

Cohort Scheduling Secondary Schools

August 12, 2020







Version History

Version	Date	Description	
1.0	6-Aug-2020	Initial document creation	
1.1	12-Aug-2020	Added section 2.2.6 Review Student Schedules.	

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1.0 Introduction

The purpose of this guide is to assist Secondary schools with re-scheduling course sections and students, after a master schedule has been completed. It is a condensed version of the 10 scheduling modules, which should be followed when initially creating a master schedule and loading students. This guide will walk participants through key components to consider a logical order in which steps should be completed and how to perform the required actions.

The guide is based on moving from a Full Year (linear), Semester and Quarterly master schedule to strictly Quarterly. Even if this is not the exact model of your current master schedule or the structure you are moving to, the topics and steps are relevant for all schools, regardless of their current structure and what they may be moving towards.

Additionally, this guide is based on a process of manually scheduling course sections into new Terms, Days & Periods, Rooms, with a Teacher and then hand loading students into those course sections. It does not cover the complete steps required (Patterns, Pattern Sets, Course Setup with Cover and Base Terms, Periods per Cycle, applying Pattern Sets, Optional Build and Load attributes or Rules) to have the MyEducation application schedule course sections or load students based on course requests. If a school would like to do this, please follow the information laid out in the 10 scheduling modules.

2.0 Working in Build view after End of Year Rollover (EOYR)

After the EOYR process has been completed, ALL functionality is still available in the Build view. It is not until after a Scenario has been Committed - moving the Scenario from the Build view to the School view to become the Active Schedule - that users will no longer be able to utilize Build view functionality. And even after the Commit process has been completed, it is still possible to move back into the Build view and Re-commit a scenario. If a school wishes to Re-Commit a Scenario please reach out to the Service Desk for assistance, as there can be very significant consequences depending on the amount of work completed in the School view

2.1 Create a New Scenario

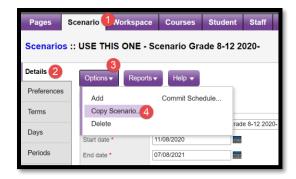
It is highly advisable when beginning this process, that schools make a Copy of their latest Scenario they intended to commit and uncheck shared Preferences. By making, a copy of the Scenario schools will have their completed master schedule and student schedules to refer back. By unchecking shared Preferences, the school will not affect their previous work.

2.1.1 How to Copy a Scenario

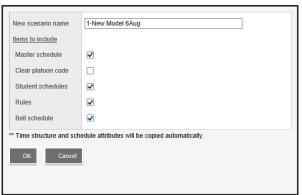
- 1. From Scenario top tab (tt).
- 2. Click into the last Scenario worked on so the *Details* is highlighted.
- 3. Click Options > Copy Scenario....







- 4. Complete the following fields
 - Enter a New scenario name a suggestion is to make this descriptive for example 1-New Model 7Aug
 - Check Master Schedule
 - Uncheck Clear Platoon Codes
 - Check Student Schedules
 - Check Rules (you may not be running the Build or Load process, but this will
 ensure the Rules come forward if you so choose to use them later in the process)
 - Check Bell schedule
 - Check *Rotation* (this will only be present if the school used the Rotate Schedule function)



5. Click Ok

2.1.2 Setting Shared Preferences

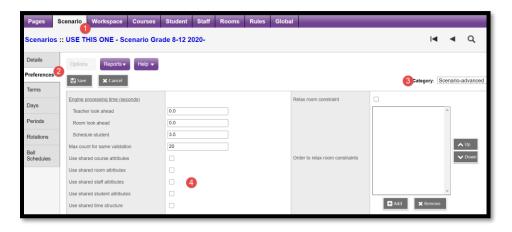
Within the Preferences of a Scenario you have the ability to *Share* different settings you make in this Scenario with others and vice versa. It is advisable, with in this New Model Scenario, that you Uncheck all shared Preferences. This will ensure the work you do in this Scenario (and subsequent copies of this one) are not pushed back to Scenarios you worked on previously.

- 1. Scenario tt >
- 2. Preferences st >
- 3. Category (far left of the screen) = Scenario-advanced.
- 4. Uncheck:
 - Use shared course attributes





- Use shared room attributes
- Use shared staff attributes
- Use shared student attributes
- Use shared time structures



5. Click Save





2.2 Identifying Cohort groups of Students

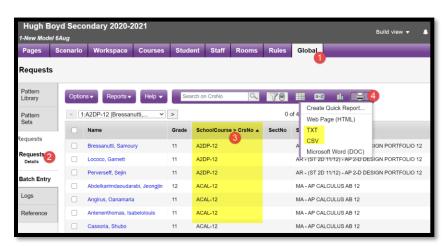
This section covers methods to assist in identify students, whom have similar course requests or have been scheduled together in course sections. *There is no single report, extract or screen to identify cohort groups of students*. Below are some suggested ways within the application that may help.

2.2.1 Course Requests

Please keep in mind, Course request are Global to *ALL* scenarios, therefore any modifications to these will affect other Scenarios.

From the Global top tab (tt) > Request side tab (st) all requests for all students, at a school are listed.

By clicking on the column header of *SchoolCourse > CrsNo*, the list can be sorted thereby grouping all students whom have chosen the same course. This information can be printed as a Txt or CSV file for further analysis.







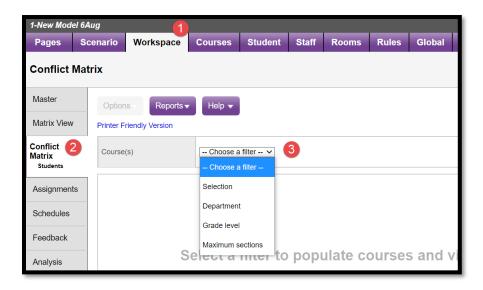
2.2.2 Conflict Matrix

The Conflict Matrix shows a grid of the numbers of students who have requests for the same two courses and therefore be used to start to identify Cohort groups of students.

This number appears at the course intersection. Click it to see a list of students who requested both courses.

You can select what courses to show in the Conflict Matrix, such as by department or grade level. One reason for students being listed in the matrix is if one or both courses have only a single section available. To use the Conflict Matrix:

- 1. Click the Workspace tt
- 2. Conflict Matrix st.
- 3. In the *Course(s)* section, select one of the following:
 - Selection
 - Department
 - Grade level
 - Maximum sections



- 4. Do one of the following:
 - If you selected *Selection, Department* or *Grade level*, use the pick list that appears to select one or more courses, departments or grade levels respectively, and click OK.
 - If you selected *Maximum* sections, enter the number of sections you want to set as the maximum to appear in the Conflict Matrix and click Submit. Only courses with up to this value appear.



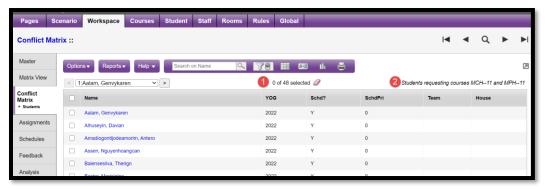


5. In this example, I have chosen *Grade level* of 11 and have used the scroll bars to find two courses with the greatest number of requests.

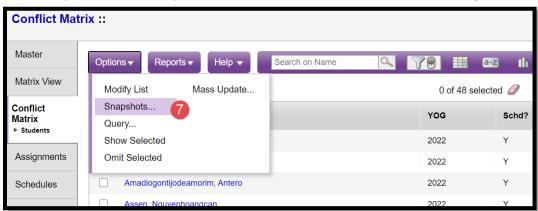
Those two courses are MCH--11 and MPH--11, with 48 requests:



6. At the intersection of two courses, click the number. This will take you to a list of Students that have chosen both courses:



7. From the *Options* menu a *Snapshot* can be created to be used later when loading students:

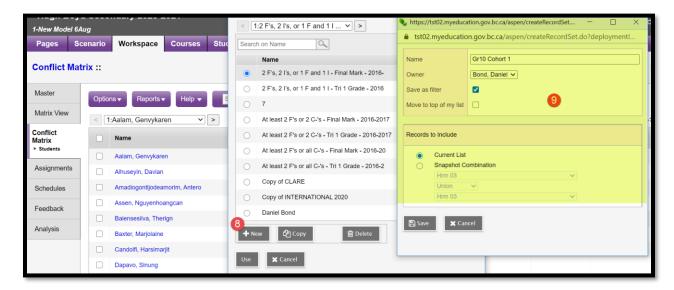


- 8. The *Snapshot* window opens. Click the *New* button.
- 9. A new window opens to identify this *Snapshot*:
 - Name: Enter a name;





- Owner: Set the owner;
- Save as filter: this will make the Snapshot available to the Owner for future use;
- Current List: Select this to save the list of students that have chosen both courses.



10. This *Snapshot* can be edited later to include or exclude more students. This is done from the *Student* tt. Select the student you wish to add, click *Snapshot st > Options > Add... >* a list of *Snapshots* will appear > select the appropriate one.

NOTE: See Section 2.5.1.1 below for more information on the use of Snapshots.





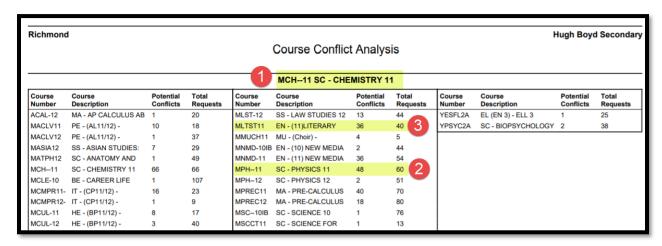
2.2.3 Course Conflict Analysis - Report

Courses tt > Reports

This report shows how many students have chosen one course listed in the header of each page and the number of *Potential Conflicts* with other courses. This information can be used to further determine potential Cohorts of Students.

Following our example of MCH--11 and MPH--11, we can see:

- 1. MCH—11 SC-Chemistry 11 at the top;
- 2. And the number 48 of the requests for MPH--11;
- 3. We can also see that there are 36 requests for MLTST11





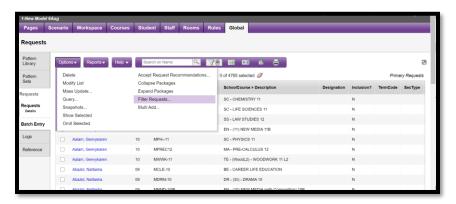


2.2.4 Filter Requests

Filter requests provides a means for the user to find students who have requested a particular set of courses and then show if they have another set of courses requested. This feature is useful to identify students with particular combinations of courses.

In the last example we found 48 students who requested *MCH--11* and *MPH--11*. We can use the *Filter Requests* to determine other courses students may have also requested.

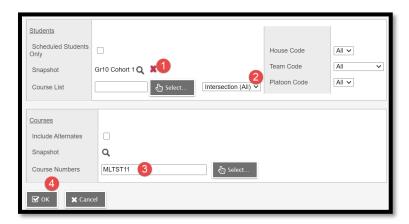
Filter requests is accessed from *Global* tt> *Requests* st > *Options* > *Filter Requests...*



The upper block is used to identify the students with All (Intersection) or Any (Union) of a chosen group of courses.

The lower block determines which course request or requests will be displayed for the students identified using the upper block filter.

- 1. Using our previous example of Gr10 Cohort 1, select this Snapshot in the upper block;
- 2. Select Intersection (All);
- 3. In the lower block enter or Select another course(s). In this example I have chosen MLTST11;
- 4. Click OK;



5. We can see there are 31 students from the snapshot that have also chosen MLTST11





			5	0 of 31 selected
Name	Grade	SchoolCourse > CrsNo 🛦	SectNo	SchoolCourse > Description
Alhuseyin, Davian	10	MLTST11		EN - (11)LITERARY STUDIES 11A
Assen, Nguyenhoangcan	10	MLTST11		EN - (11)LITERARY STUDIES 11A
Baiensesilva, Therign	10	MLTST11		EN - (11)LITERARY STUDIES 11A



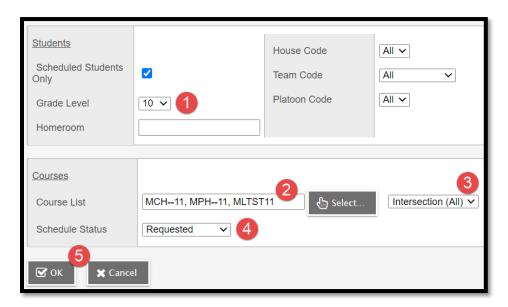


2.2.5 Filter Students

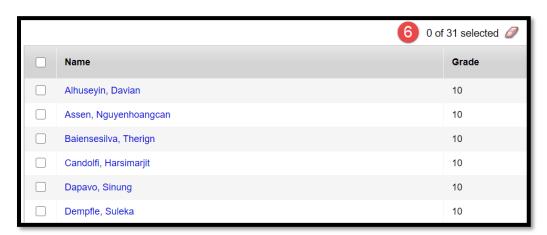
Student tt > Options > Filter Students...

Filter students allows the user to find students by grade, homeroom, or house/team/platoon code that have a course or courses with a given schedule status. This can be used to determine how many students have chosen particular courses.

- 1. In the <u>Students</u> upper block, select the criteria of students you want to analyze (e.g. *Grade Level* = 10);
- 2. In the *Courses* lower block, select the courses from the *Course List*
- 3. Select Intersection (All);
- 4. Select the Schedule Status = Requested.
- 5. Click OK



6. We can see there are 31 students:



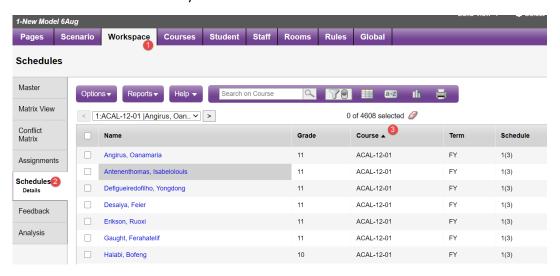




2.2.6 Review Student Schedules

Workspace tt > Schedules st

Schedules for all students, in this scenario, can be viewed and printed (TXT or CSV) from this area for further analysis. By sorting on the column header of *Course* (which is actually the courses sections) users can see all student schedules by course sections.



2.3 Modifying the Scenario Structure

The Scenario structure defines the Terms, Days and Periods that are going to be used to schedule course sections.

If modifications are going to be made to any of these <u>Ensure your Scenario Preference of 'Use shared</u> <u>time structure' is <u>UNCHECKED</u> – this will ensure you do not impact other scenarios (see section 2.1.2 for details)</u>

Make adjustments to your *Scenario Structure* <u>**BEFORE**</u> making changes to schedule information of course sections in the Workspace.

2.3.1 Adjusting Terms

It is <u>not advisable to Delete schedule terms</u> during this process. The reason is the application allows the Term value, on the course section (Workspace) to be deleted, leaving the schedule value Day/Period intact – THIS WILL CAUSE SYSTEMS ERRORS WHEN TRYING TO SCHEDULE STUDENTS.

2.3.1.1 Adding Schedule Term Codes values

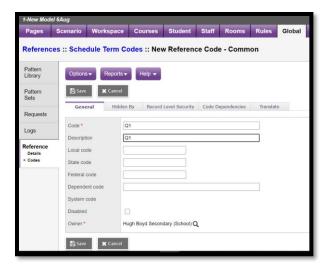
If the desired Term code is not present, it needs to be added to the Schedule Term reference table.

To add schedule terms to the reference table, go to the **Build View > Global > Reference > Schedule Term Codes > Codes > Options > Add**.

Enter a *Code* and *Description* that will be meaningful to the users and Save.











2.3.1.2 Adding Schedule Terms

Once the code has been created terms can be created using that code:

- 1. To add additional schedule terms go to Scenario > Terms > Options > Add.
- 2. From the Code drop down list select the desired schedule term. If the term code representing the required schedule term does not appear, add the code into the reference table as described above.
- 3. Use the following table to enter information in the fields:

Field	Description
Code	Select the code for the schedule term. For example, you might select FY for a full-year term, and S1 for Semester 1. Note: School users with the security role of Schedule Builder can create these schedule term codes from the Build View > Global > Reference > Schedule Term Codes > Codes > Options > Add
Name	Type a name for the schedule term.
Base terms per year	Type the total number of this type of schedule term in your schedule. For example, for a course that meets one-third of the year (a single trimester), there are three base terms. For a course that meets half of the year (a single semester), there are two base terms.
Term map	Select the checkbox that represents which of the base terms this specific schedule term covers. For example, if you are defining Q1 1 and there are 4 base terms, select the first checkbox to indicate that this term is the first of the term.
	Note: The system displays checkboxes that equal the number of base terms you identify at the Base terms per year field. For example, if you identify 4 base terms, four checkboxes appear.
Start & End Dates	Enter when Term starts and ends i.e. when students are receiving instruction.
Grade term cover map	These check boxes are based on the number of Grade Terms defined within the School view. In this sample school the past year had Single Term, Trimester Grades and Quarterly Grades. Check the appropriate boxes to indicate which Grade Terms this Schedule Term will fall within.





2.3.2 Adjusting Days

The number of days defined will appear on a course section when scheduling the section and on the Student > Schedule > Workspace in the Matrix view.

During this process if you are adding days, there is no significant impact.

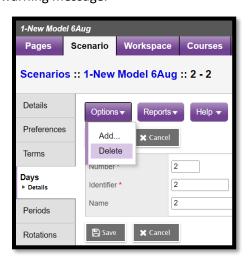
If you are <u>deleting days</u> you will have to run the *Synchronize Schedule* procedure after deletion in the *Workspace* (see section 2.3.2.1 for details).

To Add days:

- 1. On the Options menu, click Add, the Add Day dialog box appears;
- 2. In the Day count field, type the number of days in the schedule scenario.
- 3. Click the TAB key on your keyboard, the dialog box displays the appropriate number of rows, with each row representing one day.
- 4. For each day, type in the Identifier and Name value, for each day.
- 5. Click Save.

To **Delete** days:

- 1. Go into the *Details* of a *Day*;
- 2. Select Options > Delete;
- 3. Select Continue on the warning message.







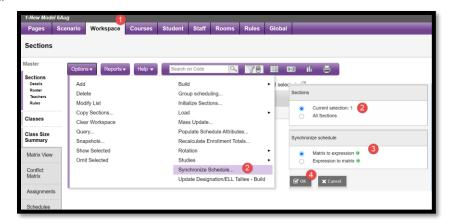


2.3.2.1 Synchronize Schedule

• In the Workspace tt you will see a blue exclamation at the end of the schedule expression:



- Click *Options* > *Synchronize Schedule...* The Synchronize Schedule dialog box appears and indicate how many sections have been selected.
- Select Matrix to expression
- Click OK.



The section is no longer scheduled on the day that was deleted:



2.3.3 Adjusting Periods

Periods do not have to be deleted. If they are left in and sections are not scheduled into them, they will still appear on a Student Schedule Matrix view as blank cells.

The process for Adding and Deleting Days follows the same steps as section 2.3.2. Adjusting Days above with the exception it is done from the *Days* st.

Like Days if Periods are going to be deleted the Synchronize Schedule procedure will have to be run (see section 2.3.2.1 above).





2.4 Modifying Course Section Schedule Information

Schedule information includes the Term, Schedule (Day/Period) and Teacher.

The Schedule information of course sections can be done on mass via a Mass Update or List edit **Options** > **Mass Update** > **Field=Term**, or **Field=Schedule**

NOTE When mass updating the Schedule field, it is a free form test field and therefore the expression (Day/Period) must be **EXACT.** It would be advisable to only do this with the List Edit functionality.

Alternately, this information can be edited by going into the Details of each course section.

2.4.1 Adding and Deleting Course Sections

Schools maybe altering the number of sections of courses being offered or removing sections of certain courses altogether.

If Schools have decided to offer *New* courses there are a couple of additional steps (see https://www.myeducationbc.info/resources/school-schedulers/ MODULE 2 – COURSE CATALOGUES, STUDENT AND STAFF SETUP pdf document).

- First the course needs to be *Added* to the District Catalogue for the 2021 School Year(if not already there);
- Then added to the School course catalogue for the 2021 School Year (School view > Schedule tt
 Courses st > Filter = Build Year and;
- Finally Refreshed into the scenario currently being worked on (Build view > Courses tt > Options > Refresh).

2.4.1.1 Adding Course Sections

Steps:

- 1. Workspace tt > Master st > Options > Add
- 2. New Schedule Build Maser window opens
- 3. Select the lookup magnifying glass in the *Number* field. This will bring up a search window to find the course.
- 4. Select the lookup magnifying glass in the *Staff> Name* field. This will bring up a search window to find the. Teacher.

NOTE: If the teacher is not listed go to **Staff** tt > **Optons** > **Refresh** to make the teacher available.

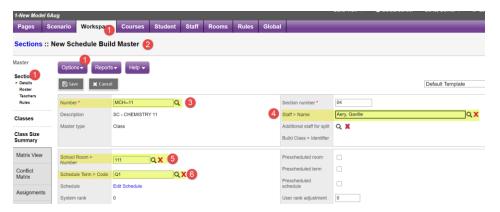
5. Select the lookup magnifying glass in the *School Room > Number* field. This will bring up a search window to find the Room.

NOTE: If the Room is not listed, it will have to be added in the School view (Schedule tt > Room st > Options > Add. Then Refresh into the Build view (Rooms tt > Options > Refresh)





6. Select the lookup magnifying glass in the *Schedule Term > Code* field. This will bring up a search window to select the Term.

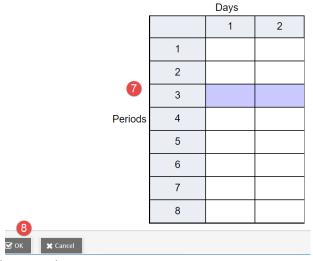


7. The next step is to edit the *Schedule* information for this new section. Click the *Edit Schedule* link, to bring up the *Matrix* window.

Note: This will display the *Days* along the top and *Periods* down the left side. If the number of *Days* or *Periods* does not reflect the desired layout, your school is moving to consider going be to section *2.3 Modifying the Scenario Structure* and making appropriate changes.

Click into each cell to reflect when this course section is to be offered, turning the cell blue.

8. Click Ok.



9. Click *Save* on the newly created course sections.

2.4.1.2 Deleting Course Sections

If Schools need to reduce the number of course sections, these can be deleted from the Workspace.

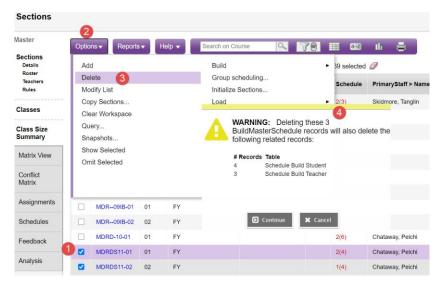
Steps:

- 1. Select the course sections to Delete;
- 2. Click Options





- 3. Select Delete
- 4. On the Warning message pop up window select Continue



NOTE: Once the section is deleted, it cannot be restored. It will have to be re-added

2.4.2 Manually scheduling sections of courses

If schools only want to change individual parts of the course section schedule information, each of the fields above can be modified individually.

Follow appropriate steps above, in section 2.4.1.1, to complete this work.

2.5 Scheduling Students

Once the new structure has been defined and course sections re-scheduled students can be scheduled into sections.

2.5.1 Class Roster

Working with several districts on recommendations for this process, all have expressed that manually, re-scheduling students using this method is going to be the quickest and easiest.

From the Roster of a course section (*Workspace* tt > *Details* > *Roster* > *Options* > *Add...*) students can be *Pulled* into a section, *Pushed* or scheduled via a *Snapshot*.

2.5.1.1 Snapshots

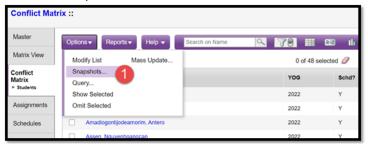
A snapshot represents a static list of students. Think of a snapshot as a picture of a particular group of students that you can file and easily retrieve.

Snapshots of students can be created from the *Student* tt in *School* view or *Build* view. Once created they can used from the *Roster* leaf, to schedule groups of students.

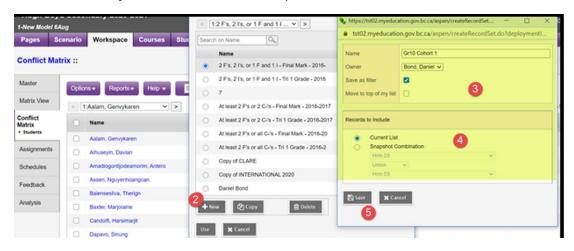




1. From the Options menu a Snapshot:



- 2. The *Snapshot* window opens. Click the *New* button.
- 3. A new window opens to identify this *Snapshot*:
 - Name: Enter a name;Owner: Set the owner;
 - Save as filter: this will make the Snapshot available to the Owner for future use;



- 4. In the Records to Include area, users can choose:
 - Current List or;
 - Snapshot Combination

 If you selected Snapshot Combination, use the following table to determine how you want to assemble the two snapshots you select:

Select	To include the following in the snapshot:
Code	Select the code for the schedule term. For example, you might select FY for a full-year term, and S1 for Semester 1.
	Note: School users with the security role of Schedule Builder can create these schedule term codes from the Build View > Global > Reference > Schedule Term Codes > Codes > Options > Add





Select	To include the following in the snapshot:
Union	Any records that appear in the first snapshot you select or the second snapshot you select. For example, if you want to create a snapshot of students who appear on either or both the Gr10 Cohort 1 and Gr10 Cohort 2, select Union
Intersect	Only records that appear in both the first and second snapshot you select. For example, if you want to create a snapshot of students who appear on both Gr10 Cohort 1 and Gr10 Cohort 2 select Intersect.
Difference	Any record that appears in the first snapshot you select, but not in the second. For example, if you want to create a snapshot of students who appear on the Gr10 Cohort 1, but not on Gr10 Cohort 2, select Difference.

The *Snapshot* can be edited later to include or exclude more students. This is done from the *Student* tt. Select the student you wish to add, click *Snapshot* st > Options > Add... > a list of*Snapshots*will appear > select the appropriate one.

2.5.1.2 Pull and/or Push

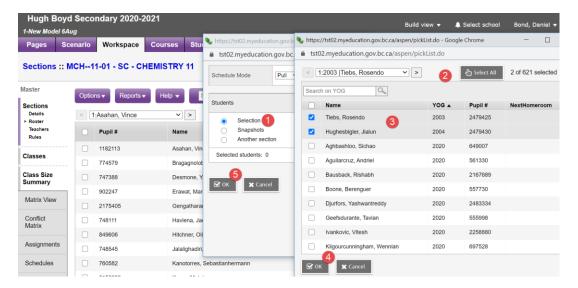
Following this path *Workspace* tt > *Details* > *Roster* > *Options* > *Add...* user are presented with a pop-up window to Pull students into a course section by *Selection, Snapshot* or *Another Section*.

Steps for **Pull**:

- 1. Select Selection
- 2. A pop-up window opens. This can be sorted by student Name, YOG, Pupil # or NextHomeroom
- 3. Select the students to be scheduled into this course section.
- 4. Click OK on the student selection window.
- 5. Click OK on the Pull window



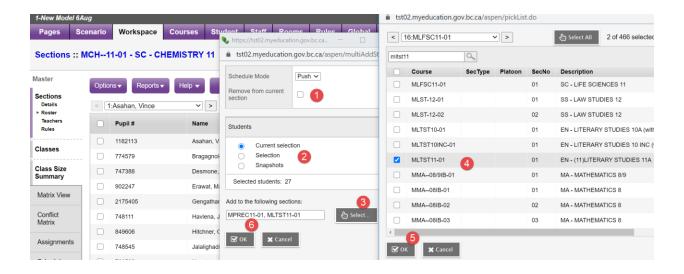




The Push method allows for using the current course section *Roster* to populate other course sections.

Steps for **Push**:

- 1. Select *Remove from current section* if you want to un-schedule students from the current section;
- 2. Select the method you would like to use to choose students. Options are:
 - Current Selection (i.e. the list of students in the section you are working with);
 - Selection or
 - Snapshot (see section 2.5.1.1 for more information)
- 3. Click the Select button;
- 4. From the course section pop-up window select the course sections;
- 5. Click *OK* on course section pop-up window;
- 6. Click OK on the Push pop-up window;







2.5.2 Using Platoons, Teams and/or Houses

Platoons, Teams and/or Houses are 3 ways to cohort a static group of students together, as they take multiple course sections (all function the same).

There are 6 fundamental steps to this process that need to be considered:

- Platoon, Team and/or House fields <u>MUST</u> be checked in the Scenario > Preferences > Category=Scenario Basic
- 2. Reference codes representing Platoon, Team or House or names **MUST** be created;
- 3. Students **MUST** be assigned a Platoon, Team or House;
- 4. Course sections **MUST** be assigned a Platoon, Team or House;
- 5. Students <u>MUST</u> have course requests for the courses you would like to schedule them into and;
- 6. A Load **MUST** be run to have the students scheduled into the appropriate course sections.

When a Load is run <u>ALL</u> course requests for students will be processed and students re-scheduled.

For detailed information on these 6 items please see the Scheduling Modules list below on the myeducationbc.info website under Resources > School-schedulers:

- 1. MODULE 3 SCENARIOS, PREFERENCES AND TIME STRUCTURE;
- 2. MODULE 4 STUDENT COURSE REQUESTS;
- 3. MODULE 6B SCHEDULING ATTRIBUTES;
- 4. MODULE 8 WORKSPACE AND BUILD VALIDATION;
- 5. MODULE 9 LOAD STUDENTS AND ANALYSIS.