific, no room was available that met the criteria either because the room does not exist, or it was excluded from the scenario.



Resolve Room Assignments Window

13. Optionally, you can do one or more of the following:
    - If a course is unassigned because of a conflict, click once on the course to open a Conflicts tab in the lower part of the window. This tab lists all the courses that are in conflict with the selected course.
    - To view a course in the Course Navigator, double-click the course.

> **Note:**
> For detailed information about working with the Course Navigator, see Using the Course Navigator.

    - To filter this list, do one or more of the following:
    - On the Academic Unit drop-down list, select an academic unit.
    - On the Subject drop-down list, select a subject.
    - Click on a column heading to sort by the heading.

> **Note:**
> You can also clear the Exceptions Only option at the bottom of the window to view a list of all courses (assigned and unassigned) for the selected domain and term. (Courses that were pre-assigned are listed as Locked In).

Note:
If you are carrying out incremental optimization by academic unit, you must repeat this procedure for every academic unit that is to be optimized.

14. Continue to Assign Rooms.

CHAPTER 68: Set a Final Exam Schedule

At some point after a term has been published in EMS Academic Planning, you must schedule the final exams for the term. EMS Academic Planning provides the functionality to automate the final exam scheduling process using templates. You create a final exam schedule template based on all unique course schedule patterns (for example, MWF 9 am-9:50 am, TR 1 pm-2:20 pm, and so on), and their corresponding final exam days and times. In addition to creating a template, you have the flexibility to define common exams, specify the final exam schedules for specific courses, specify the final exam for multiple courses, and/or exclude certain courses from the final exam scheduling process.

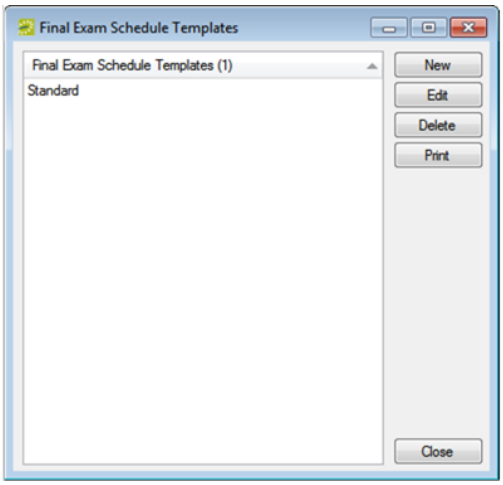
Note:
Unless otherwise specified in Final Exam Settings, EMS Academic Planning attempts to schedule the final exam for a course in the same room that the course has been using for the term. The final exam session publishing process adds the final exam as a separate booking in the course's reservation.

This topic will provide the information that will allow you to do the following:

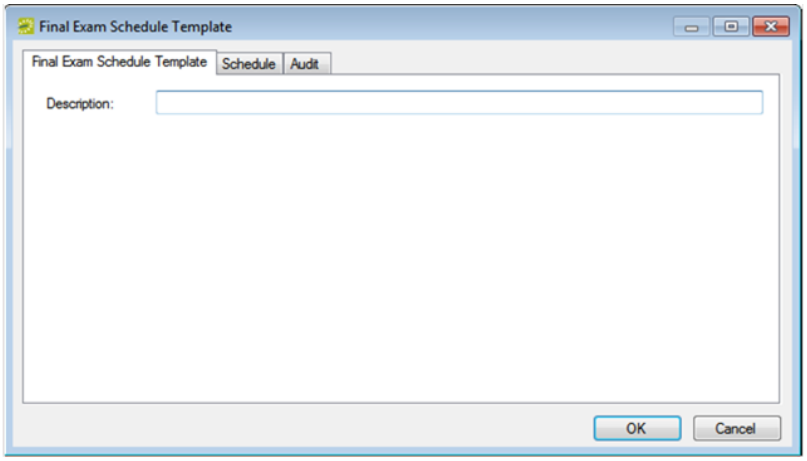
- Create a Final Exam Schedule Template
- Manually Create a Final Exam Schedule Template
- Import a Term to Create a Final Exam Schedule Template
- Import a File to Create a Final Exam Schedule Template
- Specify Final Exam Settings for a Specific Course
- Specify Final Exam Settings for Multiple Courses

Create a Final Exam Schedule Template

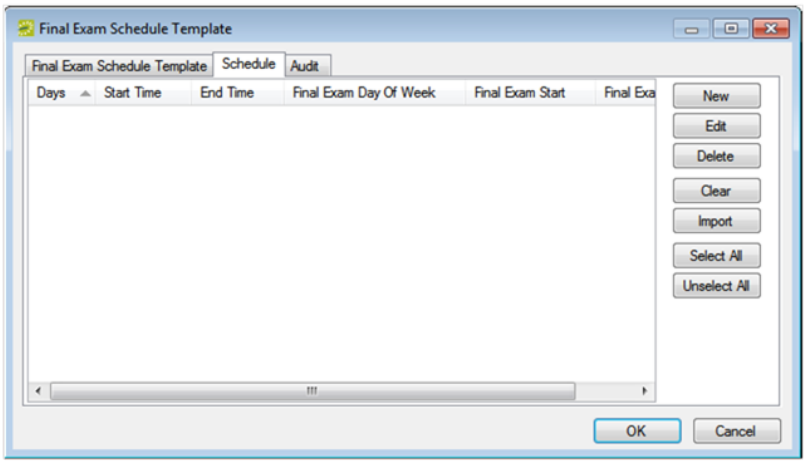
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Final Exam Schedule Templates**. The Final Exam Schedule Templates window opens. This window lists all the final exam schedule templates that are currently configured in your EMS database.



2. Click **New**. The Final Exam Schedule Template dialog box opens. The Final Exam Schedule Template tab is the active tab.



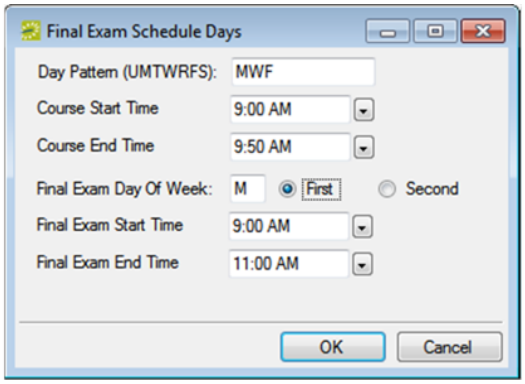
3. In the Description field, enter a name or description for the final exam schedule template, for example, Fall Finals. The description can be a maximum of 50 characters, including spaces.
4. Open the Schedule tab.



5. Continue to one of the following procedures to create a list of unique course schedule patterns.

Manually Create a Final Exam Schedule Template

1. Click **New**. The Final Exam Schedule Days dialog box opens.
2. Enter the information for a unique course schedule pattern and the corresponding final exam day and time, and then click OK. The Final Exam Schedule Days dialog box closes. You return to the Schedule tab with the pattern displayed on the tab. Final Exam Schedule Days dialog box (shown with information for a final exam schedule)

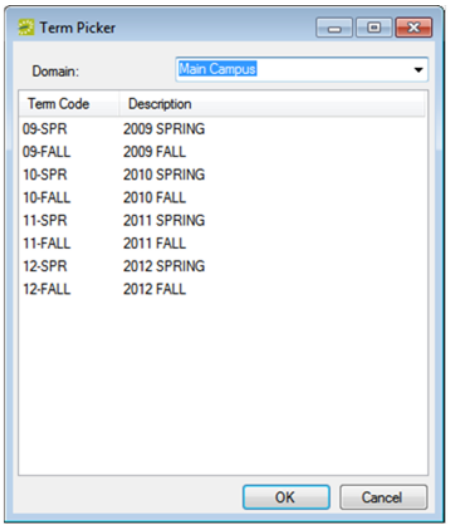


3. Repeat this procedure as many times as needed to create a final exam schedule template for each unique course schedule pattern in the term.
4. Click **OK** to close the dialog box and return to the Final Exam Schedule Templates window, where you will see the newly configured final exam schedule template automatically selected.

> **Note:**
> If any meeting patterns are left without a corresponding final exam time, then courses that fit that meeting pattern in the term will not have a final exam scheduled for them.

Import a Term to Create a Final Exam Schedule Template

1. Click **Import**, and on the dropdown list that opens, select Term. The Term Picker dialog box opens, listing the terms currently configured in your EMS database.



2. Select your Domain and Term for which you are creating the final exam schedule template, and then click **OK**. EMS Campus scans the term and identifies unique meeting patterns to begin the template building process. After the import is complete, a message opens indicating this.
3. Click **OK** to close the message and return to the Schedule tab, which shows the imported patterns on the Schedule tab.
4. Select an individual pattern, or CTRL-click to select multiple patterns, and then click Edit to open the Final Exam Schedule Days dialog box and assign the final exam day of the week and the final exam start and end times.
5. Click **OK** to close the Final Exam Schedule Days dialog box and return to the Schedule tab.
6. Click **OK** to close the Final Exam Schedule Template dialog box and return to the Final Exam Schedule Templates window with the newly configured final exam schedule template automatically selected.

> **Note:**
> If any meeting patterns are left without a corresponding final exam time, then courses that fit that meeting pattern in the term will not have a final exam scheduled for them.

Import a File to Create a Final Exam Schedule Template

You can import your course schedule patterns from a tab-delimited text file.

> **Note:**
> See Course Schedule Import File Specifications in the EMS Desktop Client Configuration Guide for a table that details the Course Schedule Patterns import file specifications.

Campus — Final Exam Template Import Format

(import file must be tab delimited)

Sequence	Column	Type	Required	Unique	Max Chars.
1	Sunday	True/False	Yes		
2	Monday	True/False	Yes		
3	Tuesday	True/False	Yes		
4	Wednesday	True/False	Yes		
5	Thursday	True/False	Yes		
6	Friday	True/False	Yes		
7	Saturday	True/False	Yes		
8	Start Time	Text (HHMM)	Yes		4
9	End Time	Text (HHMM)	Yes		4
10	Final Exam Day Of Week	Text (UMTWRFS)	Yes		
11	Final Exam Start Time	Text (HHMM)	Yes		4
12	Final Exam End Time	Text (HHMM)	Yes		4

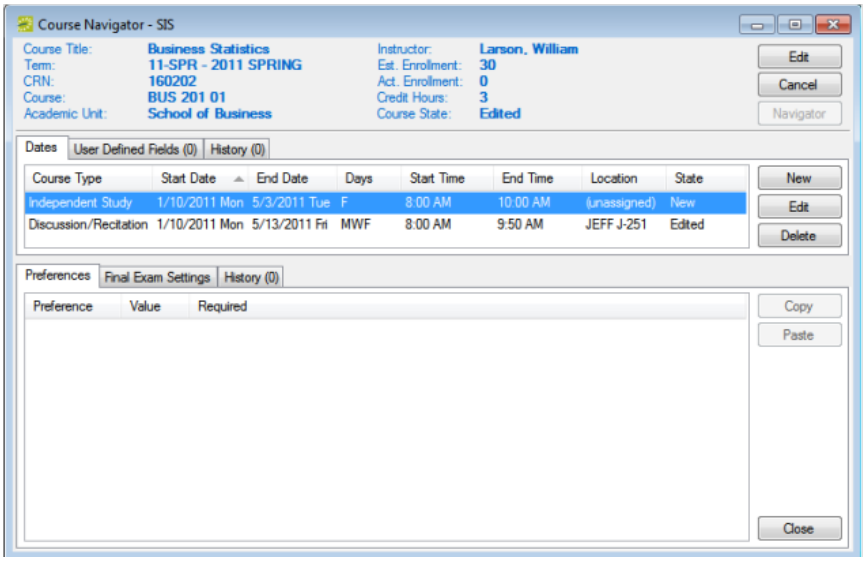
Course Schedule Patterns import file format

1. Click **Import**, and then on the dropdown list that opens, click File. The Open File dialog box opens.
2. Browse to and select the import file, and then click **Open**. The Open dialog box closes and the course schedule patterns are imported. After the import is complete, a message opens indicating this.
3. Click **OK** to close the message and return to the Schedule tab. The imported patterns are displayed on the Schedule tab.
4. Select an individual pattern, or CTRL-click to select multiple patterns, and then click Edit to open the Final Exam Schedule Days dialog box and assign the final exam day of the week and the final exam start and end times.
5. Click **OK** to close the Final Exam Schedule Days dialog box and return to the Schedule tab.
6. Click **OK** to close the dialog box. You return to the Final Exam Schedule Templates window with the newly configured final exam schedule template automatically selected.

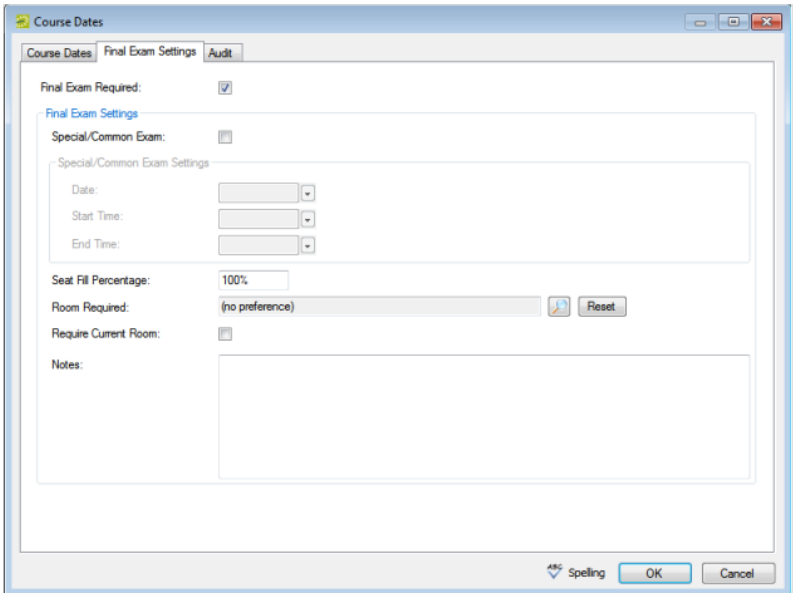
> **Note:**
> If any meeting patterns are left without a corresponding final exam time, then courses that fit that meeting pattern in the term will not have a final exam scheduled for them.

Specify Final Exam Settings for a Specific Course

1. Open the specific course in the Course Navigator through either the Academic Browser, the Academic Book, or the Navigator.



2. In the middle pane of the Navigator, select a course date record, and then click Edit. The Course Dates dialog box opens. The Course Dates tab is the active tab.
3. Open the Final Exam Settings tab.



4. Do any of the following:

> **Note:**
> Typically, courses with multiple course dates, lab components, or short-term courses are marked as “No Exam Required."

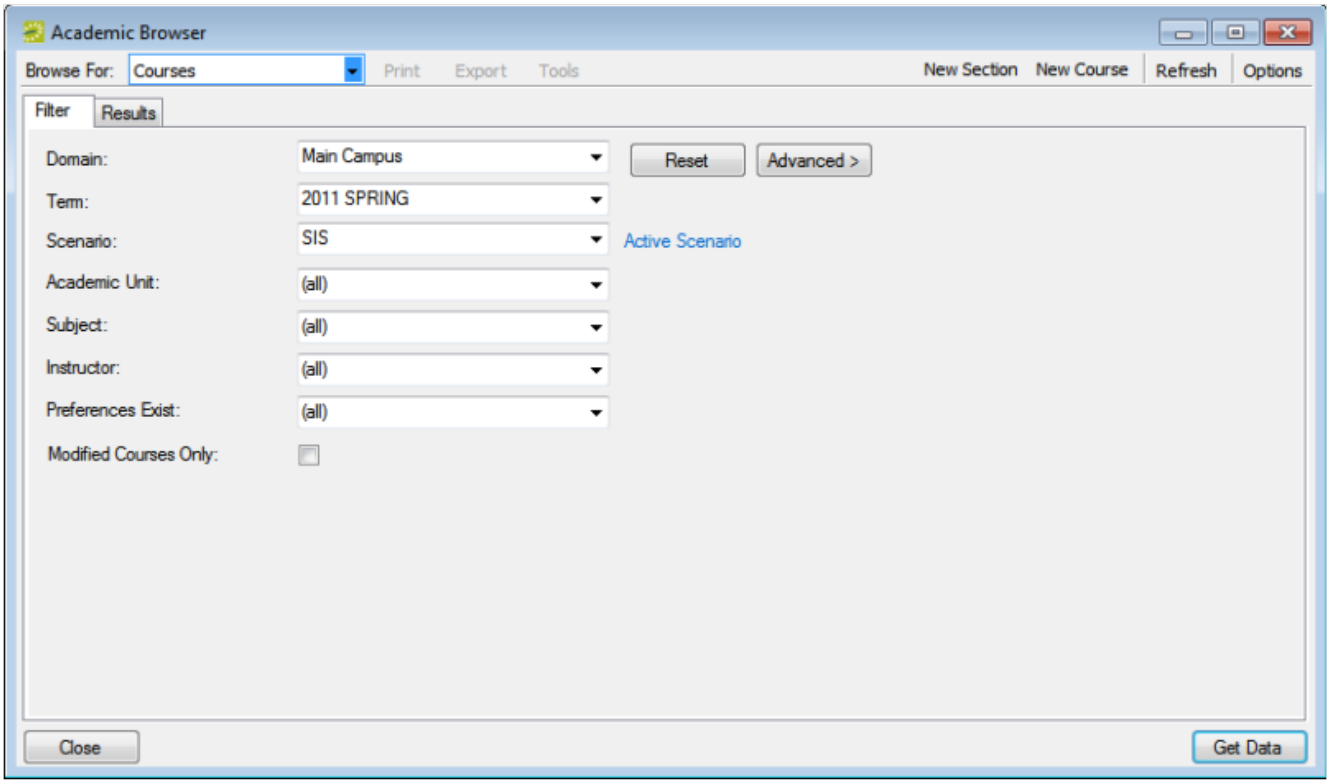
- If a final exam is not required for the course, then clear the Final Exam Required option, and go to Step 5.
- If the course is having a final exam at a day/time other than what is specified by the template, select Special/Common Exam, and then enter the date, and start and end times for the special/common exam.
- Optionally, if you would like the seat fill percentage to be a different value than the default value, update the seat fill percentage for the exam.
- If the exam is to take place in a different room (not the same room that the course has been using all semester), click the Search icon next to Room Required to open the Room Selector dialog box and select a different room for the exam.
- If the exam is to take place in the same room that the course has been using all semester, then select Require Current Room.

> **Note:**
> During publishing of the final exam session, if the same room is unavailable, EMS leaves the course unassigned for a manual search.

5. Optionally, in the Notes field, enter any information that is pertinent to the course or final exam.
6. Click OK. The Course Dates dialog box closes. You return to the Course Navigator with the course date still selected.

Specify Final Exam Settings for Multiple Courses

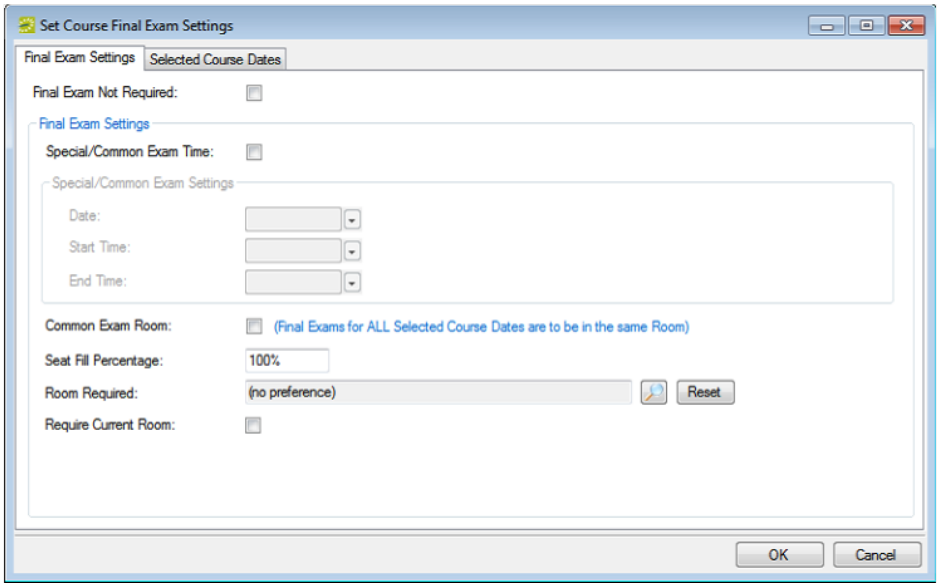
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Academic Browser**. The Academic Browser opens.
2. If needed, open the Filter tab.



3. On the Domain dropdown list, select the appropriate domain and on the Term dropdown list, select the appropriate term.
4. Set any other criteria (academic unit, subject, and so on) as needed to provide assistance in locating the courses for which you want to set preferences and requirements, and then click **Get Data**. The courses that meet your search criteria are displayed on the Results tab.

> **Note:**
> For detailed information about searching with the Academic Browser, see Searching with the Academic Browser.

5. In the search results, CTRL-click to select the multiple courses for which you are setting the final exam schedule.
6. On the Tools menu, click Set Final Exam Settings. The Set Course Final Exam Settings dialog opens.



7. Do one of the following:

- If a final exam is not required for the courses, then select Final Exam Not Required, and then continue to the next step.

Note:
Typically, courses with multiple course dates, lab components, or short-term courses are marked as "No Exam Required.

- If the courses are having their final exams at a day/time other than what is specified by the template, select Special/Common Exam, and then enter the date, and start and end times for the special/common exam.

Note:
All the selected courses will meet at the date/time specified.

- If the final exams for all the selected courses are to be in the same room, then select Common Exam Room.
- If the exam/exams are to take place in a different room (not the same rooms that the courses have been using all semester), click the Search icon next to Room Required to open the Room Selector dialog box and select a different room for the exams.

> **Note:**
> All courses will meet in this room for the final exams.

- If the exams are to take place in the same rooms that the courses have been using all semester, then select Require Current Room.

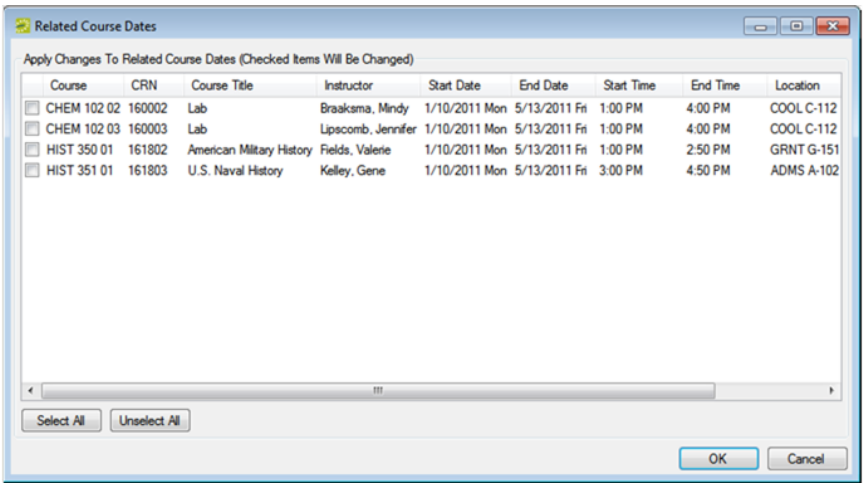
> **Note:**
> If no room is requested, or Require Current Room is selected, then each course will have the final exam in its own room. During publishing of the final exam session, if the same room is unavailable, EMS leaves the course unassigned for a manual search.

8. Optionally, do one or both of the following:

- If you want the seat fill percentage to be a different value than the default value, update the seat fill percentage for the exam.
- In the Notes field, enter any information that is pertinent to the course or final exam.

9. Click **OK**.

The Related Courses Dates dialog box opens. This dialog box lists all the courses that you selected on the Results tab of the Academic Browser.



10. Select the courses to which the final exam settings are to be applied, or click Select All to select all the courses in a single step, and then click OK. A message opens indicating that any final exam settings that exist for the selected courses will be overwritten, and asking you if it is OK to continue.
11. Click **Yes**. A second message opens indicating that the final exam settings were successfully set.

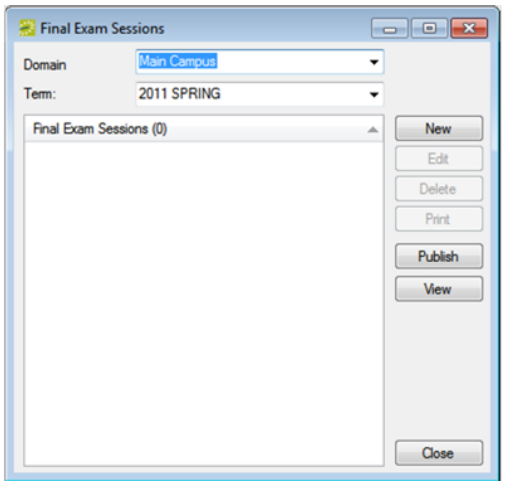
12. Click **OK** to close the second message and the Related Course Dates dialog box. You return to the Results tab of the Academic Browser, with the courses still selected on the tab.

CHAPTER 69: Publish a Final Exam Session

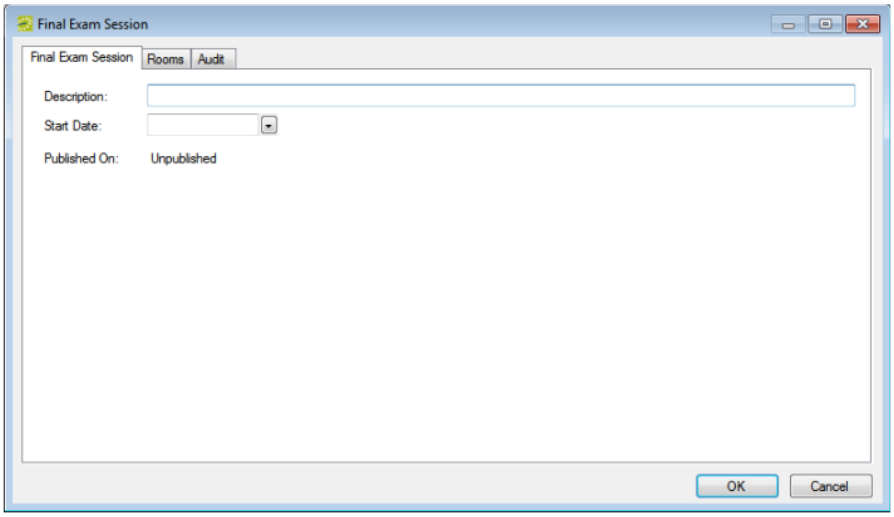
After you have created the final exam schedule template for the term, and updated any final exam settings, you must publish the final exam session. Publishing a final exam session is a two part process. First, you must create a final exam session and specify a start date for the session. Second, you must then apply a final exam schedule template to the final exam session and then you can publish the session.

Create a Final Exam Session

1. On the EMS Academic Planning menu bar, select **Academic Planning** > **Courses** > **Final Exam Sessions**. The Final Exam Sessions window opens. The window lists all the final exam sessions that have been published in your EMS database.



2. On the Domain dropdown list, select the campus for which you are publishing the final exam session, and on the Term dropdown list, select the term.
3. Click **New**. The Final Exam Session dialog box opens. The Final Exam Session tab is the active tab.



4. In the Description field, enter a name or description for the session, for example, Fall Finals 2018.

> **Note:**
> The description can be a maximum of 30 characters, including spaces.

5. Select a start date for the final exam session.

> **Note:**
> The final exam session will start on this date. Use the final exam template day of the week to schedule specific final exam dates. EMS can accommodate up to a two week final exam session.

6. Open the Rooms tab and select the rooms that are available to host final exams by doing the following:
   - On the Building dropdown list, select (all) buildings, or select a specific building, area, or view.
   - On the Room Type dropdown list, leave the default value of (all), or select a specific room type.
   - In the Available list, select the room, or CTRL-click to select multiple rooms, and then click the Move (>) button to move the rooms to the Selected list.

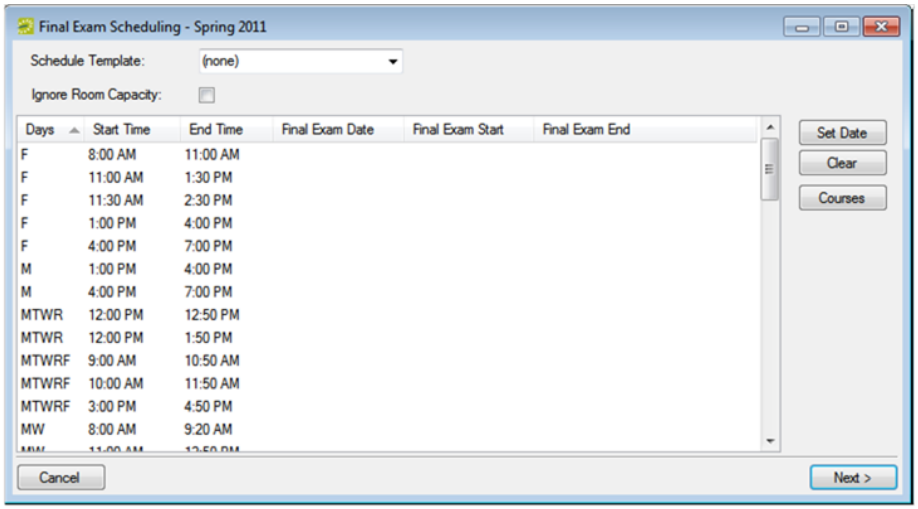
> **Note:**
> If needed, you can repeat these steps for specific buildings until you have selected all the rooms in specific buildings that can host a final exam.

7. Click **OK**. The Final Exam Session dialog box closes. You return to the Final Exam Sessions window with the newly configured session automatically selected.

8. Continue to “Publish the final exam session” below.

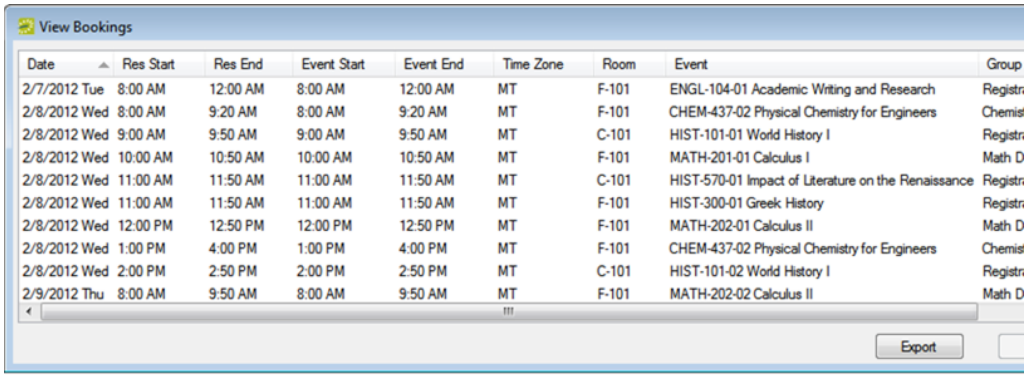
Publish the Final Exam Session

1. If you have not already done so, open the Final Exam Session dialog box and select the session that is to be published.
2. Click **Publish**. The Final Exam Scheduling window opens. This window lists all the unique course schedule patterns for the term for which you are publishing the final exam session.



3. On the Schedule Template dropdown list, select the final exam template that is to be used for the term, and optionally select Ignore Room Capacity if you do not want EMS to consider room capacity when assigning final exam sessions. The Final Exam Date, Final Exam Start, and Final Exam End columns are automatically populated based on the applied template.
4. If necessary, do one or more of the following:
   - Select a unique course schedule pattern and click Set Date to open the Final Exam Date dialog box and edit a pattern setting, or create a course schedule pattern that was not in the selected template.
   - Select a unique course schedule pattern and click Clear to clear the pattern setting, and then click Set Date to open the Final Exam Set dialog box and edit the pattern as needed.
5. Click **Next**. The Final Exam Scheduling window lists the summarizing information for any special/common exams that have been set for specific courses.
6. Optionally, select a course, and then click **Open** to view the course in the Course Navigator.
7. Click **Finish**. A message opens, indicating that you are about to publish the final exam schedule, and asking you if it is OK to continue.

8. Click **Yes**. The message closes. After the final exam session is published, a second message opens indicating this.
9. Click **OK**. The second message closes and the View Bookings window opens. By default, the window initially shows only those final exam bookings for which a room could not be scheduled.



Date	Res Start	Res End	Event Start	Event End	Time Zone	Room	Event	Group
2/7/2012 Tue	8:00 AM	12:00 AM	8:00 AM	12:00 AM	MT	F-101	ENGL-104-01 Academic Writing and Research	Registr
2/8/2012 Wed	8:00 AM	9:20 AM	8:00 AM	9:20 AM	MT	F-101	CHEM-437-02 Physical Chemistry for Engineers	Chemist
2/8/2012 Wed	9:00 AM	9:50 AM	9:00 AM	9:50 AM	MT	C-101	HIST-101-01 World History I	Registr
2/8/2012 Wed	10:00 AM	10:50 AM	10:00 AM	10:50 AM	MT	F-101	MATH-201-01 Calculus I	Math D
2/8/2012 Wed	11:00 AM	11:50 AM	11:00 AM	11:50 AM	MT	C-101	HIST-570-01 Impact of Literature on the Renaissance	Registr
2/8/2012 Wed	11:00 AM	11:50 AM	11:00 AM	11:50 AM	MT	F-101	HIST-300-01 Greek History	Registr
2/8/2012 Wed	12:00 PM	12:50 PM	12:00 PM	12:50 PM	MT	F-101	MATH-202-01 Calculus II	Math D
2/8/2012 Wed	1:00 PM	4:00 PM	1:00 PM	4:00 PM	MT	F-101	CHEM-437-02 Physical Chemistry for Engineers	Chemist
2/8/2012 Wed	2:00 PM	2:50 PM	2:00 PM	2:50 PM	MT	C-101	HIST-101-02 World History I	Registr
2/9/2012 Thu	8:00 AM	9:50 AM	8:00 AM	9:50 AM	MT	F-101	MATH-202-02 Calculus II	Math D

10. Optionally, do one or more or all of the following:
    - To view all final exam bookings, clear the Show Unassigned Only option.
    - To view a course in the Navigator, select the course, and then click Open.
    - To export the course list to a Microsoft Excel spreadsheet, click Export.

> **Note:**
> Unless the option to require the same room was selected for a course, course preferences can be considered and the final exam for the course can be scheduled in another room through optimization. Courses can be assigned to TBD if no rooms were available. Those courses that are in a different room than they were all semester have the NO flag in the same room column.

11. Click **Close** to close the View Bookings window and return to the Final Exam Sessions window. The final exam session publishing process adds the final exam for each course as a separate booking in the course's reservation. After you publish a final exam session, you can find the final exam booking for a course by opening the course in the Navigator and expanding the reservation and scrolling to the bottom of the Reservation (left) pane, or to the bottom of the Bookings (lower right) pane. You can use the Final Exam Schedule report to review the final exam schedule or the Final Exam Settings report to view optional settings. (See Generate Academic Reports.) To open the View Bookings window again, click View on the Final Exam Sessions window. If you delete a final exam session, then all final exam bookings that are associated with the session are deleted.

Using the Academic Tools

- Search with the Academic Browser
- Use the Academic Book
- Use the Course Navigator
- Use the Search for Rooms Tool

CHAPTER 70: Post-Publish Processing of Courses

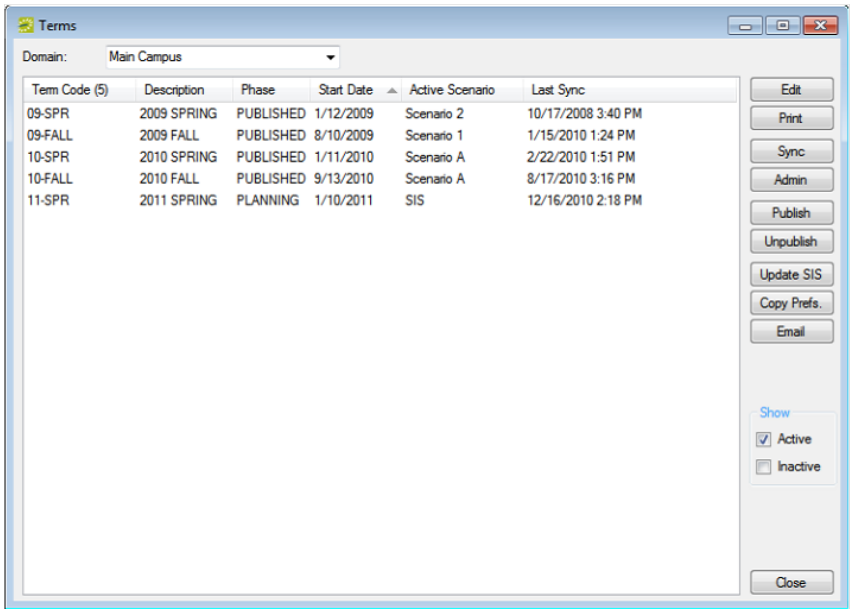
In most cases, courses are added, changed, or canceled in the SIS after the course schedule has been published in EMS. You can manually resynchronize and process these courses, or you can set options in EMS Academic Planning to automatically resynchronize these courses. After these course are automatically resynchronized, they can be automatically processed as well, or you can manually process them. Also, at the point that actual enrollment should determine room assignment (that is, can a room's capacity handle the actual enrollment), you can process courses post-publish so that the courses are updated with the actual enrollment.

Note:

For automatic synchronizing to occur, the EMS Academic Planning Auto Sync Service must be installed and configured. Refer to the EMS Installation manual for details.

Manually Process Courses Post-publish

1. On the EMS Academic Planning menu bar, click Academic Planning > Courses > Manage Terms. The Terms window opens.

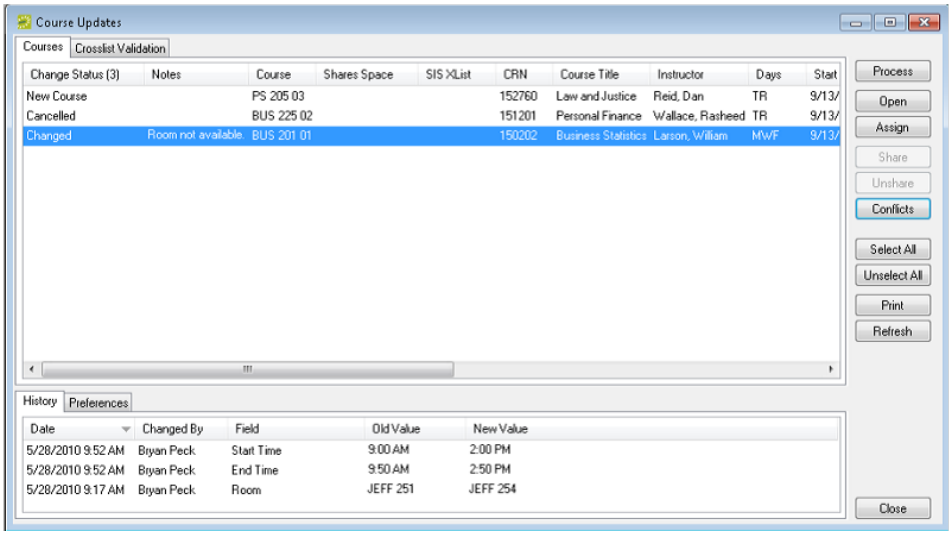


2. Select the term which requires post-publish processing, and then click **Sync**.

   The Course Updates window opens. The **Course** tab is the active tab. This tab displays all the new courses, new course dates, changed courses, or canceled courses from the SIS. After processing, it

also lists *Room Capacity Violations*, or courses in which the designated enrollment (estimated or actual) has surpassed the capacity of the room. The Course Updates window also has a **Crosslist Validation** tab. When EMS changes a cross-list parent to accommodate a new course, course date, or change that is being processed, the cross-listed courses are displayed on the **Crosslist Validation** tab. The **Crosslist Validation** tab is for informational purposes only so that you are kept abreast of parent changes.

If you are satisfied with the parent assignments, you can simply click **Reviewed** and the cross-listed courses are cleared from the tab; otherwise, a Set Parent option is available.



Course Updates Window, Courses tab

3. Continue to one of the following:
   - Process a canceled course post-publish
   - Process a changed course post-publish
   - Process a new course date post-publish
   - Process a new course post-publish
   - Process a Room Capacity Violation post-publish

Note:
The following procedures are presented in the order in which the post-publish processing should be carried out—cancellations, changes, new course dates, new courses, and then Room Capacity Violations.

Process a Canceled Course Post-Publish

1. Select the canceled course, or CTRL-click to select multiple courses.
2. Click **Process**. A message opens asking you if you are sure that you want to process the selected course dates.
3. Click **Yes**. After processing is complete, the message closes and the canceled courses are removed from the Course Updates window. The bookings are canceled in EMS.

Process a Changed Course Post-Publish

A course is listed as changed if there has been a change to the start or end date, a day of the week, the start or end time, and/or the room in the SIS.

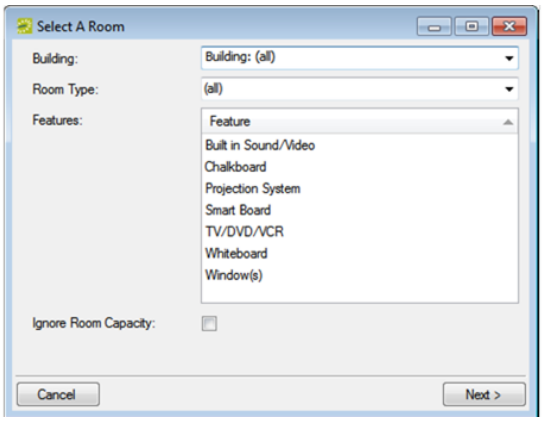
1. Select the changed course, or CTRL-click to select multiple courses. The change history for the selected courses is displayed on the History tab in the lower pane of the Course Updates window.
2. Click **Process**.

   A message opens asking you if you are sure that you want to process the selected course dates.
3. Click **Yes**. Two results are possible:
   - If the changes were successfully completed for the reservations and bookings, then the courses are removed from the Course Updates window.
   - If the changes resulted in a room conflict, Room Not Available is displayed in the Notes column. Go to Step 4.
4. Click **Conflicts** to view the conflicts for the course. The View Conflicts dialog box opens. Each course and/or event that is causing the conflict is displayed.
5. If the conflict was caused by the switching of the rooms in the SIS, select the two course dates that are in conflict, and then click **Swap** to swap and process the rooms in the same step; otherwise, go to Step 6.
6. Do one of the following:
   - Click **Process** again to process the course with conflicts.

     A Warning message opens asking you if you are sure that you want to process with conflicts. Click **Yes** to close the message and complete the processing.

> **Note:**
> If needed, at a later date, you can use the Browser to manually search for these conflicts and resolve them.

- Click **Assign** to search for a new room. The Select a Room dialog box opens. Go to Step 7.



7. Specify your search criteria, and then click **Next**. A list of rooms that meets your search criteria is displayed.
8. Select the room that is to be assigned to the new courses, and then click **Finish**. The Select a Room dialog box closes and you return to the Course Updates window with the new courses still selected.
9. Click **Process**. A message opens asking you if you are sure that you want to process the selected course dates.
10. Click **Yes**.

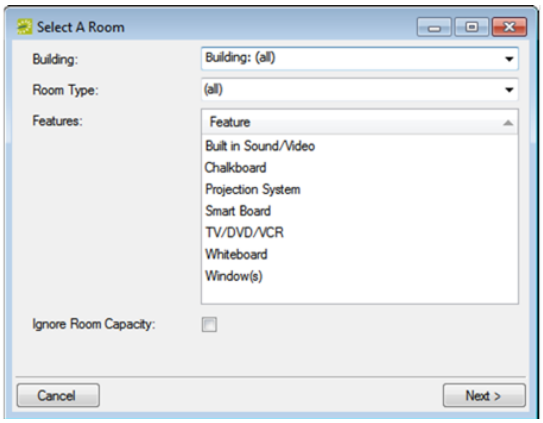
    After processing is complete, the message closes and the changed courses are removed from the Course Updates window. If a Day of the Week change has been made, then processing course changes deletes and recreates the bookings that were previously made in EMS.

> **Note:**
> If bookings are deleted and recreated, then any manual changes that have been made to these bookings and/or any services that have been added to the booking are lost.

Process a New Course Date Post-Publish

1. Select the new course dates, or CTRL-click to select multiple new course dates.
2. If rooms have already been assigned to the course dates in the SIS and you want to keep these

rooms, then go to Step 5; otherwise, click Assign to open the Select A Room dialog box, and then go to Step 3.



3. Specify your search criteria, and then click **Next**. A list of rooms that meets your search criteria is displayed.

4. Select the room that is to be assigned to the new courses, and then click **Finish**.

   The Select a Room dialog box closes, and you return to the Course Updates window with the new courses still selected.

> **Note:**
> Rooms can be processed without a room assignment. In this case, the course date is published in the TBD room that was specified when the term was published.

5. Click **Process**. A message opens asking you if you are sure that you want to process the selected course dates.

6. Click **Yes**. Two results are possible:

   - If the changes were successfully completed for the reservations and bookings, then the courses are removed from the Course Updates window.
   - If the changes resulted in a room conflict, **Room Not Available** is displayed in the Notes column. Go to Step 7.

7. Click **Conflicts** to view the conflicts for the course.

   The View Conflicts dialog box opens. Each course and/or event that is causing the conflict is displayed.

8. If the conflict was caused by the switching of the rooms in the SIS, select the two course dates that are in conflict, and then click **Swap** to swap and process the rooms in the same step; otherwise, go to Step 9.

9. Do one of the following:

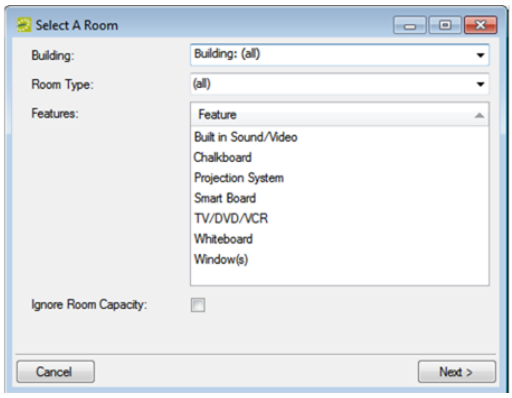
   - Click **Process** again to process the course with conflicts.

     A Warning message opens asking you if you are sure that you want to process with conflicts. Click **Yes** to close the message and complete the processing.

     > **Note:**
     > If needed, at a later date, you can use the Browser to manually search for these conflicts and resolve them.

   - Click **Assign** to search for a new room.

     The Select a Room dialog box opens. Go to Step 10.



10. Specify your search criteria, and then click **Next**.

    A list of rooms that meets your search criteria is displayed.

11. Select the room that is to be assigned to the new courses, and then click **Finish**.

    The Select a Room dialog box closes and you return to the Course Updates window with the new courses still selected.

12. Click **Process**.

    A message opens asking you if you are sure that you want to process the selected course dates.

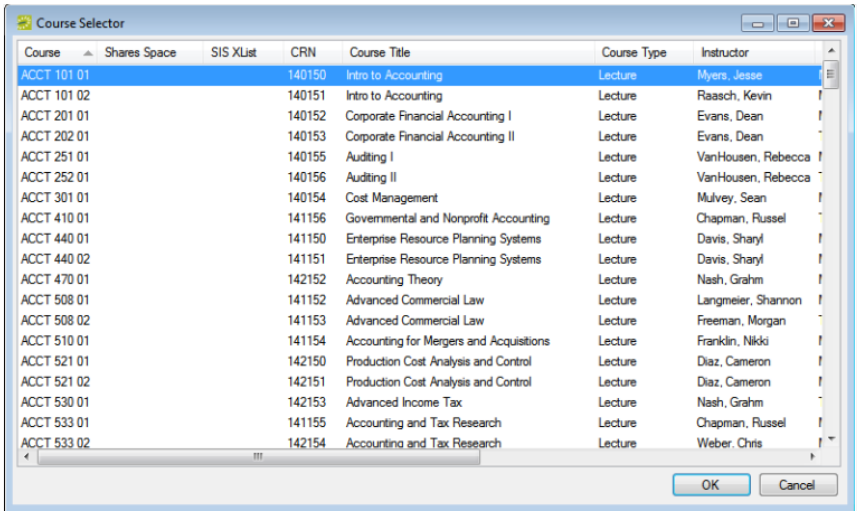
13. Click **Yes**.

After processing is complete, the message closes and the changed courses are removed from the Course Updates window. If a Day of the Week change has been made, then processing course changes deletes and recreates the bookings that were previously made in EMS.

> **Note:**
> If bookings are deleted and recreated, then any manual changes that have been made to these bookings and/or any services that have been added to the booking are lost.

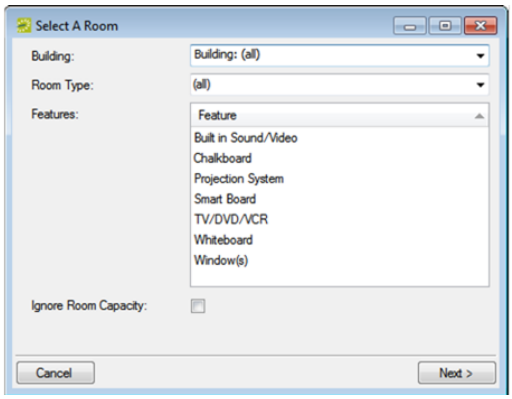
Process a New Course Post-Publish

1. Select the new course, or CTRL-click to select multiple new courses.
2. Do one of the following:
   - If rooms have already been assigned to the courses in the SIS and you want to keep these rooms, then go to Step 6.
   - If a room has already been assigned to the course (the first course) in the SIS, but it is meant to share a room with another course (the second course), then click **Share** to open the Course Selector dialog box, and then go to Step 5.



   - If a room has not been assigned to the course in the SIS, and you want to search for a room, then click **Assign** to open the Select A Room dialog box and then go to Step 3.

> **Note:**
> Rooms can be processed without a room assignment. In this case, the course date is published in the TBD room that was specified when the term was published.



3. Specify your search criteria, and then click **Next**.

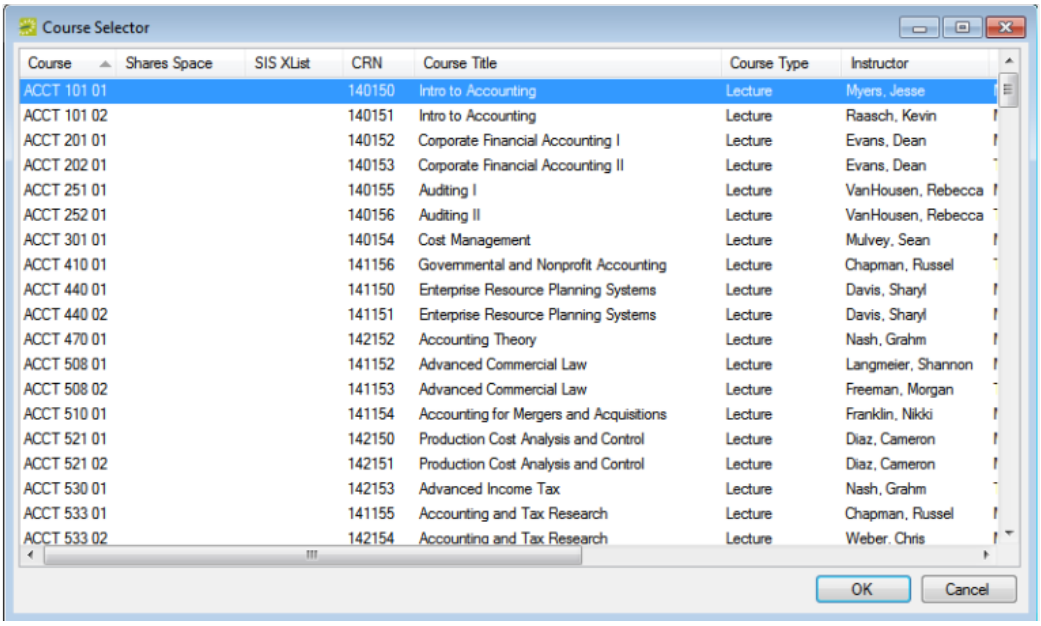
   A list of rooms that meets your search criteria is displayed.

4. Select the room that is to be assigned to the new course, and then click **Finish**.

   The Select a Room dialog box closes and you return to the Course Updates window with the new course still selected.

5. If the course is not meant to share a room with another course, go to Step 6; otherwise, if the course is meant to share a room with another course, then do the following:

- Click **Share** to open the Course Selector dialog box.



- Enter the appropriate search criteria (CRN, Course Title, Subject and/or Instructor) to search for the second course.
- Select the second course, and then click **OK**.

  You are returned to the Course Updates window.

6. Click **Process**.

   A message opens asking you if you are sure that you want to process the selected course dates.

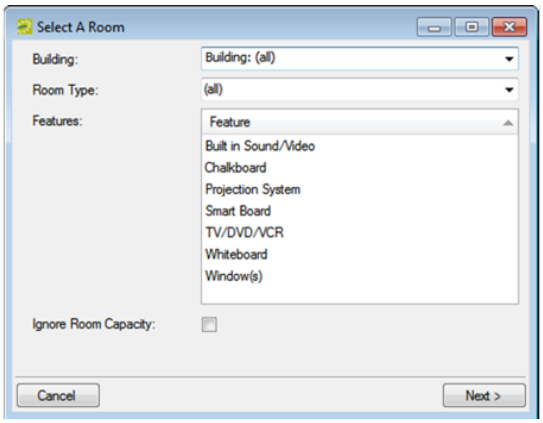
7. Click **Yes**.

   After processing is complete, the message closes and the new courses are removed from the Course Updates window.

Process a Room Capacity Violation Post-Publish

If the enrollment for a class violates the minimum or maximum capacity for its assigned room, then the course is displayed on the Course Updates window with a change status of Room Capacity Violation.

1. Select the course, or CTRL-click to select multiple courses.
2. To assign the course to a new room, click **Assign** to open the Select a Room dialog box, then go to Step 3; otherwise, to leave the course in the same room, go Step 5.



3. Specify your search criteria, and then click **Next**.

   A list of rooms that meets your search criteria is displayed.

4. Select the room that is to be assigned to the new course, and then click **Finish**.

   The Select a Room dialog box closes and you return to the Course Updates window with the new course still selected.

5. Click **Process**. A message opens asking you if you are sure that you want to process the selected course dates.

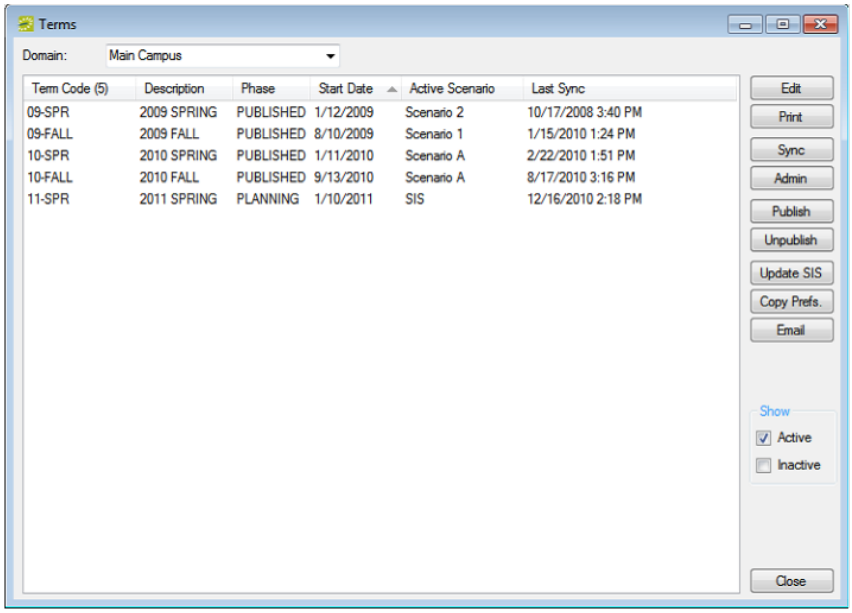
6. Click **Yes**. After processing is complete, the message closes and the new courses are removed from the Course Updates window.

> **Note:**
> If you did not assign a new room to the course, then clicking **Process** merely acknowledges the room violation. The course remains in its same room.

Automatically Process Courses Post-Publish

1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**.

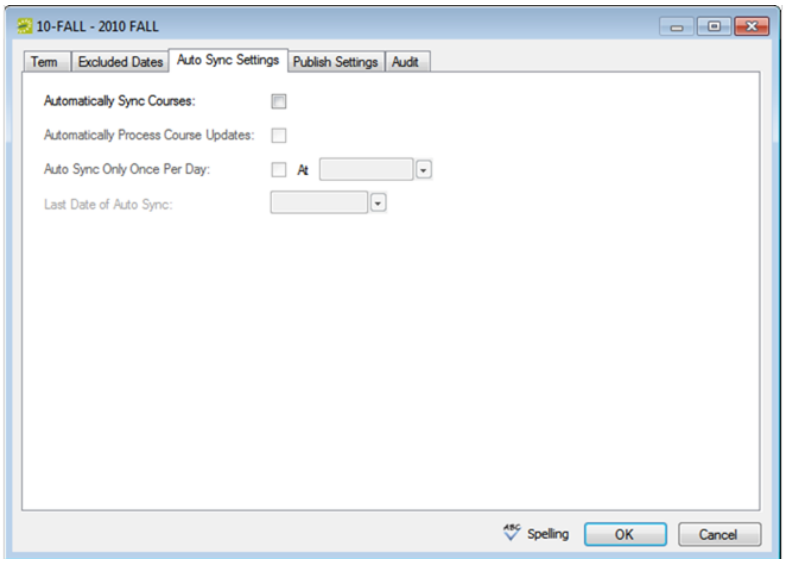
   The Terms window opens.



2. Select the term which requires post-publish processing, and then click **Edit**.

   The Term dialog box opens. The **Term** tab is the active tab.

3. Open the **Auto Sync Settings** tab.

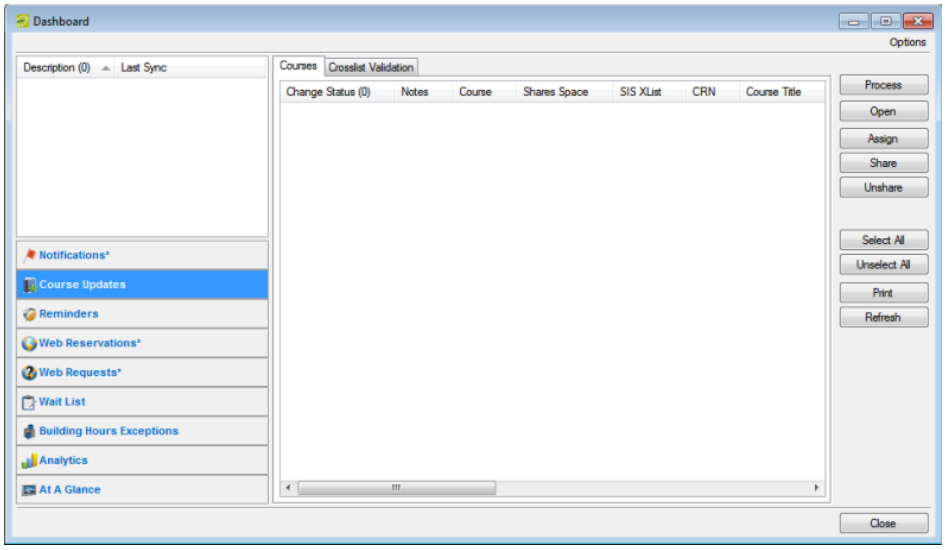


4. Specify your auto sync settings.

Setting	Description
Automatically Sync Courses	Select this option to automatically synchronize courses in your SIS. **Note:** To automatically synchronize courses, a user who can carry out this function must be created, and this user must be specified for the Auto Sync User EMS (Campus) system parameter.
Automatically Process Course Updates	Select this option if EMS is to automatically process new courses, changes, and cancellations if possible. Leave the option blank to manually process new courses, changes and cancellations from the EMS Dashboard. (See To manually process courses post-publish.) **Note:** If this option is selected, and EMS cannot automatically process new courses, course dates and/or changes because of a conflict (for example, a room is not available), then you must manually process these courses. You must open the Course Updates tab on the EMS Dashboard, and then open the Courses sub-tab to view the courses in conflict that you must manually process. The Courses sub-tab is identical to the Course Updates window. See EMS Dashboard for information about working with tabs on the Dashboard window. In addition to this setting, three Campus system parameters determine the specific types of updates that you are auto-processing.
Auto Sync Only Once Per Day	If you do not select this option, then EMS automatically synchronizes the courses in your SIS according to the settings for the EMS Academic Planning Auto Sync service.
Last Date of Auto Sync	Required value. Enabled after Automatically Synch Courses is selected. Select the last date on which synchronization is to be automatically carried out by EMS for this term, which typically corresponds to the last date of the term.

5. Click **OK**.

The Term dialog box closes. You return to the Terms window.



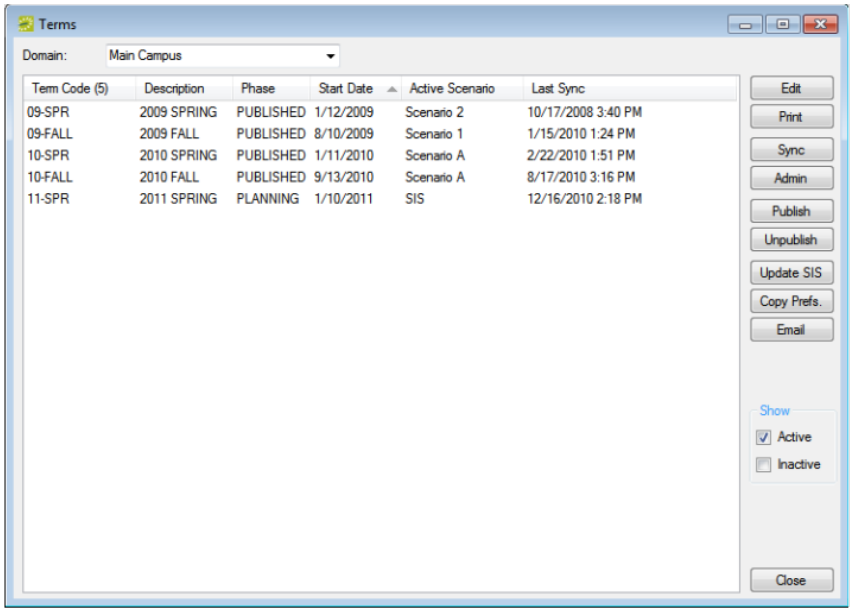
Dashboard window, Course Updates tab

Process Courses Post-Publish for Enrollment

Typically, you publish your term in EMS prior to registration beginning. As a result, estimated enrollment is the most relevant value for searching for rooms with appropriate capacities. Closer to the start of the term, however, actual enrollment might become more relevant and you might need to change the setting so that EMS uses this value when searching for new rooms in the Navigator wizards and Course Updates window.

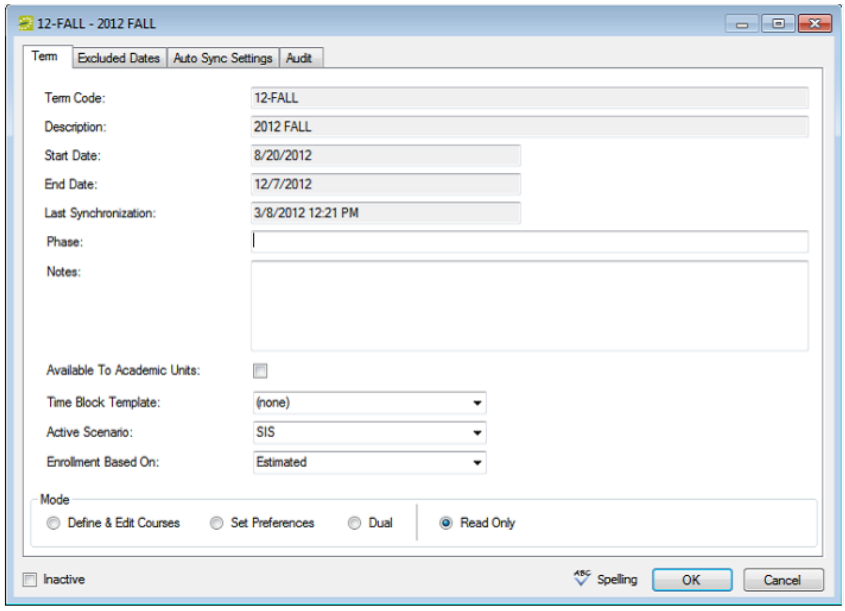
1. On the EMS Academic Planning menu bar, click **Academic Planning** > **Courses** > **Manage Terms**.

   The Terms window opens.



2. Select the term which requires post-publish processing, and then click **Edit**.

   The Term dialog box opens. The **Term** tab is the active tab.

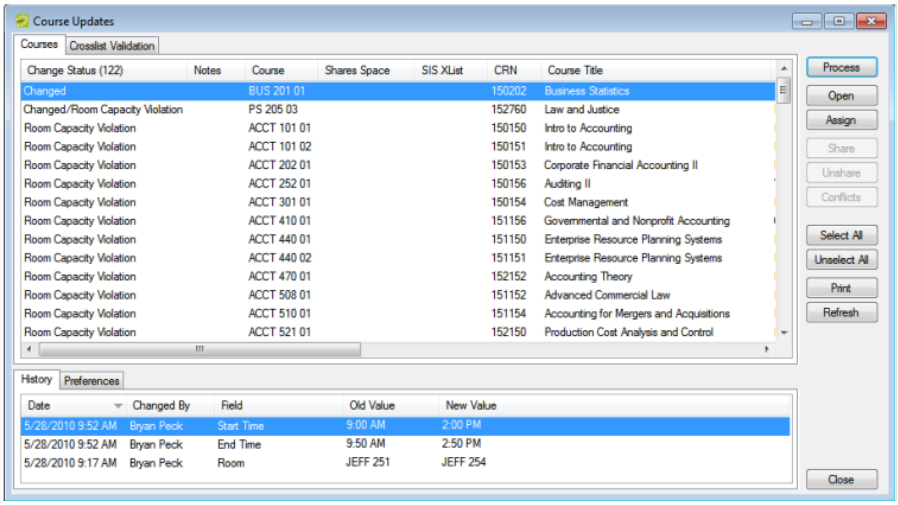


3. On the Post Publish Enrollment drop-down list, select **Actual**, and then click **OK**.

   The Term dialog box closes. You return to the Terms window with the term still selected.

4. Click **Sync**.

A Synchronizing progress dialog box opens. After the synchronization is complete, the Course Updates window opens. If the actual enrollment for a class violates the minimum or maximum capacity for its assigned room, then the course is displayed on the window with a Change Status of Room Capacity Violation.



Course Updates window showing rooms with capacity violations

5. To assign the course to a new room, click **Assign**; otherwise, go to Step 8.

   The Select A Room dialog box opens.

6. Specify your search criteria, and then click **Next**.

   A list of rooms that meets your search criteria is displayed. The list includes any TBD rooms that have been configured.

7. Select the room that is to be assigned to the new courses, and then click **Finish**. The Select a Room dialog box closes and you return to the Course Updates window with the new courses still selected.

8. Click **Process**. A message opens asking you if you are sure that you want to process the selected course date.

9. Click **Yes**. After processing is complete, the message closes and the courses are removed from the Course Updates window.

Note:

If you did not assign a new room to the course, then clicking **Process** merely acknowledges the room violation. The course remains in its same room.

CHAPTER 71: Generate Academic Reports

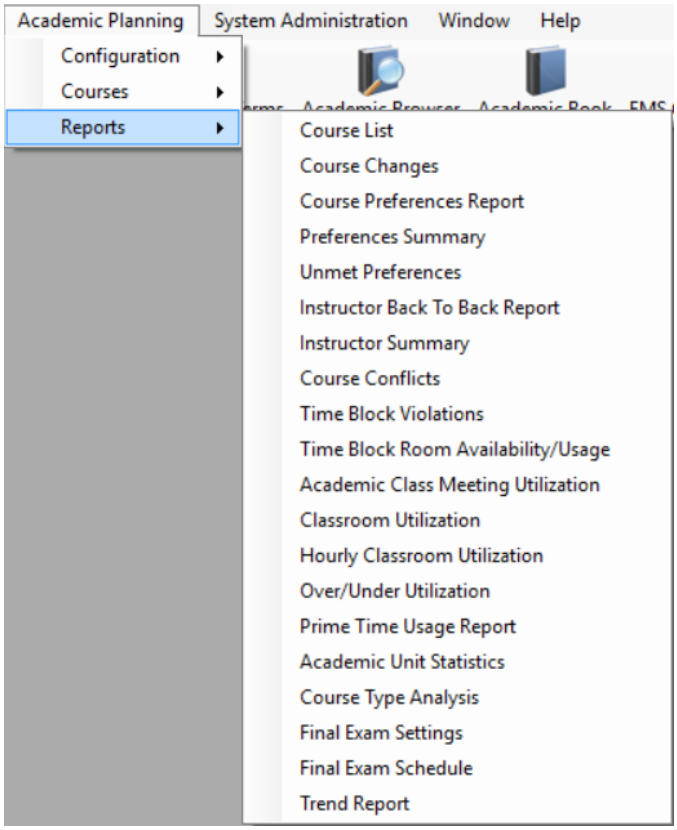
For any academic report, you can specify the parameters, options, and format for the report, or you can generate the report according to memorized settings. (For detailed information about a memorized report, See Also: Work with Saved Reports.)

Not all reports require the same parameters, nor do they all have the same options available. In addition, you can generate different reports in different formats. All subjects must belong to an academic unit to be displayed on an academic report. See Also: Configure Academic User Templates and Synchronize Campus-Specific Data.

This topic will provide information on setting up each type of report:

- Course List
- Course Changes
- Course Preferences
- Preferences Summary
- Unmet Preferences
- Instructor Back to Back
- Instructor Summary
- Time Block Violations
- Time Block Room Availability/Usage
- Academic Class Meeting Utilization
- Classroom Utilization
- Hourly Classroom Utilization
- Over/Under Utilization
- Prime Time Usage
- Academic Class Meeting Utilization
- Course Type Analysis
- Final Exam Settings
- Final Exam Schedule
- Trend Report

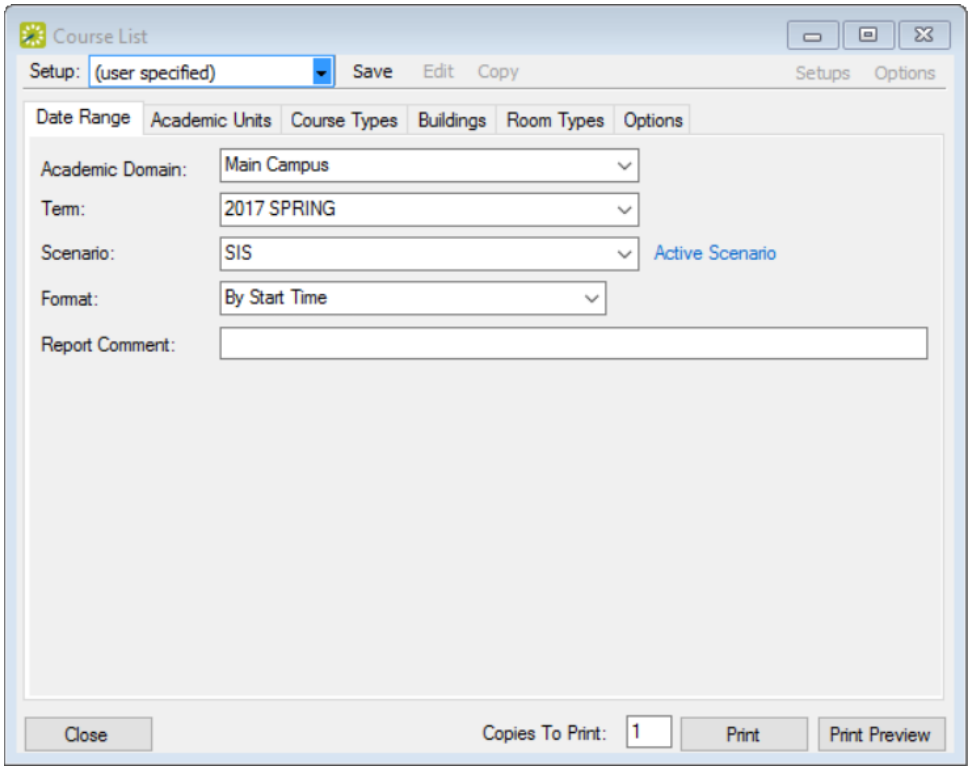
1. On the EMS Academic Planning menu bar, click **Academic Planning** > Reports to open the Reports menu, and then click the report you want to generate. For example, to generate the Course List report, click **Academic Planning** > **Reports** > **Course List**.



Note:

All academic reports are also available under Reports > Academic Planning.

2. On the window that appears, set up your report.



> **Note:**
> In the Setup field, you can leave it as user-specified, however, if there are saved reports available in this drop-down for this type of report, you can select one and streamline the reporting process. See Also: Work with Saved Reports.

In the Report Comment field, you can enter a comment to print on the report (maximum 255 characters).

You can click Print Preview to see an preview of the report.

You can print a hard copy of the report: specify the number of copies that you are printing, and then click Print.

If you want to save settings so that you do not have to adjust them every time you run this type of report, you can click Save. The option will appear in the Setup field drop-down list next time you open this type of report.

3. When you have specified all options, click **Close**. Unless you change the setup, these settings will be used as defaults (which you can change) for all subsequent reports you generate.

Course List

Description	Options
Provides a list of courses and course dates. **Note:** This report is often sent out to academic units for review when the Domain Scheduler is finished with room assignments.	There are options to include courses without room assignments and to print User Defined Fields that are associated with courses. Formats include: • By Course • By Instructor • By Academic Department By Course • By Academic Department By Instructor • By Day of Week • By Location • By Estimated Enrollment • By Start Time • By Subject • By Course Type

Course Changes

Description	Options
Used during Define and Edit Mode to capture changes made by the academic units to courses and course dates so that the Domain Scheduler can data enter these changes into the SIS.	• **Show Changes** • **All Changes For Term**—If selected, all changes for the term (even changes that have possibly already been data-entered into the SIS) are included in the report. • **Changes Since Last Synchronization**—If selected, the report includes only changes that have been made since the last time that the term was synchronized. • **Show Room Changes**—If selected, the report includes changes to rooms (post-publish only). • **Show Canceled Courses Only**—If selected, the report includes only cancellations. • **Show New Courses Only**—If selected,

Description	Options
	the report includes only new courses. • **Show Edited Courses Only**—If selected, the report includes only changes. • **Show Latest Changes Only**—If this option is selected, and a single value has been changed multiple times, the report includes only the most recent change for the field. • **Hide Change Details**—If selected, audit trail details are hidden on the report. • **Show All Courses**—If selected, all courses, even those without changes, are shown in the report. • **Show User Defined Fields**—If selected, the report includes any user defined fields that have been completed. • **Show Notes**—If selected, any user-supplied notes are shown in the report. **Note:** The options that are marked with an asterisk (*) are the recommended options for the most inclusive reports.

Course Preferences

Description	Options
Used after Set Preferences mode to provide a list of courses and course dates with their preferences and requirements.	Format Choices: • By Course • By Academic Department By Course • By Academic Department by Instructor

Preferences Summary

Description	Options
After running an optimization scenario, this report is used to summarize the following information: • The number of each type of preference or requirement. • The number of the preferences that can be met from the optimization process. • The number of preferences that cannot be met from the optimization process. You can generate this report for each different scenario that was optimized.	N/A

Unmet Preferences

Description	Options
After running an optimization scenario, this report is used to list the courses that had preferences or requirements that were not met during the optimization process. You can generate this report for each different scenario that was optimized.	Format Choices: • By Course • By Academic Department By Course • By Academic Department by Instructor

Instructor Back to Back

Description	Options
Lists the courses that have instructors who are scheduled to teach two courses at the same time (Conflicts) and instructors who are teaching back to back in different locations within the time gap that is specified in Options.	• The days of the week that are to be included in the instructor's schedule. • The time gap (in minutes) between classes on the specified days that determines "back to back."

Instructor Summary

Description	Options
This report includes the following values per instructor: • Number of sections. • Number of teaching hours. • Number of credit hours. • Total estimated enrollment. • Total actual enrollment. • Number of sections in Prime Time. • Number of Time Block violations,.	N/A

Time Block Violations

Description	Options
Lists the courses that are in violation of the Time Block template. In the Summary format, the following values are included: • Total number of course dates • Total in violation • Percent in violation • Total that meet the Time Block template • Percent that meet the Time Block template • Percent of total violations per academic unit	Format options: • By Course • By Instructor • By Academic Unit By Course • By Academic Unit By Instructor • Summary • Chart - Violation Count • Chart - Violation Totals • Show All Courses • Include Courses Not Assigned To Rooms • Show User Defined Fields

Time Block Room Availability/Usage

Description	Options
Displays the number of rooms that are either available or in use for each room size (Small, Medium, or Large) for each time block. **Note:** To generate this report, a Time Block template must be indicated on the term.	• Format options: • Availability • Usage • Indicate Low Availability and High Availability Thresholds • Include All Active Scenarios in other Domains

Academic Class Meeting Utilization

Description	Options
Used after publishing to view the percent utilization of your rooms based on the number of class meetings that you specify. For instance, if you hold 50 minute courses from 8:00 - 5:00 (9 meetings) and have one evening course from 6:00 - 9:00 (1 meeting) Monday through Friday (x5), you would have 50 class meetings per week.	N/A

Classroom Utilization

Description	Options
Used to analyze the percent that your rooms are utilized compared to a number of hours and the percentage of seats full (selected enrollment compared to room capacity). **Note:** In Manage Terms, you can specify either estimated enrollment or actual enrollment. The value that you selected is the value that is used to calculate the values for this report.	• Format Options: • Detail • Chart - By Building • Chart - By Room Type • Chart - By Room Size • The days of the week that are to be included in the report

Description	Options
	• The Hours Per Day that are to be considered • Include All Active Scenarios in other Domains

Hourly Classroom Utilization

Description	Options
Calculates the percent that a room is used during each hour of the day. Formats include detailed (percent for each hour of each room specified) and chart (a chart of each hour for overall).	• Format Options: • Detail • Chart • The days of week that are to be reviewed • Include All Active Scenarios in other Domains

Over/Under Utilization

Description	Options
Displays those courses that have an adjusted enrollment that is either over the maximum capacity for the room or under the minimum capacity for the room and seat fill.	To show or not to Show All Courses (regardless if they fall outside capacity thresholds)

Description	Options
Note: In Manage Terms, you can specify either estimated enrollment or actual enrollment. The value that you selected is the value that is used to calculate the values for this report.	

Prime Time Usage

Description	Options
This report displays the number of sections (course dates) with room assignments that fall within the specified time range (Prime Time) or that have been indicated as Prime Time on the Time Block template. **Note:** In Manage Terms, you can specify either estimated enrollment or actual enrollment. The value that you selected is the value that is used to calculate the values for this report.	Format options: • Detail • Chart - Sections • Chart - Class Meetings • Chart - Class Hours • The days of the week that are to be included in the report • Include courses that have not been assigned into a room

Academic Unit Statistics

Description	Options
Displays the following statistics for course dates that have been scheduled into rooms: • Number of sections per unit • Percentage of the total sections • Number of class meetings • Percentage of the total class meetings • Number of class hours • Percentage of class hours	Format options: • By Academic Unit • By Academic Time Block • The days of the week that are to be included in the report • Include course dates that have not been assigned into a room

Description	Options
• Average estimated enrollment • Average actual enrollment • Average seat fill **Note:** In Manage Terms, you can specify either estimated enrollment or actual enrollment. The value that you selected is the value that is used to calculate the values for this report.	

Course Type Analysis

Description	Options
Displays the following statistics indicated by course type: • Number of sections • Percentage of the total sections • Number of class meetings • Percentage of the total class meetings • Number of class hours • Percentage of class hours • Average estimated enrollment • Average actual enrollment	• Format options: • Detail • Chart - Sections • Chart - Class Meetings • Chart - Class Hours • Chart - Actual Enrollment • The days of the week that are to be included in the report • Include course dates that have not been assigned into a room

Final Exam Settings

Description	Options
Outlines any final exam settings that are marked on courses for preparation of publishing the final exam schedule.	• Show All Courses - Displays all courses and their corresponding settings • Show Final Exam Not Required - Limits the

Description	Options
	report to those courses that had "No Exam Required" specified • Show Special/Common Exams - Limits the report to only those courses with special/common exams settings

Final Exam Schedule

Description	Options
Displays a list of courses with the corresponding final exam date, time, and room as assigned by the final exam session.	• All Assigned - All courses that have been assigned to a room by the final exam session • Different Rooms - All courses that have been scheduled in room that was not the same that was used all semester for the course for the final exam • Unassigned - All courses that have not been scheduled in a room for the final exam • Final Exam Not Scheduled - All courses for which no final exam was scheduled

Trend Report

Description	Options
Shows how the following statistics are trending term by term: • Percent utilization • Percent estimated seat fill • Percent actual seat fill • Percent sections in Prime Time • Percent sections over maximum capacity • Percent sections under minimum capacity • Percent Time Block violations	Format options: • By Term • By Term By Academic Unit • Chart • The days of the week that are to be included in the report • The number of hours per day that are to be used to calculate utilization • Include course dates that have not been assigned into a room

EMS Desktop Client - Academic Planning - April 2019

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