Pivot Table User Guide

Department of Home Affairs

Table of Contents

Pivot Tables

About this guide

The Department of Home Affairs is now publishing a range of data in pivot table format. The purpose of this guide is to assist users to understand how to make the most of this data.

Prerequisites

A working knowledge of Microsoft Office Excel is required to use the pivot tables. These pivot tables are created in Microsoft Excel 2016.

For more information on how to use Microsoft Excel see Microsoft Support.

Using pivot tables in Microsoft Excel

Pivot tables are a powerful, easy to use data analysis tool that enables you to reorganise, filter, group and summarise data by dragging and dropping variables into and out of a table.

Structure of a pivot table

The following diagram shows the basic structure of a pivot table. This picture specifically relates to the subclass 457 pivot table, but the principles are the same for all the Home Affairs pivot tables.

Figure 1: Structure of a pivot table

Age Group	(All)								
Citizenship Country	(All)								
Client Location	(All)								
Financial Year Quarter	(All)								
Gender	(All)								
Nominated Occupation (Major Group)	(All)								
Nominated Occupation (Unit Group)	(All)								
Nominated Occupation (Skill Level)	(All)								
Nominated Occupation	(All)								
Nominated Position Location (Statistical Area Level 3)	(All)								
Nominated Position Location (Statistical Area Level 4)	(All)								
Applicant Type	(All)								
Sponsor Industry	(All)								
Visa Subclass	(All)								

Sum of Total	Financial							
Nominated Position Location (State)	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Australian Capital Territory	880	1301	1376	1426	1261	1368	2119	1784
New South Wales	23269	28405	35560	28143	22754	30248	38695	43365
Northern Territory	1070	1478	1717	1967	1308	1137	1803	1568
Queensland	11574	16128	19932	19805	10204	13554	21489	21109
South Australia	2787	3362	4073	4671	3185	3390	3577	3961
Tasmania	728	783	890	995	581	672	551	676
Victoria	13214	18764	22319	20715	15881	20878	24035	26327
Western Australia	11363	16339	24013	22953	12229	18459	29942	26969
Not Specified	6852	1377	1139	757	620	439	2864	602
Grand Total	**71737**	**87937**	**111019**	**101432**	**68023**	**90145**	**125075**	**126361**

Using fields to summarise data

What is a field?

- Fields are also known as data items or variables. They are what enable us to specify the data to be displayed in the pivot table.

- Specifically, the pivot fields may include applicant type, age group, gender, citizenship country and client location.

- Within each field there are items. For example, the items in the field applicant type are primary and secondary.

- Fields enable the data to be either summarised or filtered.

- All of the fields can be moved with the mouse to different areas in the pivot table to give different summaries of the data.

- Clicking the down arrow at the right of the field name will reveal the item selector of the field, showing the items that make up that field.Department of Home Affairs is now publishing a range of data in pivot table format. The purpose of this guide is to assist users to understand how to make the most of this data.

Moving fields

Fields can be moved to any part of the pivot table.

- To move a field simply select the field name with the mouse, drag & drop the field in the new location. The table will then be updated with the revised table layout and the data will update automatically.

- When you move fields around, you will see the cursor change shape indicating the area into which the field is to be dropped.

- If a field is placed in the wrong position, it is easy enough to pick up and move.

Stacking fields

- Fields can be stacked in the row or column areas, enabling more complex tables to be created from the data.

- To stack fields, select the fields and drag & drop them in the appropriate area (one field at a time).

- You can stack several fields in a row and/or column, but stacking too many fields can make the data difficult to read.

- For example, in Figure 2, gender and selected age groups have been stacked in the row area, enabling the comparison of subclass 457 visa grants by gender and selected age groups across a range of financial years (columns).

Figure 2: Example of stacked fields

Citizenship Country		(All)									
Client Location		(All)									
Financial Year Quarter		(All)									
Nominated Occupation (Major Group)		(All)									
Nominated Occupation (Unit Group)		(All)									
Nominated Occupation (Skill Level)		(All)									
Nominated Occupation		(All)									
Nominated Position Location (State)		(All)									
Nominated Position Location (Statistical Area Level 3)		(All)									
Nominated Position Location (Statistical Area Level 4)		(All)									
Applicant Type		(All)									
Sponsor Industry		(All)									
Visa Subclass		(All)									

Sum of Total			Financial								
Gender		Age Group	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
⊟ Female		20 - 24	2276	2774	3557	3413	2401	2947	4460	5412
		25 - 29	6887	8514	10838	10208	7869	10239	13633	15372
		30 - 34	5804	7131	8922	7935	5539	7094	9742	9970
		35 - 39	3618	4758	5922	5435	3403	4252	5323	5152
Female Total			18585	23177	29239	26991	19212	24532	33158	35906
⊟ Male		20 - 24	2200	2469	3316	2879	1805	2717	4770	5424
		25 - 29	7851	9401	12156	10410	7913	11699	16427	18012
		30 - 34	8029	9827	12140	10327	7078	9917	14198	14298
		35 - 39	5892	7204	8683	7755	4528	6093	8605	8241
Male Total			23972	28901	36295	31371	21324	30426	44000	45975
Grand Total			42557	52078	65534	58362	40536	54958	77158	81881

Filtering data

Fields can also be used to filter the data. For example in Figure 2 above, only the age ranges of 20 to 39 years were selected in the age group field. Similarly this can be done for other fields that may not specifically be in the table, for example country of citizenship.

To apply a filter, do the following:

- Click the down arrow at the right of the field box. This will reveal the items of the field. Click the item(s) to be filtered on, and click "OK".
    - o Note: if more than one item is required to be selected, please select the "select multiple items" tick box at the bottom left hand side of the expanded filter box, if it hasn't already been selected.
- The table will then be updated with the updated data.
- If only one item is included in the field filter, it will be displayed next to the name of the field. If multiple items have been selected, it will display "multiple items", if no filtering is applied to a field, it will display "all".
- To remove the filter, follow the same procedure, but select "all".

Sorting items and data

It is often convenient to sort items in different ways. For example you may want to sort the citizenship countries in your table into alphabetical order, or by the number of visa grants.

To sort items by name:

- Locate the field to be sorted in the row or column. Click the down arrow at the right of the field box.
- Click the sort buttons in the menu at the top of the drop down screen to sort the items based on their name.

To sort items by data values:

- Locate the field to be sorted in the row or column. Click the down arrow at the right of the field box. Click the "more sort options" from the menu.

- The sort menu will appear, select ascending or descending, and then select the variable by which to sort the data.

- This menu also enables you to manually sort data into an order that you wish.

- Once the sort order has been defined, select "OK".

To sort non-selected items to make it easier to find the filter you want:

- Right click the name of the item and select "sort"

- Select "sort A-Z" from the extended drop-down menu. This will enable you to easily select multiple countries for example from the country of citizenship list.

Copying data from pivot tables

It is often useful to copy summarised data from a pivot table to another excel file for archiving, presentation or further analysis.

The data in the Home Affairs pivot tables has been locked to protect privacy, and therefore it is not an easy matter of selecting the cells to be copied and pasting the data elsewhere. However the data can be exported from the Home Affairs pivot table, to enable further analysis.

To export the data from the pivot table:

1. Set up the table in the format you wish to export, including any filtering of the data.

2. From the menu tabs select "file/save as"

3. Enter the file name and location where you wish to save the file, but change the file format to csv (comma delimited) (*.csv). This will enable you to open the saved file in excel (or a large range of other programs), while preserving the privacy restrictions placed on the file.

4. Select "OK".