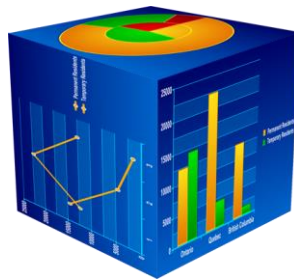


# *User Manual*



**Research Datamart**

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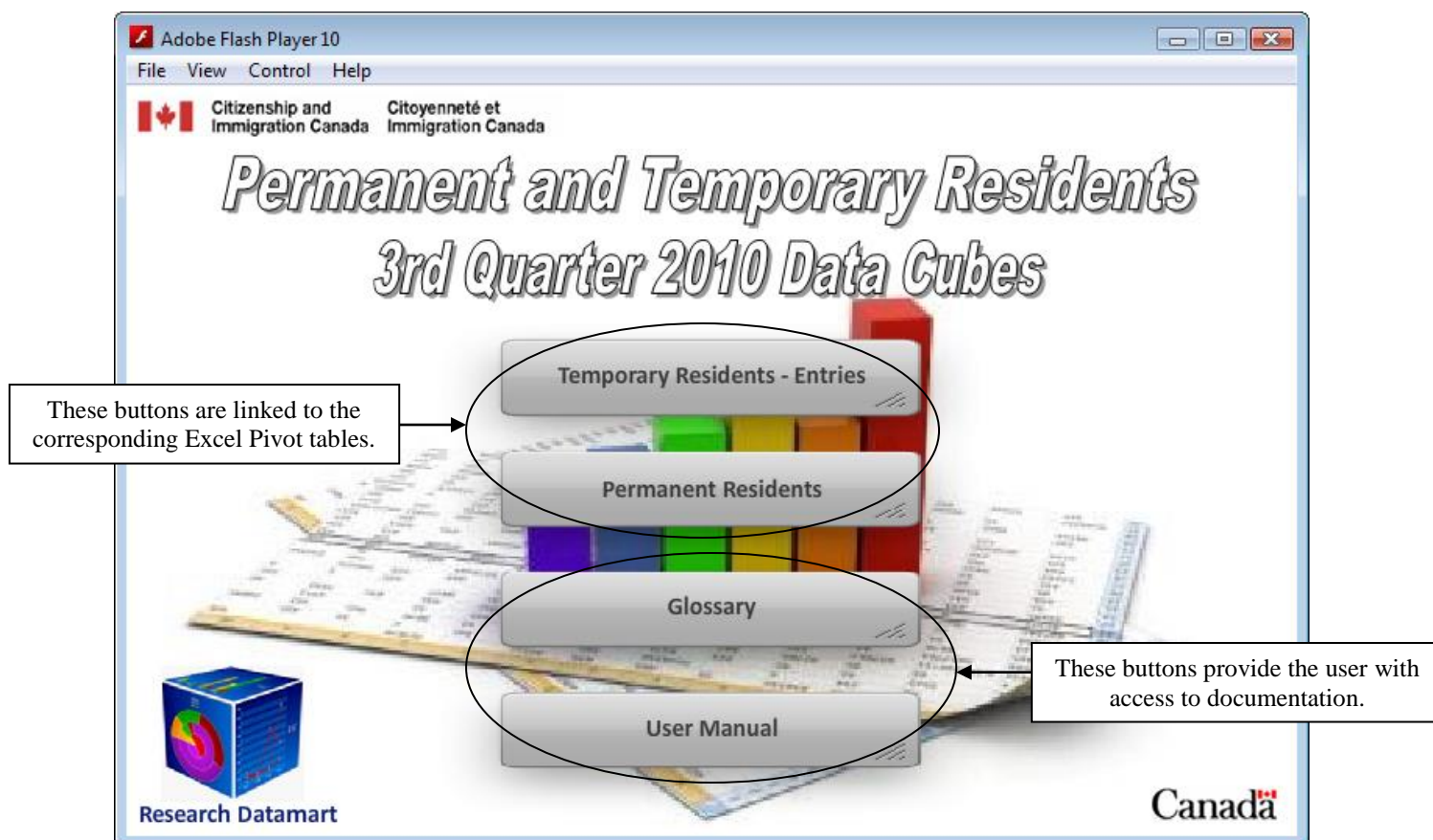
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# Main Menu Interface

The Main Menu Interface is an interactive tool which allows the user to select their desired information. Once installed, the Main Menu Interface will pop-up automatically.

For any future use, there will be a shortcut, , of the application on the (user's) desktop.

The Main Menu Interface will resemble the one outlined below.



## Main Menu Buttons [^Top](#)

**Temporary Residents – Entries:** The data examines the flow of foreign nationals who are lawfully in Canada on a temporary basis under the authority of a valid document (i.e., a work permit, study permit, temporary resident permit, or a visitor record). Temporary residents include foreign workers, foreign students, the humanitarian population and other temporary residents.

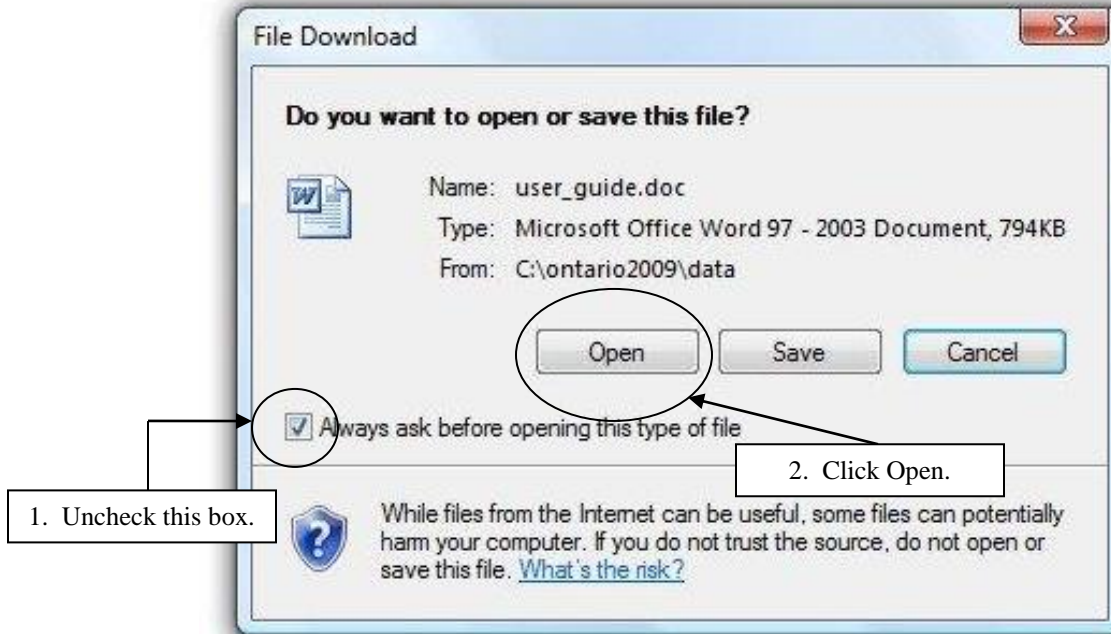
**Permanent Residents:** The data represents all the individuals who have been granted permanent resident status in Canada for any given year. Permanent residents must live in Canada for at least 730 days (two years) within a five-year period. Permanent residents have all the rights guaranteed under the Canadian Charter of Rights and Freedoms such as equality rights, legal rights, and mobility rights, freedom of religion, freedom of expression and freedom of association.

**Glossary:** This document provides in-depth explanation of all the variables and its corresponding terminology found within each excel pivot table (i.e. Temporary Residents and Permanent Residents).

## Opening a Microsoft Excel or Word Document <sup>^Top</sup>

When opening an excel or word document – through the main menu buttons – a pop-up window (as illustrated below) will appear. Please note that this window may appear on your computer, depending on your settings.

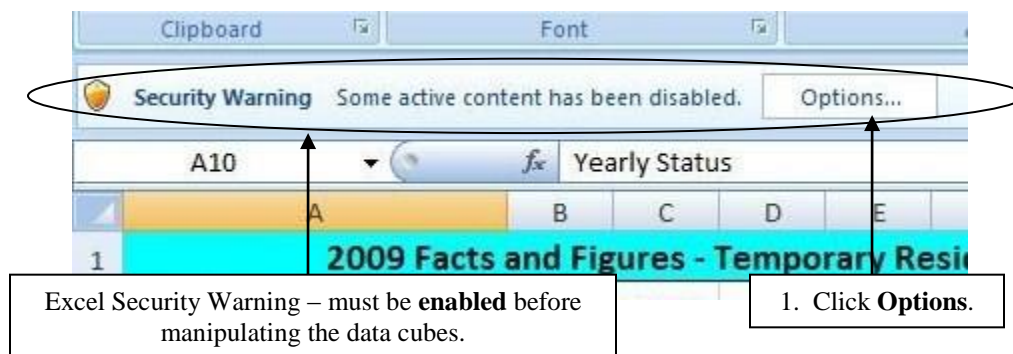
If the pop-up does appear, **uncheck the box** where it asks “Always ask before opening this type of file” and then click on **Open**.



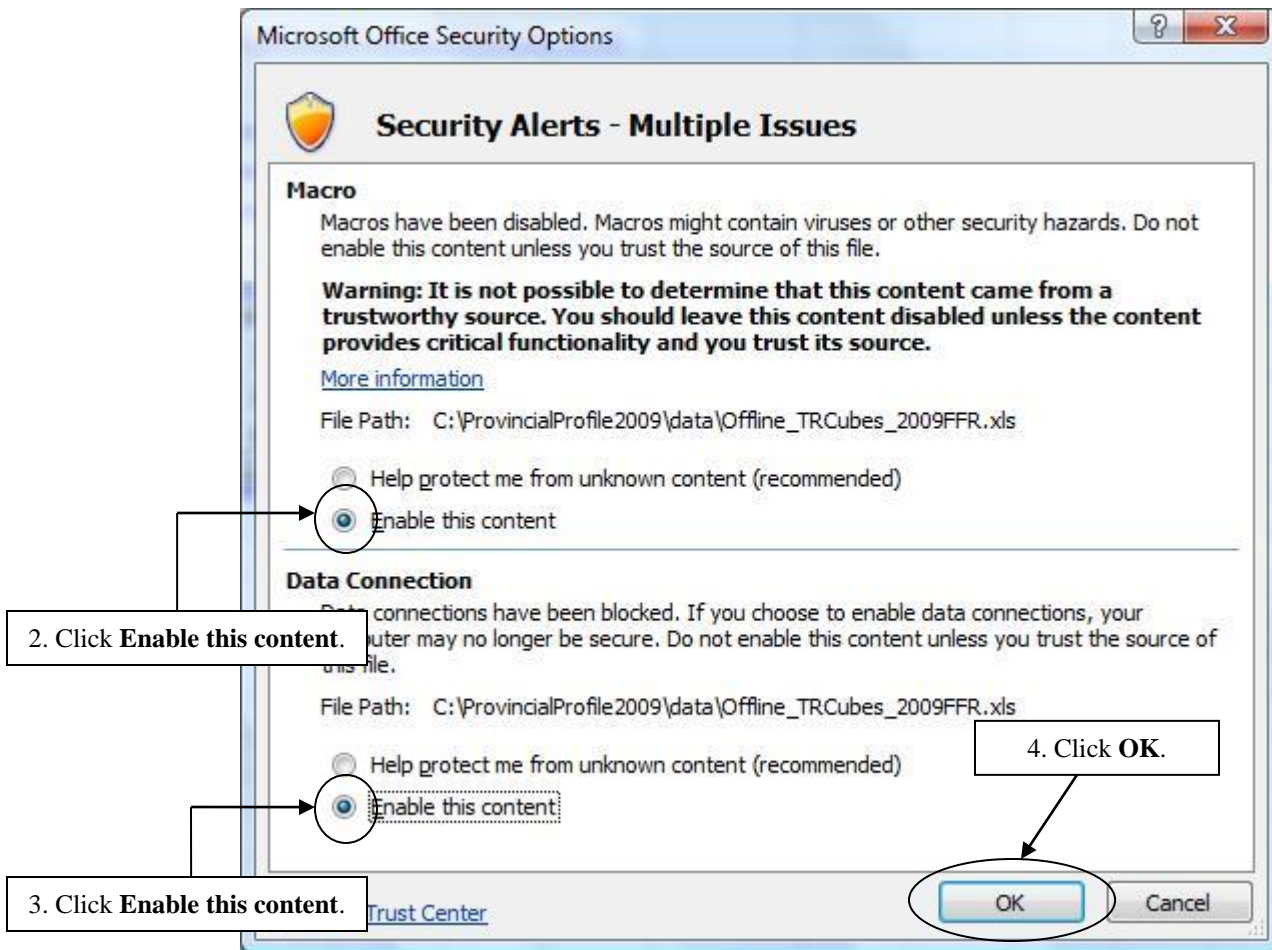
Once the above steps have been executed, the Excel or Word document will open. In addition, for subsequent use, the pop-up window will no longer appear.

## Excel Pivot Table - Enabling Content <sup>^Top</sup>

The Temporary Resident and Permanent Resident data cubes are Excel Pivot Tables. Therefore, when opening an Excel Pivot Table for the first time, there will be a **security warning** at the top left hand-side, underneath the toolbar, as outlined in the image below. The Security Warning must be enabled in order to manipulate the data cubes.



In order to enable the security setting, **click on Options**, and the following pop-up window will appear.



When the window appears, click **Enable this content** for the Macro and **Enable this content** for the Data Connection. Once both options have been selected, click **OK**.

**These steps will need to be done only once for each corresponding Excel Pivot Table.**

### ***Excel Pivot Table – Data Connectivity*** [^Top](#)

Once the content within the Excel Pivot tables have been enabled - as outlined above - and an error message appears in regards to the data connectivity; please refer to the following Microsoft web-site to attain the required updates/software packages, necessary to run the Excel Pivot Tables.

<http://www.microsoft.com/downloads/en/details.aspx?familyid=78cac895-efc2-4f8e-a9e0-3a1afbd5922e&displaylang=en>

# Excel Pivot Table Instructions

## ***Introduction to pivot tables*** [^Top](#)

A **pivot table** is an in-built interactive function of Microsoft Excel 5.0 or higher. Data can be selected and arranged in whatever format is appropriate. Selected data fields included in the pivot table can be quickly reorganized by using the mouse. Numeric data is automatically summed in a pivot table, non numeric data is counted.

Pivot Tables allow the user to manipulate data through an array of options, such as:

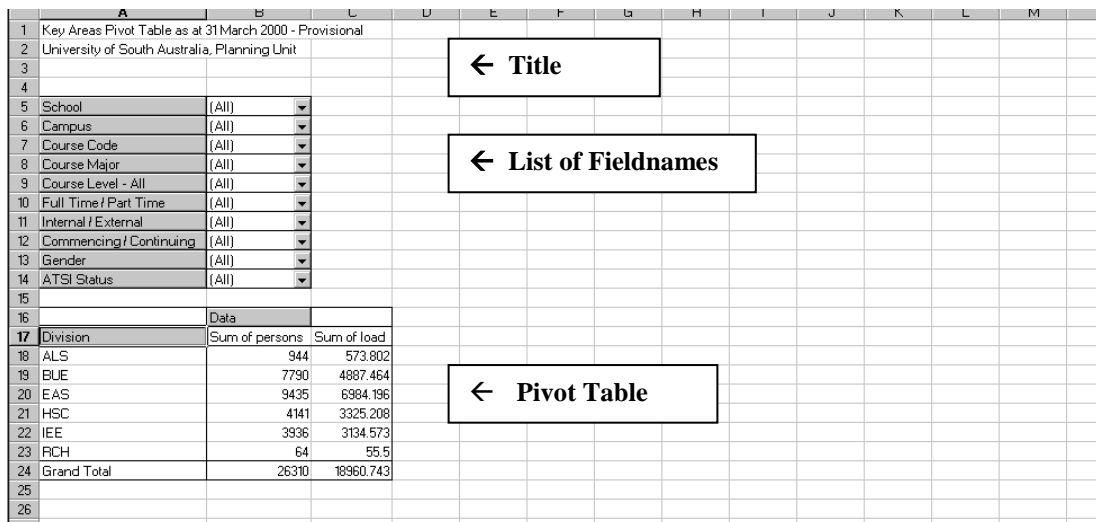
- Data fields can be dragged from a list above the table or in a show fields list into the pivot table.
- Data fields can be dragged from a column and dropped into a row and vice versa.
- Data filters can be applied to the pivot table by selecting the drop-down arrows in the list of fields.
- Totals and subtotals can be displayed or hidden.
- Data can be sorted or grouped.

Many other Excel tools and features are available to sort and format your pivot table.

You can save a pivot table to your own computer, or work with the table directly from the interactive front page. However, you will need to save your 'finished' pivot table to your computer if you wish to refer to it again.

The original pivot table will always remain available on the CD – do not be afraid to **experiment!**

Below is an illustration of a Pivot Table.



Division	Sum of persons	Sum of load
ALS	944	573.802
BUE	7790	4887.464
EAS	9435	6984.196
HSC	4141	3325.208
IEE	3936	3134.573
FCH	64	55.5
Grand Total	26310	18960.743

## ***Selecting the data fields for the pivot table*** [^Top](#)

You will see the title, then a list of fieldnames at the top left (e.g. 'Division', 'Campus' etc.) or on the right-hand side in the field list, and a default pivot table containing the Calendar Year for the past 10 years and the Immigration or Yearly Status category. In this example, the 'data' in the pivot table (shown below) shows the number of student's enrolled (sum of persons) and their total load (sum of load).

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Key Areas Pivot Table as at 31 March 2000 - Provisional												
2	University of South Australia, Planning Unit												
3													
4	Division	(All)											
5	School	(All)											
6	Campus	(All)											
7	Course Code	(All)											
8	Course Major	(All)											
9	Course Level - All	(All)											
10	Full Time / Part Time	(All)											
11	Internal / External	(All)											
12	Commencing / Continuing	(All)											
13	Gender	(All)											
14	ATSI Status	(All)											
15													
16		Data											
17		Sum of persons	Sum of load										
18	Total	26310	18960.743										
19													
20													

Suppose we want to see more detail in the data.

- A data field in the list of fields at the top can be moved into a **new column** of the table:

Suppose we want to see how many students are in each Division. Click on the fieldname 'Division' in the field list and holding the mouse button down, drag the mouse pointer down to the left hand side of the table until the shape of the mouse pointer changes to a 'column' shape (near the word 'Total'). Release the mouse button, and the field will be dropped into the table.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Key Areas Pivot Table as at 31 March 2000 - Provisional												
2	University of South Australia, Planning Unit												
3													
4													
5	School	(All)											
6	Campus	(All)											
7	Course Code	(All)											
8	Course Major	(All)											
9	Course Level - All	(All)											
10	Full Time / Part Time	(All)											
11	Internal / External	(All)											
12	Commencing / Continuing	(All)											
13	Gender	(All)											
14	ATSI Status	(All)											
15													
16		Data											
17	Division	Sum of persons	Sum of load										
18	ALS	944	573.802										
19	BUE	7790	4887.464										
20	EAS	9435	6984.196										
21	HSC	4141	3325.208										
22	IEE	3936	3134.573										
23	RCH	64	55.5										
24	Grand Total	26310	18960.743										
25													

NOTE: If the mouse pointer changes to an 'X' shape, do not release the mouse key or the data field will be removed from the table. Too late? Don't worry, you can get back to the original table by reopening it from your internet browser or, for more advanced users, going to the pivot table wizard – right click on the word 'Data' and select wizard.

NOTE: You may notice that adding a 'column' heading to the table actually produces new rows of data in the table. Vice versa, adding a 'row' heading actually produces new columns of data. You may see this alternative terminology used in the Excel as you use pivot tables more.

- Now add the data field 'gender' as a **new row** into the table:

Suppose we also want to know how many male and female students are in each Division. Click on the fieldname 'Gender' in the field list and holding the mouse button down, drag the pointer down to the right hand side of the 'Division' column until the shape of the mouse pointer changes to a 'row' shape (near the word 'Data'). Release the mouse button, and the field will be dropped into the table.

	A	B	C	D	E	F	G	H	I	J
1	Key Areas Pivot Table as at 31 March 2000 - Provisional									
2	University of South Australia, Planning Unit									
3										
4										
5										
6	School	(All)								
7	Campus	(All)								
8	Course Code	(All)								
9	Course Major	(All)								
10	Course Level - All	(All)								
11	Full Time / Part Time	(All)								
12	Internal / External	(All)								
13	Commencing / Continuing	(All)								
14	ATSI Status	(All)								
15										
16		Data	Gender							
17		Sum of persons		Sum of load			Total Sum of persons	Total Sum of load		
18	Division	Female	Male	Female	Male					
19	ALS	630	314	390.865	182.937		944	573.802		
20	BUE	4268	3522	2549.373	2338.091		7790	4887.464		
21	EAS	6877	2558	5047.498	1936.698		9435	6984.196		
22	HSC	3097	1044	2459.507	865.701		4141	3325.208		
23	IEE	888	3048	728.364	2406.209		3936	3134.573		
24	RCH	18	46	14.5	41		64	55.5		
25	Grand Total	15778	10532	11190.107	7770.636		26310	18960.743		
26										
27										

- The field 'Gender' could have been added as a **second column** in the table, instead of a row.

Move the field 'Gender' from a row to a column instead:

Click on the row name 'Gender' in the pivot table and holding the mouse button down, drag the pointer down to the left hand side near the 'Division' column until the shape of the mouse pointer changes to a 'column' shape. Release the mouse button, and the field will be dropped into the table as a column.

	A	B	C	D	E	F	G	H	I	J
5										
6	School	(All)								
7	Campus	(All)								
8	Course Code	(All)								
9	Course Major	(All)								
10	Course Level - All	(All)								
11	Full Time / Part Time	(All)								
12	Internal / External	(All)								
13	Commencing / Continuing	(All)								
14	ATSI Status	(All)								
15										
16		Data								
17	Division	Gender	Sum of persons	Sum of load						
18	ALS	Female	630	390.865						
19		Male	314	182.937						
20	ALS Total		944	573.802						
21	BUE	Female	4268	2549.373						
22		Male	3522	2338.091						
23	BUE Total		7790	4887.464						
24	EAS	Female	6877	5047.498						
25		Male	2558	1936.698						
26	EAS Total		9435	6984.196						
27	HSC	Female	3097	2459.507						
28		Male	1044	865.701						
29	HSC Total		4141	3325.208						
30	IEE	Female	888	728.364						
31		Male	3048	2406.209						
32	IEE Total		3936	3134.573						
33	RCH	Female	18	14.5						
34		Male	46	41						
35	RCH Total		64	55.5						
36	Grand Total		26310	18960.743						
37										

If you now have the column 'Gender' first (on the left) and 'Division' on the right, but would like them the other way around, try clicking on one and moving it to the other location. Watch the shape of the mouse pointer to see if you are going to make a row or a column.

We have looked at the Division and Gender data in three different formats – you can choose which one you like the best.

- A data field may be **removed** from the pivot table and put back into the list of fieldnames at the top of the table:



Suppose we do not want the Division data in the table any more.

Click on the column name 'Division' in the pivot table and holding the mouse button down, drag the mouse pointer up to the fieldname list above the table until the shape of the mouse pointer changes to a 'list' (or 'steps') shape. Release the mouse button, and the data field will be dropped back into the list of fieldnames, and removed from the pivot table.

	A	B	C	D	E	F	G	H	I	J	K
1	Key Areas Pivot Table as at 31 March 2000 - Provisional										
2	University of South Australia, Planning Unit										
3											
4											
5	Division	(All)									
6	School	(All)									
7	Campus	(All)									
8	Course Code	(All)									
9	Course Major	(All)									
10	Course Level - All	(All)									
11	Full Time / Part Time	(All)									
12	Internal / External	(All)									
13	Commencing / Continuing	(All)									
14	ATSI Status	(All)									
15											
16		Data									
17	Gender	Sum of persons	Sum of load								
18	Female	15778	11190.107								
19	Male	10532	7770.636								
20	Grand Total	26310	18960.743								
21											

- We can **apply a filter** to the pivot table by using the drop-down arrows in the fieldname list.

Suppose we want to filter the data in the table to show only the students at City West campus:

Click on the drop-down arrow to the right of the fieldname 'Campus'. Click on the words 'City West'. Keep your eye on the pivot table data below as you do this. The data will change to only show City West numbers. To remove the filter, click on the drop-down arrow next to 'Campus', then click on the word 'All'. Watch the data in the pivot table change back to include all students.

	A	B	C	D	E	F	G	H	I	J	K
1	Key Areas Pivot Table as at 31 March 2000 - Provisional										
2	University of South Australia, Planning Unit										
3											
4											
5	Division	(All)									
6	School	(All)									
7	Campus	City West									
8	Course Code	(All)									
9	Course Major	City West									
10	Course Level - All	The Levels									
11	Full Time / Part Time	Magill									
12	Internal / External	Offshore									
13	Commencing / Continuing	Underdale									
14	ATSI Status	Whyalla									
15											
16		Data									
17	Gender	Sum of persons	Sum of load								
18	Female	3626	2521.954								
19	Male	3257	2260.858								
20	Grand Total	6883	4782.812								
21											
22											

## **Working with Totals in a pivot table** [^Top](#)

In the table below, you will see a list of fieldnames at the top left (e.g. 'Division', 'Campus' etc.), and a pivot table containing only a row of totals below. The 'data' in the pivot table shows the number of student's enrolled (sum of persons) and their total load (sum of load).

Add the fields Division, Campus and Gender to the table as three columns, left to right. (See instructions Section 2 if you do not know how to do this.)

You will see that the table automatically includes subtotals for Division and Campus.

Division	Campus	Gender	Sum of persons	Sum of load
ALS	City East	Female	194	57.607
		Male	105	35.067
	City East Total		299	92.674
	Whyalla	Female	436	333.258
		Male	209	147.87
	Whyalla Total		645	481.128
ALS Total			944	573.802
BUE	City West	Female	2894	1910.123
		Male	2540	1643.216
	City West Total		5434	3553.339
	Offshore	Female	1374	639.25
		Male	982	694.875
	Offshore Total		2356	1334.125
BUE Total			7790	4887.464
EAS	City West	Female	687	571.581
		Male	617	532.642
	City West Total		1304	1104.223
	City East	Female	304	161.57
		Male	72	39.787
	City East Total		376	201.357
The Level			1	1

- Suppose we do NOT want to see the **subtotals** for 'Campus' in the table:

Right click on the column name 'Campus' in the pivot table. In the drop down menu that appears, click on 'field'. Under the heading 'subtotals', click next to the word 'none' instead of 'automatic'. Then click 'OK'. The pivot table will now not have the subtotals for 'Campus'.

Division	Campus	Gender	Sum of persons	Sum of load
ALS	City East	Female	194	57.607
		Male	105	35.067
	Whyalla	Female	436	333.258
		Male	209	147.87
	ALS Total		944	573.802
	BUE	City West	Female	2894
Male			2540	1643.216
City West Total		5434	3553.339	
Offshore		Female	1374	639.25
		Male	982	694.875
BUE Total		7790	4887.464	
EAS	City West	Female	687	571.581
		Male	617	532.642
	City West Total		1304	1104.223
	City East	Female	304	161.57
		Male	72	39.787
	City East Total		376	201.357
The Level			1	1
Magill			3950	2990.143
Offshore			1064	800.592
Underdale			369	174.197
The Level			172	90.281
Underdale			1566	1149.007

- Suppose we do NOT want to see the **grand total** for the table:

Right click on the word 'Data' in the pivot table. In the drop down menu that appears, click on 'options'. Uncheck the box next to 'Grand totals for columns'. Then click 'OK'. The pivot table will now not have a grand total.

Other subtotals and grand totals can be manipulated in a similar way.

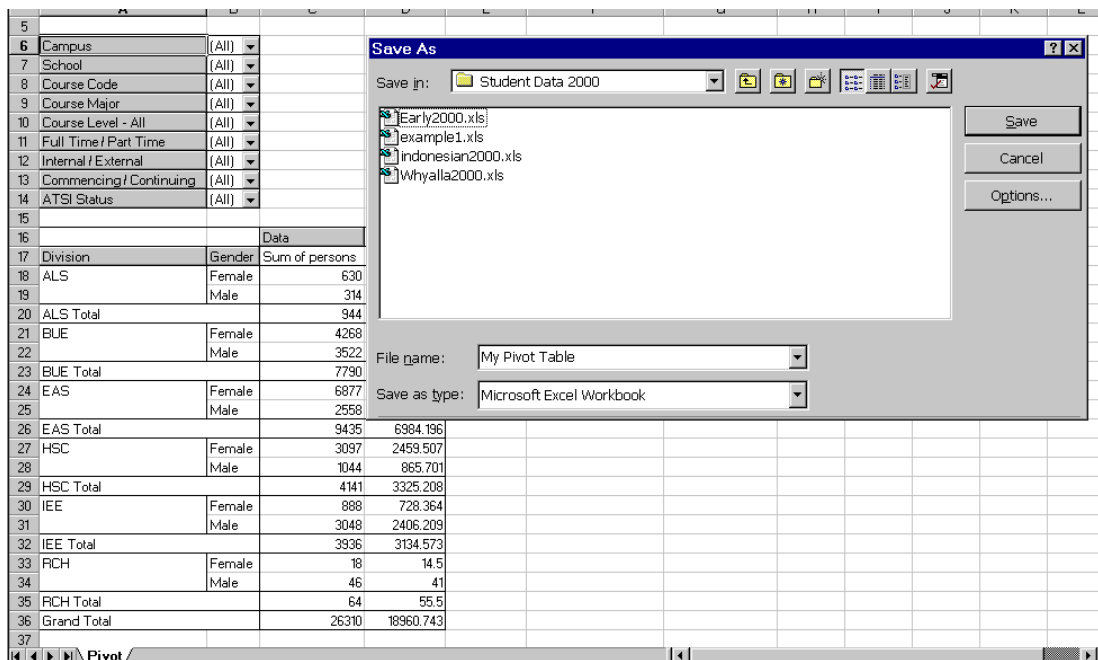
## ***Saving a pivot table to your computer*** [^Top](#)

You can work with the original pivot table on the CD, but if you want to keep a pivot table the way you have formatted it, you need to save a copy of it to your computer.

- Saving the table as a **pivot table**.

Using this method, you will save the pivot table as it appears, and have a copy of the pivot table which can still be manipulated as if it were the original pivot table! This will take up more room on your computer than the second method below, but is more versatile.

From the Excel toolbar at the top of the pivot table click on 'File', then click on 'Save as'. Select a folder on your computer where you wish to save the table. Change the file name if you wish, then click 'Save'.



You will now have a copy of the pivot table on your computer.

- Saving the table as **data only**.

Using this method, you will save the table data as it appears, and have a copy of the data only which can NOT be manipulated as a pivot table. This is useful if you wish to send the data to a third party, or want to keep the formatted table for future use. It takes up less space on your computer than keeping the whole pivot table.

Select the rows of the table you wish to keep. Click and drag down the row numbers on the left of the table (the rows selected will be colored black.)  
Click on 'Edit', then click on 'Copy'.

	A	B	C	D	E	F	G	H	I	J	K	L
5												
6	Campus	(All) ▼										
7	School	(All) ▼										
8	Course Code	(All) ▼										
9	Course Major	(All) ▼										
10	Course Level - All	(All) ▼										
11	Full Time / Part Time	(All) ▼										
12	Internal / External	(All) ▼										
13	Commencing / Continuing	(All) ▼										
14	ATSI Status	(All) ▼										
15												
16			Data									
17	Division	Gender	Sum of persons	Sum of load								
18	ALS	Female	630	390.865								
19		Male	314	182.937								
20	ALS Total		944	573.802								
21	BUE	Female	4268	2549.373								
22		Male	3522	2338.091								
23	BUE Total		7790	4887.464								
24	EAS	Female	6877	5047.498								
25		Male	2558	1936.698								
26	EAS Total		9435	6984.196								
27	HSC	Female	3097	2459.507								
28		Male	1044	865.701								
29	HSC Total		4141	3325.208								
30	IEE	Female	888	728.364								
31		Male	3048	2406.209								
32	IEE Total		3936	3134.573								
33	RCH	Female	18	14.5								
34		Male	46	41								
35	RCH Total		64	55.5								
36	Grand Total		26310	18960.743								
37												

Open a new Excel file to copy the table into. Click on 'File', then click on 'New'.  
Paste the table into the new file. Click on 'Edit', then click on 'Paste'.

Now save the new file on your computer.  
From the Excel toolbar at the top of the pivot table click on 'File', then click on 'Save as'.  
Navigate to a folder on your computer where you wish to save the table. Change the file name if you wish, then click 'Save'.

	A	B	C	D	E	F	G	H	I	J	K
1			Data								
2	Division	Gender	Sum of persons	Sum of load							
3	ALS	Female	630	390.865							
4		Male	314								
5	ALS Total		944								
6	BUE	Female	4268								
7		Male	3522								
8	BUE Total		7790								
9	EAS	Female	6877								
10		Male	2558								
11	EAS Total		9435								
12	HSC	Female	3097								
13		Male	1044								
14	HSC Total		4141								
15	IEE	Female	888								
16		Male	3048								
17	IEE Total		3936								
18	RCH	Female	18								
19		Male	46								
20	RCH Total		64	55.5							
21	Grand Total		26310	18960.743							
22											

You will now have a copy of the table on your computer as an Excel file, but not a pivot table.