

Scheduling Module 9

Load Students and Analysis

April 13, 2015 v1.0







Version History

Version	Date	Description
1.0	April 13, 2015	Initial Draft

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1.0 Introduction

After you build your master schedule on the Workspace tab, load students into the finished master schedule. Loading students into the schedule maximizes section balances and requests satisfied.

After you load students, you can analyze the load results. The system provides reasons for each conflict a student's schedule has when trying to fulfill requests.

Note: Students are Loaded into each scenario. This allows you to analyze the results, make a copy of the scenario, try new options and then go back to a previous scenario.

2.0 Lock Individual Student Schedules

Students can be hand scheduled before or after a load is run.

2.1 Lock a Student's schedule

After a load has been run a student's schedule can be locked, preventing the student from being rescheduled in subsequent loads

From the Student top tab

- 1. Select the student
- 2. Details
- 3. Check the Lock Schedule box:

est and the second seco	RITISH DLUMBIA My	Education <mark>BC</mark>	South Kar SM9- 2 - Load	nloops Se	condar	y 2015-2	016			Change View	Select School Set Preferences	Log Off Build View
Pages	Scenario	Workspace	Courses	Student	Staff	Rooms	Rules	Globa	1			
Options	Reports	Help										×
Students	s :: 459649	- Addley, D	om									
Details	Save	Cancel									Default Template	T
Requests	Legal firs	st name *	Dom						Enrollment status	Active		
Schedule	Legal mi	ddle name							School > Name	South Kamloops Secondary		
Schools	Legal las	t name *	Addley						Next School > Name	South Kamloops Secondary		
	Suffix		¥						Homeroom	K121		
Transcript	Gender		M ¥						Next homeroom	Q,		
Document	S Year of g	raduation 🤨	2018									
Rules	Grade le	vel	09									
Snapshots	Include i	n scheduling	•						Team	Blue V		
	Schedule	priority	40						Static team			
	Schedule	weight	1.0						House	Spartans V		
	Lock sch	edule							Static house			
	Balance		-						Platoon	Div03 V		
									Unavailable schedule	Edit Schedule		
	Save	Cancel										

4. Click Save





3.0 Load Students

3.1 All Students

To load students into the master schedule:

- 1. Log on to the Build view.
- 2. Click the Workspace tab.
- 3. On the Options menu, click Load > Load.
- 4. The Load Students dialog box appears:

	Load Students - Google	Chrome 📃 🗆 🗙
[ts1.myeducation.	gov.bc.ca/aspen/loadStudents.do?d
	Allow over max Percentage over max Use alternates Save load files Automatically import	(blank for unlimited)
	OK Cancel	

- 1. Select the **Allow over max** checkbox if you want the system to ignore the maximum enrollment numbers you defined for sections. Then, enter the **Percentage over max** you want.
- 2. Select the **Use alternates** checkbox if you want the system to attempt to schedule students into their alternate requests if primary requests are not available
- 3. Save load files does not have to be checked, unless directed by support staff.
- 4. Check Automatically import
- 5. Click **OK**. The progress meter displays the name of the student currently being scheduled, and the number of students remaining to be scheduled. When the system finishes scheduling students.

The order in which students are loaded can be controlled by setting a student **Load priority**. In the example below the priority has been set in ascending order. Grade 11 students have the lowest priority and Grade 7 the highest. With this setup, the Grade 11 students will be loaded first:





	BRITISH OLUMBIA My	Education <mark>BC</mark>	South Kamloops Secondary 2015-2016 SM9- 1 - Load							Selec	t Schoo	l Set i	Preferen	ices Log <i>Build</i> V	g Off /iew
Pages	Scenario	Workspace	Courses	Student	Staff	Rooms	Rules	Global							
Options	Reports	6 Help								T		a+z	th	H	Z
Student	s														
Details						0 of 5 selec	ted 🥖						Cust	om Selec	tion
Requests	📄 Nam			Grade 🖣			YOG		Pri 🗲	-	S	chd?			
	Alex,			11			2016	20			Y				
Schedule		na, Ivy		10			2017	30			Y				
Schools	Addle	ey, Dom		09			2018	40			Y				
		Emmet		08			2019	50			Y				
Transcript	t 📃 Aley,	Delaine		07			2020	60			Y				
Document	ts														
Rules															
Snapshot	s														

4.0 Analysis

There are several ways to analyze the results and determine the overall build and success of the load. From the Workspace top tab, click on the Analysis side tab. This shows information from the latest load:

BE COL	COLUMBIA MyEducationBC			nloops Se	econda	ry 2015-2	Change View	Select School	Set Preferen	ces Log Off Build View		
Pages	Scenario	Workspace	Courses	Student	Staff	Rooms	Rules	Global				
Options	Report	s Help										2
Analysis												
Master	Printer	Friendly Version										
Matrix View	/	run type	Load									
Assignmen	ts	s of last run ation Errors	Completed									
Schedules		ation Warnings	70									
Feedback	Build	failure reason										
Analysis	Requ	ests satisfied	6929 (93%)									
Course Su	Immary Total	requests	7415									
	Stud	ents satisfied	843 (81%)									
	Total	students	1040									
	Tota	run time	53 sec.									

Last run type – shows either Build of Load.

Status - indicates if it has completed or in progress.

Validation Errors – It there were errors the number would be indicated.

Requests satisfied - shows the overall number of request successfully scheduled.

Total request – the number of requests for all students at the school.

Students satisfied - the total number of students fully scheduled (all requests met).

Total students – number of students included in the load.

Total run time – the time it took to load.





4.1 Conflict Summary

After a load has been completed you can see which sections had conflicts; students that requested a course but did not get into a section.

From the Workspace top tab > Analysis side tab click on **Course Summary**

BRITI COLUM	sh ibla MyE	ducation ^{BC}	South Kar SM9- 2 - Load		econda	ry 2015-2	C	hange View Se	elect School Se	et Preferences Log Off Build View	
Pages So	enario	Workspace	Courses	Student	Staff	Rooms	Rules	Global			
Options	Reports	Help									Σ
Analysis ::											
_	Printer Frie	endly Version									
Master	Departm	All	T				Section count				
Matrix View	filter Conflicts						Minimum confli	icts			
Assignments											
Schedules	Course 4	Description				Depa	rtment	Section	ns Reques	sts Seats	Conflicts
Feedback	MAF12	ART FOUNDATIO	NS 12			Fine	Arts	3	80	90	2
Analysis	MDNC-12	DANCE: CHOREO	GRAPHY 12			Fine	Arts	1	27	30	8
Course Summ	ary MDNG-10	DANCE 10: GENE	RAL			Fine	Arts	1	27	30	21
	MDRR-10	DRAMA 10: THEAT	TRE PERFORMANC	E		Fine	Arts	2	59	60	13
	MEN08	ENGLISH LANGUA	AGE ARTS 8			Engli	sh	5	162	150	35
	MEN10-	ENGLISH 10				Engli	sh	8	214	240	2
	MFDN-09	FOODS AND NUT	RITION 09			Appli	ed Skills	7	182	210	24

- 1. Select a department at the **Department filter** drop-down to view only courses in a specific department.
- Select the Conflicts checkbox to view only courses with conflicts. The Conflicts checkbox is selected by default. Otherwise, the list shows all courses, including those without conflicts with student requests.
- 3. Enter a value in the **Section Count** field to limit the courses that appear by the number of sections. For example, to view how singletons were loaded, type 1.
- 4. Enter a value in the **Minimum** conflicts field to limit the courses that appear to courses with the number of conflicts you identify and above. For example, to view courses which three or more students requested and could not be scheduled in, type 3.
- 5. Click on the **Conflicts** column to resort showing courses with the most conflicts at the top:





BR COI	UMBIA My	Education <mark>BC</mark>	Secondar	South Kamloops Secondary 2015-2016 SM9- 2 - Load			Select Schoo	Set Preferences Log O Build View		
Pages	Scenario	Workspace	Courses	Student	Staff	Rooms	Rules	Global		
Options	Reports	Help							l	
Analysis	::									
Master Matrix View Assignment	, Depar filter Confl	Friendly Version rtment All icts	Ŧ		Section Minimur	count n conflicts				
Schedules	Cours	e Description		Department	Section	s Rec	juests Se	eats	Conflicts 🗸	
Feedback	MSS0	08 SOCIAL STUDIE	ES 8	Social Studie	es 5	162		50	56	
Analysis	MMA	08 MATHEMATICS	8	Mathematics	5	162	15	50	36	
► Course Su	mmary MPE0	08 PHYSICAL EDU	CATION 8	Physical Education	5	162	15	50	36	
	MEN0	08 ENGLISH LANG	UAGE ARTS 8	English	5	162	15	50	35	

6. Click the number in the *Conflicts* column to view that list of students who requested the course but could not be scheduled in it. The list of students appears:

B CC	BRITISH DLUMBI	A My	Education <mark>BC</mark>	South Kan Secondary SM9- 2 - Load	/ 2015-20 ′	_	Change View	Select School	Set Prefe	rences Log Off Build View
Pages	Scer	nario	Workspace	Courses	Student	Staff	Rooms	Rules	Global	
Options		Reports	Help					T 📰	a-z 🚺	i 📑 🛛 🗷
Student	s				+					
Details					0 of 56	selected	Ø		Cu	stom Selection
Requests		Name	•		G	Grade	YOG	SchdPri	Scl	nd?
Requests		Aley,	Delaine		0	7	2020	60	Y	
Schedule		Alibha	ai, Raveen		0	7	2020	60	Y	
Schools		Aviso	n, Clovette		0	7	2020	60	Y	
50110013		Beech	n, Yanni		0	7	2020	60	Y	
Transcript		Boyle	, Elan		0	7	2020	60	Y	

7. To view why the system could not fulfill a student's request for the course, select the student, and click the Schedule side-tab, then Conflicts. The Comment column displays Request not scheduled for any course the student requested but could not be scheduled in:



			-		-				_			
	itish umbia My	Education <mark>BC</mark>	South K		Seconda	iry 2015-2	016			Change View	Select School	Set Preferences Log O Build Vie
Pages	Scenario	Workspace	Courses	Studen	t Staff	Rooms	Rule	es G	lobal			
Options	Reports	Help										
tudents	:: 606739	- Aley, Dela	ine									Q.
Details Requests <mark>Schedule</mark>	Show alternate requests		Open R: Open to r	reserve seats on	ly C: No seats an	vailable U: Unava	ilable Sc	clude ourses thout heduled ctions cheduled quest only		House Team	All	 ▼ Hide section number ▼ Hide course description
Conflicts Workspace	e Student	t Schedule (56%	scheduled -	Class credits	s: 4.0)							
Schools	Course			2	3	4	5	6		7	8	Comment
Transcript	ENGLISH	MEN08 LANGUAGE ARTS 8		0:002 [S1] 0:003 [S2]	S:001 [S2]	C:005 [S2]						S:MEN08-001 S2 3(1-2)
Documents	FOODS	MFDN-08 AND NUTRITION 08	C:005 [Q2]	S:002 [Q1]	C:004 [Q4]							S:MFDN-08-002 Q1 2(1-2
Rules		MFR-08 FRENCH 8	O:005 [S2]	O:003 [S1] O:002 [S2]		S:004 [S2]						S:MFR-08-004 S2 4(1-2
Snapshots	GRADUA	MGT TION TRANSITIONS						S	001			S:MGT001 FY 6(1-2)
	MA	MMA08 THEMATICS 8	S:001 (2)	O:002 (1)		C:004 (1) C:003 (2)						S:MMA-08-001 FY 1(2)
	PHYSI	MPE08 CAL EDUCATION 8	S:004 (1)	O:003 (2)		C:002 (1) C:001 (2)						S:MPE-08004 FY 1(1)
		MSC08 SCIENCE 8	O:005 [S2]	O:002 [S1] O:004 [S2]		S:003 [S1]						S:MSC-08-003 S1 4(1-2)
	so	MSS-08 CIAL STUDIES 8	C:005 [S1] O:004 [S2]	O:003 [S1] O:002 [S2]	C:001 [S2]						_	Request not scheduled
	TECHNO	MTE-08 LOGY EDUCATION 8	C:005 [Q3]	S:001 [Q2]	C:003 [Q1]							S:MTE-08-001 Q2 2(1-2
		MTXT-08 TEXTILES 8	C:005 [Q1]	S:004 [Q4]	C:003 [Q3]							S:MTXT-08-004 Q4 2(1-2
		MVA08 SUAL ARTS 8	C:002 [Q4]	S:004 [Q3]	C:003 [Q2]							S:MVA-08-004 Q3 2(1-2
		KG08REG RSE PACKAGE 08										No sections scheduled

8. Click **Request not scheduled** to view the **'Schedule conflict reasons'** dialog box. The **Conflict Reason** column displays the reason the student could not be scheduled for each section:

ts1.mye	ducation.gov.bc.	c <mark>a</mark> /asper	n/stu	dentSche	eduleConflictReas	son.d	lo?p	arentF	orm=st	udent	Sched	luleCor	nflictMatr	ixForm&courseOid=CSK(
														0 of 5 select
Course	Description	Teacher	Term	Schedule	Unrotated Schedule	Total	Max	Close?	SecType	Team	House	Platoon	Inclusion?	Conflict Reason
MSS08-001	SOCIAL STUDIES 8		S2	3(1-2)		30	30	Y					N	Section is closed
MSS08-002	SOCIAL STUDIES 8		S2	2(1-2)		13	30	Y					N	Conflict with scheduled sections
MSS08-003	SOCIAL STUDIES 8		S1	2(1-2)		14	30	Y					N	Conflict with scheduled sections
MSS08-004	SOCIAL STUDIES 8		S2	1(1-2)		19	30	Y					N	Conflict with scheduled sections
MSS08-005	SOCIAL STUDIES 8		S1	1(1-2)		30	30	Y					N	Section is closed

One of the following conflict reasons appears next to each section for the course:

- Section is closed
- Student is unavailable
- Section conflicts with students preferred sections
- Invalid course relationship with students preferred sections
- Invalid section type
- Invalid team code
- Invalid house code
- Invalid platoon code
- Invalid as not preferred teacher
- Invalid as not preferred term
- Invalid as not preferred section

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- Violation of student avoid student rule
- Violation of student avoid teacher rule
- Invalid as not matching content term code
- Invalid not inclusion section for inclusion request
- Violation of term link rule
- Conflict with scheduled sections
- Invalid course relationship with scheduled sections
- Violation of inclusion ratio
- Violation of inclusion count allowed
- 9. Use the value in the Conflict Reason column to make possible changes to the student's schedule to fulfill their requests.

Note: The system updates these comments only when you run another load, or you click **Reschedule**; making manual changes to schedules to resolve conflicts does not change the comments until you load the schedule again.

5.0 Reports

There are a variety of reports available to assist with the analysis of a schools master schedule and the resulting load of students.

5.1 Requests Not Scheduled

Run the Requests Not Scheduled report to view the courses each student requested, but did not get into when you built the master schedule and loaded students.

Use the results to determine if you need to change any section information and rebuild those sections to see if you can satisfy more student requests.

To run the Requests Not Scheduled report:

- 1. Log on to the **Build view**.
- 2. Click the Workspace tab.
- 3. On the **Reports** menu, click **Requests Not Scheduled**. The Requests Not Scheduled dialog box appears:





Requests Not Scheduled

School	South Kamloops Secondary
Group by	Student V
Students to include	All
Search value	
Sort students by	Name 🔻
Courses to include	All
Search value	
Sort courses by	Course number T
Format	Adobe Acrobat (PDF)
Run Cancel	

You can view these unsatisfied requests by student name, as in the following example, or by course:

Kamloops/Thompson				South Kamloops Secondary	
Page 1		Reque	22/04/2015		
Addley, Dom	2018	MEN10	ENGLISH 10		
		Total: 1			
Alcock, Maureen		MEN10	ENGLISH 10		
		MPLAN10	PLANNING 10		
		Total: 2			
Alex, Emmet	2019	MFDN-09	FOODS AND NUTRITION 09		
		MFR09	FRENCH 9		
		MPE09	PHYSICAL EDUCATION 9		
		Total: 3			

Note:	You can run the re	eport by student or course.
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5.2 BC Master Schedule

This report shows all schedule and load information, including Classes enrollment totals.

To run the **BC Master Schedule** report:

- 1. Log on to the **Build view**.
- 2. Click the **Workspace** tab.
- 3. On the Reports menu, click BC Master Schedule. The BC Master Schedule dialog box appears:

BC Master Schedule	
School	South Kamloops Secondary
Sections to include	Current selection
Search value	
Course Information	
Include Description	
Include Department	
Include Teacher	
Include Room	
Student Information	
Show Inclusion Counts	
Show Special Ed Counts	
Show ELL	
Sort results by	Class Identifier
Format	Adobe Acrobat (PDF)
Run Cancel	

The Class ID column shows the name and the Total enrollment for the grouping:

(amloops/	Thompson									5	South	Kar	nloo	ps S	econ	idary		
6M9-2-L	oad			BC Master Sche	dule													
Page 1														Apr	il 22,	201		
									A	ssig	ned	Male		Male		Male		ale
CrsCode	Class ID	Course	Flav	Teacher	F	Room	Trm	Schedule	Tti	Max	Open	INC	SPED	ELLI	IC SPE	DEL		
AAR12		AAR12-001			J	1207	S1	4(1-2)	5	30	25							
ABIO-12		ABIO-12-001			J	J209 Sci	S1	3(1-2)	6	30	24							
ACHE-12		ACHE-12-001		Addey, Row	e				0	30	30					Т		
AELC-12		AELC-12-001			J	1206	S1	1(1-2)	6	30	24							
MAF11		MAF11-003			ĸ	K-Libr	S2	1(1-2)	29	30	1					Т		
MAF12		MAF12-003			ĸ	K117-Art	S1	3(1-2)	18	30	12							
MCH12		MCH12-001			J	1211 Sci	S1	4(1-2)	25	30	5					T		
MCH12		MCH12-002			J	J209 Sci	S2	1(1-2)	25	30	5							
MCH12		MCH12-003			L	J215 Sci	S2	4(1-2)	25	30	5					T		
MCH12		MCH12-004			L	214 Sci	S2	3(1-2)	25	30	5					Т		
MDNC-09		MDNC-09-001		Addey, Row	e J	1115-Dance	S1	4(1-2)	0	30	30					Т		
MAF11	Art 11/12 001	MAF11-001		Aven, Tasha	ı K	K117-Art	S1	4(1-2)	6							T		
MAF12	Art 11/12 001	MAF12-001		Aven, Tasha	ı K	K117-Art	S1	4(1-2)	15									
	Art 11/12 001						S1		21	30	9							
MAF11	Art 11/12 002	MAF11-002		Aven, Tasha	ı K	K117-Art	S2	3(1-2)	15									
MAF12	Art 11/12 002	MAF12-002		Aven, Tasha	ı K	K117-Art	S2	3(1-2)	15									
	Art 11/12 002						S2		30	30	0							





5.3 Unscheduled Room

This report shows all Rooms that are free in each period and term.

To run the Unscheduled Room report:

- 1. Log on to the **Build view**.
- 2. Click the **Workspace** tab.
- 3. On the **Reports** menu
- 4. Click **Rooms > Unscheduled Room**. The Unscheduled Room dialog box appears:

Unscheduled Room	
Rooms to include Search value Sort results by	All
Format	Adobe Acrobat (PDF)
Run Cancel	

Kamloops/Thompson			South Kamloops Secondary
Page 1		Incontradied Papolity	April 22, 2015
Period 1	Period 1	Period 1	Period 2
J-Admi 1(1-2)	K-Cafe 1(1-2)	K208 1(1-2)	J-Admi 2(1-2)
J-Coun1(1-2)	K- [Q1 Q2] 1(1-2) Music	K209 1(1-2) K210 1(1-2)	J-Coun2(1-2)
J-Libr 1(1-2) J101- [Q3] 1(1-2)	K-Offi [Q1 Q2] 1(1-2) K100- 1(1-2)	K211 1(1-2) K212 1(1-2) K213 1(1-2)	J-Libr 2(1-2) J101- [Q2] 2(1-2)
Art J104- 1(1-2)	Music K106 1(1-2)	K214 1(1-2)	Art J104- 2(1-2)
Cafe J105- [Q1] 1(1-2) Cafe	K109- 1(1-2) Music	K215 1(1-2) K218 1(1-2)	Cafe J105- [Q4] 2(1-2) Cafe
J107- [Q2] 1(1-2) Txtil	K110- 1(1-2) Music K111 1(1-2)	K217 1(1-2) K218 1(1-2)	J106- [Q1 Q2] 2(1-2) Cafe
J110- 1(1-2) Dance	K112 1(1-2)	K220 1(1-2) K221 1(1-2)	J107- [Q1] 2(1-2) Txtil





5.4 Unscheduled Teacher

This report shows all **Teachers** that are free in each period and term.

To run the Unscheduled Teacher report:

- 1. Log on to the **Build view**.
- 2. Click the **Workspace** tab.
- 3. On the **Reports** menu
- 4. Click Teachers > Unscheduled Teacher

Unschedu	uled Tea	cher					
Teachers to inc	clude		All	•	-		
Search value							
Sort results by			Name	•			
Format			Adobe Acrobat (PE	DF) 🔻			
Run Cancel							
Kamloops/Thomps	on						South Kamloops Secondary
Page 1			Unsch	eduled Teachers			April 22, 2015
Period 1		Period 2		Period 3		Period 4	
Addey, Rowe Aven, Tasha	1(1-2) 1(1-2)	Addey, Rowe Aven, Tasha	2(1-2) 2(1-2)	Addey, Rowe Aven, Tasha	3(1-2) [Q1 Q2] 3(1-2)	Addey, Rowe Aven, Tasha	[Q3 Q4] 4(1-2) [Q3 Q4] 4(1-2)

6.0 Adjusting a Master Schedule

Once analysis is complete, decisions will need to be made about adjustments that are required to improve the schools master schedule. These may take many different forms and are unique to each school and their situation.

The following section reviews the process for making copies of a Scenario; as this often required to compare situations.





6.1 Copy a Scenario

To copy a scenario:

- 1. From the **Scenario** tab.
- 2. Click into **Details** of the scenario you wish to copy.
- 3. Click **Options > Copy Scenario...**
- 4. The copy scenario dialogue box opens:

🔶 🕞 🍡 http://ts1.mye	ducation. gov.bc.ca /aspen/copyScenario.do?deploymentId=aspen	×ט⊴ + Q					
File Edit View Favorites	Tools Help						
New scenario name	Copy of SM9- 2 - Load						
Items to include							
Master schedule	V						
Clear platoon code							
Student schedules	V						
Rules	V						
Rotation							
Bell schedule							
** Time structure and schedule attributes will be copied automatically.							
OK Cancel							

Select the pieces of the scenario you want to copy into this new scenario, such as the master schedule, student schedules, rules, and rotations.

Note: Ensure you review the **Scenario** preferences, covered in Scheduling Module 3 – Scenarios, Time Structures and Rotations.