MULTI-LEVEL DEPENDENT DROP-DOWN LISTS

Hi-res PDF, Video & Example File: https://bit.ly/ddlists

1. Dynamic Dependent Drop-down Lists

🔖 These may also be known as 'cascading drop-down lists'.

Step 1 : Add Data

Country	Region
Australia	ACT
Australia	QLD
UK	Essex
UK	London
USA	AL
USA	CO

Table Name: TblRegions

Add data in an Excel table & give your table a name

⚙ Functions Used

UNIQUE Masterclass: https://bit.ly/da-unique

SORT Masterclass: https://bit.ly/da-sort

XLOOKUP Masterclass: https://bit.ly/fnxlookup

TRANSPOSE Masterclass: https://bit.ly/fntranspose

FILTER Masterclass: https://bit.ly/filterfunc

Step 2 : Shape Data

`=TRANSPOSE(SORT(UNIQUE(TblRegions[Country])))`

Use the TRANSPOSE + SORT+ UNIQUE function combination to list down level 1 dropdown values

	H	I	J	K
3				
4	Australia	UK	USA	
5				

`=FILTER(TblRegions[Region],TblRegions[Country]=H4,"")`

Use FILTER function to list dependent column data under each level 1 heading

	H	I	J	K
3				
4	Australia	UK	USA	
5	ACT	Essex	AL	
6	QLD	London	CO	

Copy FILTER formula across columns to allow for more countries to be added in future.

Step 3 : Create Dropdowns: Data Tab > Validation

Data Validation
Settings | Input Message | Error Alert
Validation criteria
Allow: List
Data: between
Source: `=$H$4#`

Create level 1 data validation dropdown. # Operator ensures that new values get dynamically added to the dropdown

	A	B	C
4	Country	Region	
5			
6		Australia	
7		UK	
		USA	

Data Validation
Settings | Input Message | Error Alert
Validation criteria
Allow: List
Data: between
Source: `=XLOOKUP(B5,$H$4:$P$4,$H$5:$P$5)#`

Use XLOOKUP to create dependent data validation dropdown

	A	B	C	D
4		Country	Region	
5		USA	CA	
6		Australia	AL	
7		UK	CO	

Limitations:

1. Requires anticipation of the maximum number of countries.
2. Supports only 1 dependent level

2. Multi-level Dependent Drop-down Lists

Step 1 : Define Name for First Level: Formulas tab > Define Name

Formulas | Data | Review | View | Automate | Developer | Help | Power Pivot

Define Name ▾ | Use in Formula ▾ | Create from Selection

New Name
Name: countries
Scope: Workbook
Comment:
Refers to: `=RegionsTbl[Country]`

Select the first level column from your data

⚙ Functions Used

CELL Masterclass: https://bit.ly/fncell

INDIRECT Masterclass: https://bit.ly/fxindirect

FILTER Masterclass: https://bit.ly/filterfunc

Step 2 : Create level 1 data validation dropdown

Data Validation
Settings | Input Message | Error Alert
Validation criteria
Allow: List ☑ Ignore blank ☑ In-cell dropdown
Data: between
Source: `=countries`

Reference the named range defined in step 1

	A	B	C
4		Country	Region
5			
6		Australia	
7		UK	
		USA	

Benefits:

1. No need to anticipate the maximum number of level 1 values.
2. Supports more than 2 levels of dependencies

Limitations:

1. Requires editing level 1 dropdown, every time you need to edit the dependent dropdown

⚠ **IMPORTANT**
This technique exploits the CELL function's ability to return the reference to the last edited cell. Therefore, the level upstream from the drop-down you want to select from must be the last edited cell. Download the file for an alternate solution.

Step 3 : Create Dependent data validation dropdown

`=FILTER(RegionsTbl[Region], RegionsTbl[Country]=INDIRECT(CELL("address")),"Choose a country first")`

	H								
4	ACT								
5	QLD								

For more levels: copy the formula & modify the references accordingly

Use INDIRECT + CELL function combination to filter out regions for the last edited cell

Data Validation
Settings | Input Message | Error Alert
Validation criteria
Allow: List ☑ Ignore blank ☑ In-cell dropdown
Data: between
Source: `=$H$4#`

Create the data validation list

	A	B	C	D
4		Country	Region	
5		USA	CA	
6		Australia	AL	
7		UK	CO	

FILTER FUNCTION +HACKS — GET MORE TIPS + STEP-BY-STEP VIDEO

https://bit.ly/filterfunc

Mynda Treacy
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