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PxEdit: structural tables

General

You can transfer tables to PxEdit from text or Excel files, directly from Excel or by using the clipboard (for example from LibreOffice tables).

The tables must be **structured** so that they are suitable for PX conversion. The structured table must include the necessary data:

- table heading,
- variable names,
- value texts of variables (values, headings), and
- numeric data.

All table data are not necessarily needed in the input data. Missing data are replaced with a separately defined **fill item**. The table variables or the value texts of variables do not have to be in a specific order and even duplicated data cell references are allowed (in this case, the last reference found is used for the data cell in question).

PxEdit alerts the user of duplicated data cell references.

Also note that:

- cells are separated either by tab characters or semi-colons in text files
- use of commas or spaces is not recommended
- either a comma or period is accepted as a decimal separator in the data input
- do **not** use thousand separators
- data cells can also include dot codes used in PcAxis or possible replacement formats defined for them
- if the value of an individual data cell cannot be converted into a figure or dot code, it is replaced with a padding code.

PxEdit does not alert if conversion of an individual figure is not possible.

The following examples mainly include Excel table examples in which the table structure is evident. The same principles also apply to the processing of text files.

Basic format

At its simplest, the transfer table has the table heading in the **first row** (corner cell). The next row contains the variable names. The value of each variable is found **under** the variables by row and finally the numeric data value that corresponds to them.

The part under the variable names can be seen as consisting of columns that first contain the value texts of the various variables and, in the last column, the data value corresponding to the variable-value combination of each row.

This kind of file is probably the most natural in transferring tables produced from relational databases.

This table has four variables; the value texts of each variable are given separately on each row:

	A	B	C	D	E	F
1	Nights spent and arrivals by country of residence					
2	Year	Region	Country	Type of accommodation establishment	Information	
3	2018	Åland	Finland	All accommodation establishments	Arrivals	93944
4	2018	Åland	Finland	All accommodation establishments	Nights spent	167165
5	2018	Åland	Finland	Hotels	Arrivals	65540
6	2018	Åland	Finland	Hotels	Nights spent	108485
7	2018	Åland	Europe	All accommodation establishments	Arrivals	107457
8	2018	Åland	Europe	All accommodation establishments	Nights spent	221656
9	2018	Åland	Europe	Hotels	Arrivals	62454
10	2018	Åland	Europe	Hotels	Nights spent	105396
11	2018	Åland	Asia	All accommodation establishments	Arrivals	276
12	2018	Åland	Asia	All accommodation establishments	Nights spent	528
13	2018	Åland	Asia	Hotels	Arrivals	143
14	2018	Åland	Asia	Hotels	Nights spent	258
15	2018	Åland	Oceania	All accommodation establishments	Arrivals	133
16	2018	Åland	Oceania	All accommodation establishments	Nights spent	257
17	2018	Åland	Oceania	Hotels	Arrivals	.
18	2018	Åland	Oceania	Hotels	Nights spent	.
19	2018	Åland	Africa	All accommodation establishments	Arrivals	..
20	2018	Åland	Africa	All accommodation establishments	Nights spent	..
21	2018	Åland	Africa	Hotels	Arrivals	..
22	2018	Åland	Africa	Hotels	Nights spent	..
23	2018	Åland	America	All accommodation establishments	Arrivals	787
24	2018	Åland	America	All accommodation establishments	Nights spent	1547
25	2018	Åland	America	Hotels	Arrivals	437

The values of the variables can also be given hierarchically.
The content for an empty field is the last value text given.
Every variable must always have the **first** value text given.

	A	B	C	D	E	F
1	Nights spent and arrivals by country of residence					
2	Year	Region	Country	Type of accommodation establishment	Information	
3	2018	Åland	Finland	All accommodation establishments	Arrivals	93944
4					Nights spent	167165
5				Hotels	Arrivals	65540
6					Nights spent	108485
7			Europe	All accommodation establishments	Arrivals	107457
8					Nights spent	221656
9				Hotels	Arrivals	62454
10					Nights spent	105396
11			Asia	All accommodation establishments	Arrivals	276
12					Nights spent	528
13				Hotels	Arrivals	143
14					Nights spent	258
15			Oceania	All accommodation establishments	Arrivals	133
16					Nights spent	257
17				Hotels	Arrivals	.
18					Nights spent	.
19			Africa	All accommodation establishments	Arrivals	..
20					Nights spent	..
21				Hotels	Arrivals	..
22					Nights spent	..
23			America	All accommodation establishments	Arrivals	787
24					Nights spent	1547
25				Hotels	Arrivals	437

The following example also contains a basic table but now all data values are not included;

	A	B	C	D	E	F
1	Monthly nights spent and arrivals by country of residence					
2	Month	Region	Country	Type of accommodation establishment	Information	
3	2018	Åland	Finland	All accommodation establishments	Arrivals	93944
4					Nights spent	167165
5				Hotels	Arrivals	65540
6					Nights spent	108485
7			Europe	All accommodation establishments	Arrivals	107457
8					Nights spent	221656
9				Hotels	Arrivals	62454
10					Nights spent	105396
11			Asia	All accommodation establishments	Arrivals	276
12					Nights spent	528
13				Hotels	Arrivals	143
14					Nights spent	258
15			Oceania	All accommodation establishments	Arrivals	133
16					Nights spent	257
17			America	All accommodation establishments	Arrivals	787
18					Nights spent	1547
19				Hotels	Arrivals	437
20					Nights spent	849
21		South Karelia	Finland	All accommodation establishments	Arrivals	263543
22					Nights spent	476844
23				Hotels	Arrivals	232938
24					Nights spent	387283
25			Europe	All accommodation establishments	Arrivals	104988

The table looks as follows when it has been transferred to PxEdit, headings are by default hierarchical and the padding code is two dots:

[1] Monthly nights spent and arrivals by country of residence by Month, Region, Coun...

File Edit Window Language

2018	Åland	Finland	All accommod...	Arrivals	93944
				Nights spent	167165
			Hotels	Arrivals	65540
				Nights spent	108485
		Europe	All accommod...	Arrivals	107457
				Nights spent	221656
			Hotels	Arrivals	62454
				Nights spent	105396
		Asia	All accommod...	Arrivals	276
				Nights spent	528
			Hotels	Arrivals	143
				Nights spent	258
		Oceania	All accommod...	Arrivals	133
				Nights spent	257
			Hotels	Arrivals	..
				Nights spent	..
		America	All accommod...	Arrivals	787
				Nights spent	1547
			Hotels	Arrivals	437
				Nights spent	849
		Africa	All accommod...	Arrivals	..
				Nights spent	..
			Hotels	Arrivals	..
				Nights spent	..
	South Karelia	Finland	All accommod...	Arrivals	263543
				Nights spent	476844
			Hotels	Arrivals	232938
				Nights spent	387283
		Europe	All accommod...	Arrivals	104988

456 rows x 1 columns = 456 figures

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Basic format with codes

In addition to the value texts of variables the corresponding **classification codes** can also be given in the transferable table. The codes and texts are given with the **same** variable name, so that the first (on the left) column contains the codes and the next column the texts.

	A	B	C	D	E	F	G	H	I
1	Nights spent and arrivals by country of residence								
2	Year	Region	Region	Country	Country	Type of accommodation establishment	Type of accommodation establishment	Information	
3	2018	MK21	Åland	A002	Finland	01	All accommodation establishments	Arrivals	93944
4	2018	MK21	Åland	A002	Finland	01	All accommodation establishments	Nights spent	167165
5	2018	MK21	Åland	A002	Finland	02	Hotels	Arrivals	65540
6	2018	MK21	Åland	A002	Finland	02	Hotels	Nights spent	108485
7	2018	MK21	Åland	B001	Europe	01	All accommodation establishments	Arrivals	107457
8	2018	MK21	Åland	B001	Europe	01	All accommodation establishments	Nights spent	221656
9	2018	MK21	Åland	B001	Europe	02	Hotels	Arrivals	62454
10	2018	MK21	Åland	B001	Europe	02	Hotels	Nights spent	105396
11	2018	MK21	Åland	B004	Asia	01	All accommodation establishments	Arrivals	276
12	2018	MK21	Åland	B004	Asia	01	All accommodation establishments	Nights spent	528
13	2018	MK21	Åland	B004	Asia	02	Hotels	Arrivals	143
14	2018	MK21	Åland	B004	Asia	02	Hotels	Nights spent	258
15	2018	MK21	Åland	B005	Oceania	01	All accommodation establishments	Arrivals	133
16	2018	MK21	Åland	B005	Oceania	01	All accommodation establishments	Nights spent	257
17	2018	MK21	Åland	B005	Oceania	02	Hotels	Arrivals	.
18	2018	MK21	Åland	B005	Oceania	02	Hotels	Nights spent	.
19	2018	MK21	Åland	B006	Africa	01	All accommodation establishments	Arrivals	..
20	2018	MK21	Åland	B006	Africa	01	All accommodation establishments	Nights spent	..
21	2018	MK21	Åland	B006	Africa	02	Hotels	Arrivals	..
22	2018	MK21	Åland	B006	Africa	02	Hotels	Nights spent	..
23	2018	MK21	Åland	B007	America	01	All accommodation establishments	Arrivals	787
24	2018	MK21	Åland	B007	America	01	All accommodation establishments	Nights spent	1547
25	2018	MK21	Åland	B007	America	02	Hotels	Arrivals	437
26	2018	MK21	Åland	B007	America	02	Hotels	Nights spent	849
27	2018	MK09	South Karelia	A002	Finland	01	All accommodation establishments	Arrivals	263543
28	2018	MK09	South Karelia	A002	Finland	01	All accommodation establishments	Nights spent	476844
29	2018	MK09	South Karelia	A002	Finland	02	Hotels	Arrivals	232938

Codes do not have to be given for all variables.

PxEdit's import routine processes every possible value-code pair separately so the same variable can contain several similar value texts (e.g. *Bootstrapping items* or *Total*) if they have **different** codes.

According to the Px standard, the value texts must **always** be unique. PxEdit allows processing of duplicated value texts leaving the responsibility for converting these to unique text to the user. This can be done, for example, by adding a classification code in front of the value text.

The user is always alerted about duplicated codes or values.

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Table format

Both row and column variables are used in table format presentations. In this case, the data part is a multi-way table. Compared to the basic format the table must also include descriptions of the column variables where the variable names are entered **by row** after the heading row in the first column and the variables' value texts are in their own data columns.

	A	B	C	D	E	F	G	H	I
1	Nights spent and arrivals by country of residence								
2	Type of accommodation establishment					01		02	
3	Type of accommodation establishment					All accommodation establishments		Hotels	
4	Information					Arrivals	Nights spent	Arrivals	Nights spent
5	Year	Region	Region	Country	Country				
6	2018	MK21	Åland	A002	Finland	93944	167165	65540	108485
7				B001	Europe	107457	221656	62454	105396
8				B004	Asia	276	528	143	258
9				B005	Oceania	133	257	.	.
10				B006	Africa	..	..	..	..
11				B007	America	787	1547	437	849
12		MK09	South Karelia	A002	Finland	263543	476844	232938	387283
13				B001	Europe	104988	203739	87810	156255
14				B004	Asia	8608	17919	8294	10060
15				B005	Oceania	81	183	54	128
16				B006	Africa	31	52	.	.
17				B007	America	767	1870	689	1564
18		MK14	South Ostrobothnia	A002	Finland	400576	676854	296880	489928
19				B001	Europe	9278	23344	7807	18865
20				B004	Asia	1105	5867	852	2897
21				B005	Oceania	57	267	51	261
22				B006	Africa	.	.	.	.
23				B007	America	351	882	312	766
24		MK10	South Savo	A002	Finland	297541	522275	225006	346213
25				B001	Europe	47462	142661	22006	51886
26				B004	Asia	3143	6679	2233	3634
27				B005	Oceania	285	629	128	265
28				B006	Africa	55	158	49	133
29				B007	America	929	1969	596	1084
30		MK18	Kainuu	A002	Finland	286371	846548	228526	693865
31				B001	Europe	22317	78295	12721	48150

Any sensible table presentation can relatively easily be converted into a structured table format that PxEdit accepts. Conversion of the presentation into a multidimensional px table is based on the existence of **empty** cells.

Pay attention to the formulation of the table's heading part because a wrongly interpreted table formulation may generate an unnecessarily large result table.

Keyword block

In connection with the table, you can also give px keywords, except `DATA`, `KEYS`, `LANGUAGES`, `PARTITIONED`, `VALUES` and all hierarchy keywords that are related to the table. The language setting for the table (`LANGUAGE`) should be given in the cell next to the heading.

The keyword block is separated from the actual table with two empty rows.

Table-specific keywords are given by row, first the keyword and the content in the next cell.

119				B007	America	5087
120						
121						
122	COPYRIGHT	YES				
123	UNITS	number				
124	NOTE	footnote for the table				
125						
126						

Variable-specific keywords need a corresponding variable name in their own row; this is indicated with the control code `variablename`.

125				
126	NOTE		footnote for region	
127	TIMEVAL			A
128	variablename		Region	Year
129				

Note that the sectioning code is sufficient for the TIMEVAL setting, PxEdit sets the time series expression that corresponds to the variable list and sectioning, if possible.

Value-specific keywords need the corresponding value text or code that is indicated with the control code `valuetext`.

129					
130	VALUENOTE			footnote for Uusimaa	footnote for Southwest Finland
131	variablename			Region	Region
132	valuetext			Uusimaa	MK02
133					

Defining **cell-specific** keywords is slightly more complicated: now the variable names of the table are used as control codes.

133						
134	CELLNOTE				footnote for Finns arrived in hotels	
135	Year				2018	
136	Region				*	
137	Country				Finland	
138	Type of accommodation establishment				Hotels	
139	Information				Arrivals	
140						

You can simultaneously give several keywords at different levels.

The content of the keywords is checked less intensely than when opening the table, so you should be extra careful when creating the keyword block.

Character size is not considered when processing variables and value texts.

The keyword block can also be given in reverse, in which case the keywords and control codes are in their own row and the corresponding data are in their own columns.

Language code

You can give the language code of the table in the cell next to the table heading.
This is conveyed as the LANGUAGE keyword of the table.

	A	B	C	D	E	F	G	H	
1	Nights spent and arrivals by country of residence	en							
2	Type of accommodation establishment					01		02	
3	Type of accommodation establishment					All accommodation establishments		Hotels	
4	Information					Arrivals	Nights spent	Arrivals	Ni
5	Year	Region	Region	Country	Country				
6	2018	MK21	Åland	A002	Finland	93944	167165	65540	

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Multilingual table

The language codes of the table are given separated by commas in the cell next to the table heading. Texts in different languages are given with the same **main language** variable name after the main language column or row in the order indicated by the language codes.

1	Nights spent and arrivals by country of residence	en,fi					
2	Year	Region	Region	Country	Country	Type of accommodation establishment	Type of acc
3	2018	Åland	Ahvenanmaa	Finland	Suomi	All accommodation establishments	Kaikki majc
4	2018	Åland	Ahvenanmaa	Finland	Suomi	All accommodation establishments	Kaikki majc
5	2018	Åland	Ahvenanmaa	Finland	Suomi	Hotels	Hotellit
6	2018	Åland	Ahvenanmaa	Finland	Suomi	Hotels	Hotellit
7	2018	Åland	Ahvenanmaa	Europe	Eurooppa	All accommodation establishments	Kaikki majc
8	2018	Åland	Ahvenanmaa	Europe	Eurooppa	All accommodation establishments	Kaikki majc
9	2018	Åland	Ahvenanmaa	Europe	Eurooppa	Hotels	Hotellit
10	2018	Åland	Ahvenanmaa	Europe	Eurooppa	Hotels	Hotellit
11	2018	Åland	Ahvenanmaa	Asia	Aasia	All accommodation establishments	Kaikki majc
12	2018	Åland	Ahvenanmaa	Asia	Aasia	All accommodation establishments	Kaikki majc

The variable names cannot be given directly by language in the actual table, you must use the keyword block and `VARIABLES` and `languagecode` identifiers.

458	2018	Southwest Finland	Varsinais-Suom	America	Amerikka	Hc
459						
460						
461	languagecode	fi				
462	CONTENTS	Yöpymiset ja saapuneet vieraat asuinmaittain				
463	VARIABLES	Vuosi,Maakunta,Maa,Majoitusliikkeen tyyppi,Tiedot				
464						

No separate language data needs to be provided for every variable when the value texts are the same (for example for the *Year* variable). All value texts in different languages are, however, needed when you want to convey value codes for the variable.

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Hierarchical variable

In structured tables, the **hierarchy levels** (main level = 0) of a hierarchical variable can be given in their own column (or row) before the code data.

The corresponding hierarchy codes can be given in the hierarchy column, in which case PxEdit tries to deduce the hierarchy structure used based on this.

1	Producer Price Index for Manufactured Products					
2	Year			2010	2011	2
3	Products	Products	Products			
4	0	SSS	Total	96,7	102,1	
5	1	A	A PRODUCTS OF AGRICULTURE, FORESTRY AND FISHING	..	..	..
6	2	01	01 Products of agriculture, hunting and related services	..	..	..
7	3	01.1	01.1 Non-perennial crops	..	..	..
8	4	01.11	01.11 Cereals (except rice), leguminous crops and oil seeds	..	..	..
9	4	01.13	01.13 Vegetables and melons, roots and tubers	..	..	..
10	3	01.2	01.2 Perennial crops	..	..	..
11	4	01.23	01.23 Citrus fruits	..	..	..
12	4	02.20	02.20 Wood in the rough	..	..	..
13	2	03.0	03.0 Fish and other fishing products; aquaculture products; support services to fishing	..	..	..
14	3	03.00	03.00 Fish and other fishing products; aquaculture products; support services to fishing	..	..	..
15	1	B	B MINING AND QUARRYING	93,2	100,2	
16	2	07	07 Metal ores	118,3	127,9	
17	3	07.2	07.2 Non-ferrous metal ores	118,3	127,9	
18	4	07.29	07.29 Other non-ferrous metal ores and concentrates	118,3	127,9	

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Example

Let’s edit the following table for transfer:

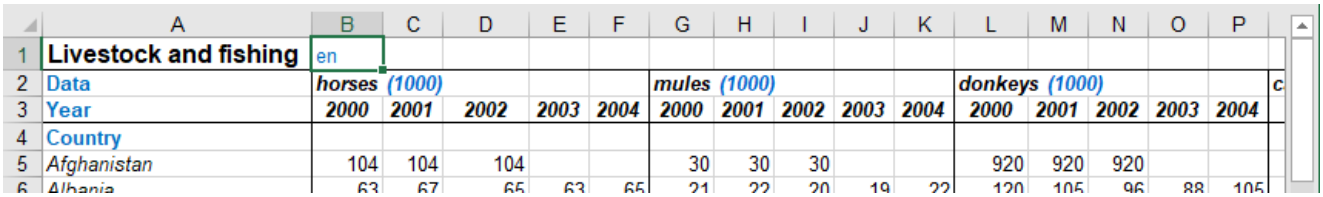
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	**Livestock and fishing**															
2																
3		***horses***					***mules***					***donkeys***				
4		*1 000*					*1 000*					*1 000*				
5		***2000***	***2001***	***2002***	***2003***	***2004***	***2000***	***2001***	***2002***	***2003***	***2004***	***2000***	***2001***	***2002***	***2003***	***2004***
6	*Afghanistan*	104	104	104			30	30	30			920	920	920		
7	*Albania*	63	67	65	63	65	21	22	20	19	22	120	105	96	88	105
8	*Algeria*	44	43	44	44	44	43	43	43	43	43	178	170	170	170	
9	*Andorra*															
10	*Angola*	1	1	1	1	1						5	5	5	5	5
11	*Antigua and Barbuda*	1	1	1	1	1						1	1	2	2	2
12	*Argentina*	3 600	3 600	3 650	3 655	3 655	180	180	180	185	185	95	95	95	98	98
13	*Armenia*	12	11	12	12	13	0	0	0	0	0	2	3	3	3	3
14	*Australia*	220	220	220	220	220						2	2	2	2	2
15	*Austria*	82	63	60	85	85										
16	*Azerbaijan*	61	64	66	68	68	0	0	0	0	0	36	38	39	38	38
17	*Bahamas*															
18	*Bahrain*															
19	*Bangladesh*															
20	*Barbados*	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
21	*Belarus*	221	217	209	202	192						8	9	9	9	9
22	*Belgium*	31	31	31	33	33										
23	*Belize*	5	5	5	5	5	4	4	5	5	5					
24	*Benin*	1	1	1	1	1						1	1	1	1	1
25	*Bhutan*	28	28	29	28	28	10	10	10	10	10	18	18	18	18	18
26	*Bolivia*	322	322	323	323	323	81	81	82	82	82	631	631	632	635	635
27	*Bosnia and Herzegovina*	18	18	18	18	18										
28	*Botswana*	33	33	33	33	33	3	3	3	3	3	330	330	330	330	330
29	*Brazil*	5 832	5 801	5 900	5 901	5 901	1 348	1 346	1 350	1 351	1 350	1 242	1 239	1 250	1 250	1 260

fi en

The heading row is already okay. Remove the unnecessary empty row below the heading and add a row for row variables:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	**Livestock and fishing**															
2		***horses***					***mules***					***donkeys***				
3		*1 000*					*1 000*					*1 000*				
4		***2000***	***2001***	***2002***	***2003***	***2004***	***2000***	***2001***	***2002***	***2003***	***2004***	***2000***	***2001***	***2002***	***2003***	***2004***
5																
6	*Afghanistan*	104	104	104			30	30	30			920	920	920		
7	*Albania*	63	67	65	63	65	21	22	20	19	22	120	105	96	88	105
8	*Algeria*	44	43	44	44	44	43	43	43	43	43	178	170	170	170	
9	*Andorra*															
10	*Angola*	1	1	1	1	1						5	5	5	5	5
11	*Antigua and Barbuda*	1	1	1	1	1						1	1	2	2	2

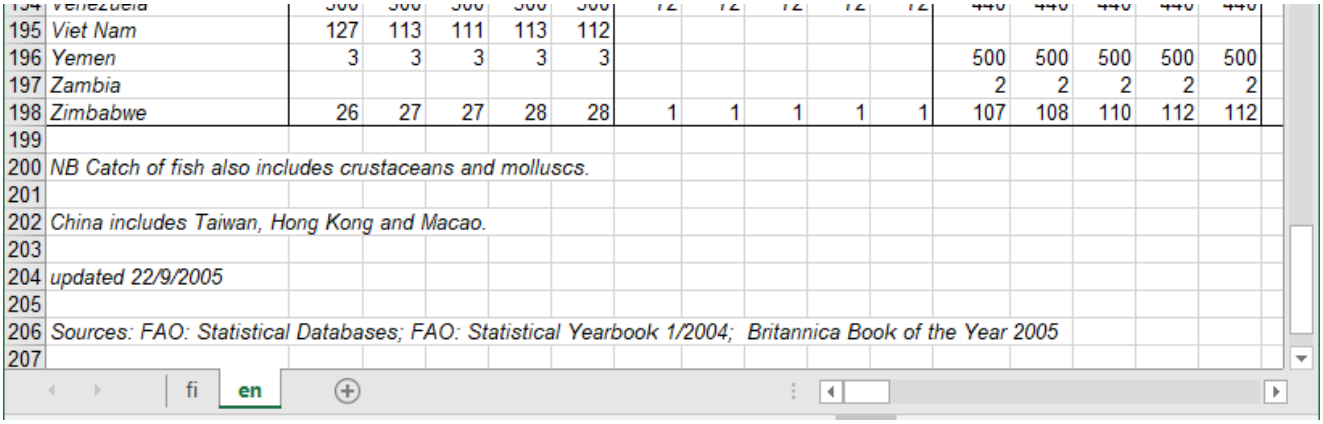
Next, write the column variable names in the first column and the row variable names in their own rows next to each other. Unit data are added after each value text in parenthesis, remove the unit row and add language data. Now the table's heading structure is completed:



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	**Livestock and fishing**	en														
2	Data	*horses (1000)*					*mules (1000)*					*donkeys (1000)*				
3	Year	*2000*	*2001*	*2002*	*2003*	*2004*	*2000*	*2001*	*2002*	*2003*	*2004*	*2000*	*2001*	*2002*	*2003*	*2004*
4	Country															
5	*Afghanistan*	104	104	104			30	30	30			920	920	920		
6	*Albania*	63	67	66	63	65	21	22	20	19	22	120	105	96	88	105

You should always check the right edge and lower section of Excel tables for possible comment texts, footnotes, etc. In some cases, Excel tables can be hard to process, for example the internal *month/year* format is not converted correctly, removal of columns or rows is not possible due to pivoting or due to table formatting, different versions installed on the same computer may prevent table transfer, etc.

Next, we will check the lower section of the table.



195	*Viet Nam*	127	113	111	113	112										
196	*Yemen*	3	3	3	3	3						500	500	500	500	500
197	*Zambia*											2	2	2	2	2
198	*Zimbabwe*	26	27	27	28	28	1	1	1	1	1	107	108	110	112	112
199																
200	*NB Catch of fish also includes crustaceans and molluscs.*															
201																
202	*China includes Taiwan, Hong Kong and Macao.*															
203																
204	*updated 22/9/2005*															
205																
206	*Sources: FAO: Statistical Databases; FAO: Statistical Yearbook 1/2004; Britannica Book of the Year 2005*															
207																

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Add one row below the table to separate the actual table from footnotes. Create a keyword block by converting footnotes to corresponding px keywords. The date should be formatted to meet px standards.

195	*Yemen*	3	3	3	3	3						500	500	500	500	500
196	*Zambia*											2	2	2	2	2
197	*Zimbabwe*	26	27	27	28	28	1	1	1	1	1	107	108	110	112	112
198																
199																
200	LAST-UPDATED	20050922 09:00														
201	SOURCE	*FAO: Statistical Databases; FAO: Statistical Yearbook 1/2004; Britannica Book of the Year 2005*														
202																
203	NOTE		*Catch of fish also includes crustaceans and molluscs.*													
204	VALUENOTE			*incl. Taiwan, Hongkong and Macao*												
205	TIMEVAL				*A*											
206	variablename		Data	Country	Year											
207	valuetext			China												

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When the table is transferred, only its data is copied, so Excel formatting (e.g. fonts, character sizes, colours and percentage and currency fields) do not really affect the transfer. You should check the decimal settings of the result table after the transfer.

Example table after transfer to PxEdit:

[1] Livestock and fishing by Country, Data and Year

File Edit Window Language

	horses (1000)					mules (1000)			
	2000	2001	2002	2003	2004	2000	2001	2002	2003
Afghanistan	104	104	104	..	..	30	30	30	.
Albania	63	67	65	63	65	21	22	20	19
Algeria	44	43	44	44	44	43	43	43	43
Andorra	..	..	..	..	..	..	..	..	.
Angola	1	1	1	1	1	..	..	..	.
Antigua and Barbuda	1	1	1	1	1	..	..	..	.
Argentina	3600	3600	3650	3655	3655	180	180	180	185
Armenia	12	11	12	12	13	0	0	0	0
Australia	220	220	220	220	220	..	..	..	.
Austria	82	63	60	85	85	..	..	..	.
Azerbaijan	61	64	66	68	68	0	0	0	0
Bahamas	..	..	..	..	..	..	..	..	.

193 rows x 45 columns = 8 685 figures

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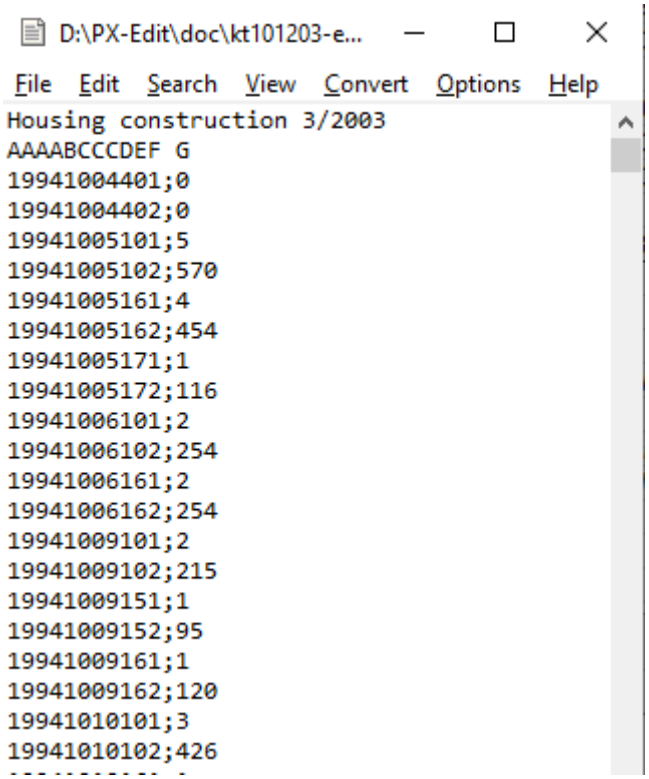
Sequential files

The data mass that is generated from some systems, especially old mainframe applications, consists of sequential file records. Decompressing the record description of such sequential files into variables can be done with the help of **record masking**.

On the row following the heading row a column mask is entered where every field of the record is masked with a character that is repeated as many times as needed. If the record contains fields, punctuation, etc. that you do not want to include, these are masked with spaces. The data field is always last, and you can identify it by pointing out the location of the first character of the data part (the length of variable length data parts cannot be determined based on the first part of the file). When reading sequential files, the value texts of variables that have been found are transferred to both variable values and codes because codes are usually processed in sequential files.

The following file has six variables, the semicolon is not included:



The "variable names" in PxEdit will be *AAAA*, *B*, *CCC*, *D*, *E* and *F*; the beginning of the data part is indicated with *G*. These must naturally be replaced with actual names (*AAAA* seems to be the year, *B* the quarter and *CCC* the municipality code).
Keyword blocks cannot be used in connection with sequential files.

Veli-Matti Jantunen

31 October 2019

Additional information

If necessary, spaces are removed from the beginning and end of the variable names that are read from the table, and from the end of variable values (like classification headings) and codes; this because some systems use initial spaces to indicate the internal hierarchy of the variables.

The size of a table to be read into PxEdit is only limited by the available storage.

The following additional information may help when refining the table format, especially the basic format:

- empty fields *at the end* of rows do not have to be indicated with the right amount of consecutive field separators (e.g. in the heading row)
- the ranking order of the variables is determined only based on the order in which the variable texts are found; you can always change the order using PxEdit's sorting function but, if you like, you can give the variable values in the right order at the *beginning* of the result table without data cells
- if the table includes a keyword block or footnotes or other data that does not belong in the transfer table, these must be separated by at least two empty rows; the possible keyword block should also be separated from other possible data by at least two empty rows
- the cell comments of the Excel table are transferred into corresponding px footnote information
- **cell-specific** footnote information can be embedded in the text file (more information about this in PxEdit's instruction file).