Tables Builder — Tables Builder

Description

After you have collected results using `collect get`, `collect:`, `etable`, `dtable`, or `table`, use the Tables Builder to create tables of the results. In the Tables Builder, you can

- choose which results go in a table,

- lay out the rows and columns,

- change how row and column headers are arranged,

- change the look of anything, and

- export a table to Microsoft Word, Microsoft Excel, PDF, HTML, LaTeX, SMCL, Markdown, and plain text.

Menu

Statistics > Summaries, tables, and tests > Tables and collections > Build and style table

Remarks and examples

Remarks are presented under the following headings:

Overview

The Tables Builder works with an existing collection. You create a collection by collecting results from commands using `collect get`, `collect`, `etable`, `dtable`, and `table`. The Tables Builder lets you choose which results go in a table, lay out the rows and columns of a table, change how row and column headers are arranged, change the look of anything in the table, and export a table to Microsoft Word, Microsoft Excel, PDF, HTML, LATEX, SMCL, Markdown, and plain text.

You launch the Tables Builder by selecting the menu item **Statistics > Summaries, tables, and tests > Tables and collections > Build and style table**

You can see the major components of the Tables Builder in this diagram.
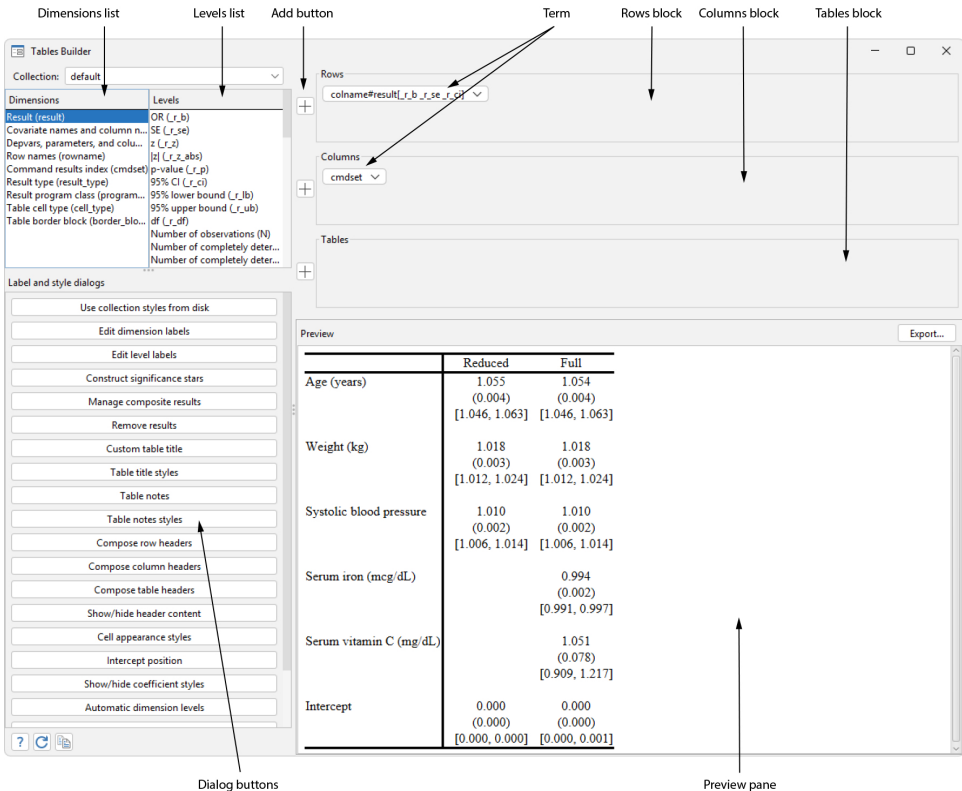
To use the Builder, you will need a basic understanding of what a collection is. In particular, if seeing the words *Dimensions* and *Levels* above leaves you confused, read *Tags, dimensions, and levels* in [TABLES] **Intro 2**.

If you are creating a table only to understand your data, you probably just need to lay out your table. If you are creating a table for publication or to otherwise share with others, that is likely to be an iterative process. It may take several steps to get the layout you want, then some steps to get the headers exactly as you want them, and yet more steps to adjust numeric formats and text styles.

Laying out a table

The first step in creating a table is deciding what goes on the table's rows and columns. We cannot help you with that. The second step is getting those things onto the rows and columns, and the Builder can help with that. The dimensions listed in the *Dimensions* list represent categories of values pulled from results you collected. Each line in the list is a dimension description followed by the dimension name in parentheses.

Choose which category you want to place on the rows of your table by clicking on one of the dimensions in the list. If you want all the values associated (tagged) with that dimension, then just click on the ⊞ to the left of the *Rows* box. If you do that, all the levels of that category become potential rows in the table. And you will see a term added to the *Rows* box. That term will be identified with the name of the dimension.

If you want only a subset of the dimension's levels, then select them from the *Levels* list before hitting the ⊞ control. As with the dimensions, each line in the list is a level description followed by the level name in parentheses. You can click one level, then shift-click another to select a range. You can control-click levels to select levels that are not neighbors in the list. If you select levels, their names will become part of the description in the added term.

Do not worry too much about selecting the levels; you can modify the selected levels later.

We say "potential rows" because you must identify specific stored values using your selected dimensions, or the Builder cannot create a table. For a detailed discussion of what is required to properly specify a layout, see *How collect layout processes tag specifications* in [TABLES] **Collection principles**.

If your table can be represented by a single dimension, you will see results in the Preview pane, and you are done with the basic layout. This might be the case if you are using the Builder to pretty up the results from a one-way tabulation command such as `table rep78`.

More likely, you are creating a two-way, or even multiway, table. To create a two-way table, you will need to put a dimension into the *Columns* box. Again, click on the dimension, optionally select some levels, and then click on the ⊞ beside the *Columns* box. A term for that dimension will appear in the *Columns* box.

If two dimensions are enough to lay out your table, you will see a table with the results you want in the Preview pane. If two dimensions are not enough for your table, you will see one of two things in the Preview pane.

1. You might see a message with some suggestions for other dimensions that may help lay out your table. If so, try adding one of those dimensions to one of the terms in your *Rows* or *Columns* box. (See *Laying out a multiway table*.)

2. You might see a table with results you are not interested in, and either the rows or columns have labels that may confuse you but certainly do not interest you. What has happened? This is really the same problem. You need a multiway table to present your results, and you have only laid out a two-way table. Let's tell you how to proceed and then tell you why it happened.

First, think about the table you are trying to create. One, or more, of the dimensions you have not yet put into the *Rows* or *Columns* box is required to identify the super-rows or super-columns of a multiway table.

If you cannot think of any dimensions that you should add, clear your current layout by clicking on the ⟳ button in the lower left of the Builder. Repeat the process of selecting and adding dimensions to your layout, but this time carefully select only the levels you are interested in. Now you will see a message in the Preview pane, and you can go back and proceed from item 1 above.

So what happened to create that useless table? The commands that collect results collect everything by default, including things you may not want on your table. You may have noticed this when selecting dimensions for your table. You may have seen levels like c1 and c2 that do not interest you. Regardless, they are in the collection, as are the values they tag. When the Builder laid out your table by searching over all the levels in the dimensions you selected for rows and columns, it found results that exactly matched some of the row/column tag combinations. That happened because you asked for a two-way table when you wanted to ask for a three-way or higher multiway table. Once you add the dimensions for a multiway table, the results found for the mistaken two-way table will no longer be found—they only match the unwanted two-way table. For more details than you probably want about what is required to properly specify a layout, see *How collect layout processes tag specifications* in [TABLES] **Collection principles**.

Laying out a multiway table

A multiway table has super-rows, super-columns, or both to present results that require more than two dimensions. Consider a cross-tabulation of frequencies by the categorical variables sex, region, and agegrp. Those counts form a cube with dimensions for each of the categorical variables. We cannot put three-way results directly on a two-way table. What we can do is create a three-way table using super-columns or super-rows for one of the dimensions. Here is what that looks like with super-rows for sex:

```
. use https://www.stata-press.com/data/r19/nhanes2l
(Second National Health and Nutrition Examination Survey)

. table (sex agegrp) (region)
```

| | Region | | | | |
---	NE	MW	S	W	Total
Sex					
Male					
Age group					
20–29	204	340	290	282	1,116
30–39	169	199	200	202	770
40–49	122	182	175	131	610
50–59	146	141	170	145	602
60–69	290	333	381	365	1,369
70+	87	115	116	130	448
Total	1,018	1,310	1,332	1,255	4,915
Female					
Age group					
20–29	240	344	299	321	1,204
30–39	165	234	243	210	852
40–49	124	194	190	154	662
50–59	146	166	215	162	689
60–69	297	388	430	376	1,491
70+	106	138	144	150	538
Total	1,078	1,464	1,521	1,373	5,436
Total					
Age group					
20–29	444	684	589	603	2,320
30–39	334	433	443	412	1,622
40–49	246	376	365	285	1,272
50–59	292	307	385	307	1,291
60–69	587	721	811	741	2,860
70+	193	253	260	280	986
Total	2,096	2,774	2,853	2,628	10,351

There are several ways to lay out a three-way table in the Builder.

Method 1. The easiest way is to start by laying out a two-way table using just two of your three required dimensions. You do that exactly as we did in *Laying out a table*. At that point, you probably have a message in the Preview pane that you need to add more dimensions. Or you might have a useless table that is not what you want. Either is to be expected. Ignore that and move on.

Time to add your third dimension. Click on the ⌄ in one of the two terms you just created. If you want a table with super-rows, click on the ⌄ on the term in the *Rows* box. If you want a table with super-columns, click on the ⌄ on the term in the *Columns* box. From the resulting drop-down list, select **Edit**. You will be presented with a *Modify term* dialog that looks something like
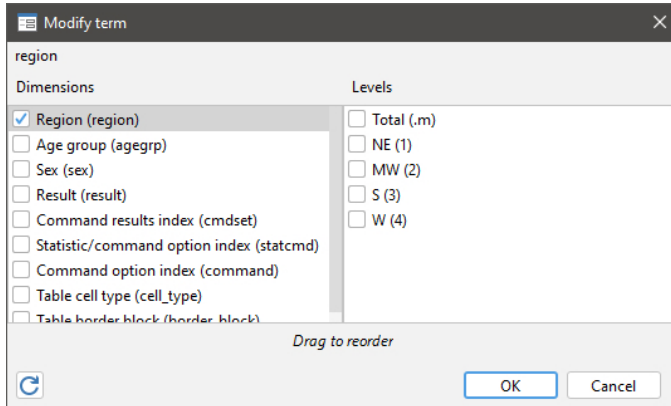
This dialog box looks and acts a lot like the *Dimensions* and *Levels* list from the main Builder window. Note that there will be a check mark in the box beside the dimension you previously selected for the term. That means the checked dimension is part of this term. If you had selected specific levels when creating the term, those will have check marks beside their lines in the *Levels* list of the dialog.

Now add your third dimension—the one you have not yet used—to this term. To do that, just click on the box beside the third dimension in the dialog. If you only want some of the levels on your table, you can click on the boxes beside the levels you want on the table. Now click on **OK**. You will see your term updated in the *Rows* or *Columns* box. More importantly, if the three dimensions you have selected do indeed identify the table, you will see a table in the Preview pane.

The term you modified will now look something like

where `colname` and `result` are the names of the dimensions you selected for the term. Your dimension names will probably not be `colname` and `result` unless you happen to be creating a comparative regression table. They will be the names of the dimensions that define your table.

The term might also look like

if you specifically selected the levels `frequency` and `percent` from the levels of dimension `result`.

The `#` is actually part of the language for specifying table layouts when you use the command `collect layout` instead of the Tables Builder. `#` instructs `layout` or the Builder to interact the levels of the dimensions. If you think about how dimensions in the *Rows* and *Columns* boxes are used, they too are interacted. In the case of the rows and columns of a two-way table, we want all possible pairings of the levels from the row and column dimensions. Those pairings form the cells in the table. When we created the interaction in our term, we were requesting all possible triplets of the levels of the three dimensions. The third dimension is organized as super-rows or super-columns.

Method 2. We can create a term with an interaction directly from the *Dimensions* list. We start as we always do. Pick a dimension, and possibly select levels; then, use one of the ⊞ controls to put it into the *Rows* or *Columns* box. Then, click on that newly added term. It will be highlighted. Then, select the third dimension from the *Dimension* list, and click on the ⊞ control for the *Rows* or *Columns* box where the term is highlighted. The new dimension will be added to the highlighted term, and it will become an interaction term. Finally, add one or more other dimensions to the empty *Rows* or *Columns* box.

Other methods. We did not have to perform all the steps in method 1 or method 2 in exactly the order as written. And we can mix and match the methods from method 1 and method 2. Put one term into the *Rows* box and then another into the *Columns* box; then use method 2 to create interaction terms. We can delete terms and start over.

Moreover, we can create four-way tables, five-way tables, all the way up to silly-way tables. We can use method 1 and method 2 to create as complex a multiway table as we like. The important thing is to get our the interaction terms that specify our rows, super-rows, super-super-rows, …; and our columns, super-columns, … built so that we get the table we want.

Modifying the layout

There are four main things we might want to change in a layout:

1. Make the rows columns and the columns rows.
2. Make super-rows rows and rows super-rows.
3. Make super-columns columns and columns super-columns.
4. Add or remove levels from a dimension.

1. Make the rows columns and the columns rows. Swapping rows and columns is both a common desire and easy. You might accidentally put a `cities ∨` dimension on the columns and realize that 87 cities makes for a truly wide table. Drag the `cities` dimension to the *Rows* box, where you always wanted it, and drag whatever dimension is in the *Rows* box to the *Columns* box. Done.

This works with terms that have interactions too. If you drag an interaction term from the *Rows* box into the *Columns* box, you are simply converting the whole super-row/row structure into a super-column/column structure. And vice versa when dragging from the *Columns* box to the *Rows* box.

2. Make super-rows rows and rows super-rows. This is a little more subtle, and you may have already encountered it if you tried your own example when we discussed multiway tables above. We showed a table in *Laying out a multiway table.* It had levels of the dimension `sex` as super-rows and levels of the dimension `agegrp` as rows. That makes the comparison of age groups within sex easy. What if you really wanted to compare females and males within age groups?

We need to swap the dimensions that are on the rows and super-rows. First, click on the ∨ on the `sex#agegrp ∨` term in the *Rows* box, and select **Edit** to launch the *Modify term* dialog. You would see that the `sex` and `agegrp` dimensions are checked and that `sex` appears above `agegrp`. Simply click-and-hold on the `agegrp` dimension, and drag it above the `sex` dimension. Or click-and-hold on the `sex` dimension, and drag it below **agegrp**. Click on **OK**. The dimensions on the rows and super-rows have been swapped. The rows for females and males are now adjacent.

That is the general idea, and it also works for multiway terms where more than two dimensions are interacted.

3. Make super-columns columns and columns super-columns. This is really just step 2. Reread step 2, and substitute "column" everywhere you see "row".

4. Add or remove levels from a dimension. You have rows you do not want, or columns that you want are missing. You may have done this to yourself when creating terms by selecting too few or too many levels for a dimension. Or you may have a collection from `table` that makes pretty draconian assumptions about which `result` dimensions you want from any `command()` options.

If you have been reading along, you may have guessed the answer to this one. Click on the ⌄ of the term for which you want to add or remove levels, and select **Edit** to launch the *Modify term* dialog. In the dialog, click on the dimension for which you want to change the list of levels. Then check or uncheck levels until all the levels you want are checked, and only the levels you want are checked.

Laying out stacked dimensions

There are cases where you do not want to interact a dimension with another dimension on the rows or columns as we did in *Laying out a multiway table*. Instead, you want to stack some results below some other results. (Or perhaps stack them to the right if the original results are on the columns.)

Consider a table comparing two regressions. Each regression appears in a column, so you already have the term [cmdset ⌄] in the *Columns* box. The coefficients and perhaps their standard errors and confidence intervals appear on the rows. The values for these statistics require that you also know the covariates. That means the *Rows* box will have an interaction term that looks like [colname#result[_r_b _r_se _r_ci] ⌄].

Suppose you also want to place some of the model-level statistics below the coefficients and their statistics. Say you want the R-square, the model F statistic, and the p-value of the model F statistic. To add these statistics to the bottom of each regression, click on **Result (result)** in the *Dimensions* list, and then control-click on **R-square (r2)**, **Model F test (F)**, and **Model test p-value (p)** in the *Levels* list. Then, after making sure that nothing is selected in the *Rows* box, click on the ⊞ beside the *Rows* box. You will see a new term added to the *Rows* box, and the model-level statistics will be added to the bottom of the table.

Placing multiple results in a cell

Rather than stacking results or placing them on adjacent columns, you may prefer to place multiple results in a single cell. For example, suppose you have a table comparing regression results. You currently have [cmdset ⌄] in the *Columns* box and [colname#result[_r_b _r_ci] ⌄] in the *Rows* box, but you would rather place the confidence intervals in the same cell as the coefficients. You can create this layout by creating a composite result from the coefficients and confidence intervals. Click on **Manage composite results**, and provide a name for this new composite result; for example, you might name this result `coefci`. Then, for the *Composite result elements*, you would select `Coefficient (_r_b)` and `95% CI (_r_ci)`. You can then lay out your table by interacting `colname` with the level `coefci` of dimension `result`.

Multiple tables

We have thus far completely ignored the *Tables* box. It has just one job. Instead of creating super-rows or super-columns, any dimension placed in the *Tables* box creates multiple tables—one for each level of the dimension. If you place or create an interaction term in the *Tables* box, a new table will be produced for all combinations of the levels in the term.

What is more, you already know how to use it. Placing dimensions into the *Tables* box or creating interaction terms in the *Tables* box works exactly as it works in the *Rows* and *Columns* boxes. You can also drag terms into the *Tables* box from the *Rows* or *Columns* boxes, and vice versa.

Changing row and column headers

Row headers are the descriptions of the rows that you see along the left of a table. Column headers are the descriptions of the columns that you see along the top of a table. These headers are the reader's guide to understanding your table. If the headers are good, your table will be easy to read and understand. If the headers are bad, readers will be left scratching their heads.

Perhaps you are lucky, and your variable labels along with the default result labels and the default header composition will be just what you want. Perhaps not. If not, there is plenty of control for the headers in the Builder. You just have to know where to look.

Let's start with the easiest part, the text actually written in the headers.

Text/labels

You can change the label for any dimension on your table. This is the label for the dimension itself, not for the levels of the dimension. It is the levels that actually form the rows and columns of your table. Sometimes, the dimension label is shown in the header; sometimes, it is not. See *Layout* for a discussion.

To change one or more of your dimension labels, click on the button **Edit dimension labels** to launch the dimension labels dialog. There you can select dimensions, see their current label, and change that label.

You can also change the labels for levels in a dimension. These labels almost always appear on the table because they identify the rows and columns. An exception is comparative regression tables that sometimes identify standard errors by placing them in parentheses and confidence intervals by placing them in brackets. Such tables often dispense with labeling the statistics, the levels, altogether. Regardless, if you want to change labels for levels, click on the **Edit level labels** button to launch a dialog for editing labels. In that dialog, you can choose the dimension with the levels you want to change, choose the level you want to change, see the current label for the level, and change that label.

Layout

There are two components to header layout—what things are shown and hidden, and how the labels and names are composed to form the header.

Let's start with what is shown and hidden. In *Text/labels*, we alluded to cases where dimension labels themselves might or might not be shown. Consider a dimension created from a birth sex variable. The two levels in that dimension would likely be labeled `Female` and `Male`. Those labels are self-explanatory and do not need any additional labeling to be clear. We do not need, and probably do not want, the label for the dimension itself. We would be perfectly happy with row headers that look like this:

```
Female  ...
Male  ...
```

Now consider a variable from a Likert scale. Say we are talking about websites, and the label on the dimension is "Easy to navigate". The levels are labeled "Strongly agree", "Agree", "Neutral", "Disagree", and "Strongly disagree". Those level labels do not mean anything by themselves. We need the dimension label—"Easy to navigate". We now need row headers that look like this:

```
Easy to navigate
  Strongly agree  ...
  Agree  ...
  Neutral  ...
  Disagree  ...
  Strongly disagree  ...
```

Click on the **Show/hide header content** to launch a dialog that lets you control which labels or names are shown. You can choose to show labels, show names, or show nothing (hide). You can make this decision for dimensions, for all levels in a dimension, or for individual levels in a dimension. You can even set the default behavior across all dimensions and levels.

Once your header content is set, you can change how row and column headers are composed or constructed. You do that by clicking on the **Compose row headers** or **Compose column headers** button.

That word "composed" encompasses a lot of choices. Let's consider a few.

Do you want cross-tabulation row headers that look like

```
Female  East
Female  West
Female  North
Female  South
Male    East
...
```

or like

```
Female
  East
  West
  North
  South
Male
  East
...
```

Then choose either **Split elements across columns** or **Stack elements in a single column** on the *Compose row headers* dialog.

Do you want your factor-variable interactions to look like

```
Sex # Region
  Female # East
  Female # West
  Female # North
  Female # South
  Male # East
  ...
```

or like

```
Sex
Region
  Female
    East
    West
    North
    South
  Male
    East
...
```

Then choose between **Compose factor-variable elements in a single cell** and **Split factor-variable elements into separate cells** on the *Compose row headers* dialog.

Similar choices can be made about column headers on the *Compose column headers* dialog.

There are many other changes to row and column headers you can make from these dialog boxes. We suggest you launch the dialogs and explore.

Appearance

You can change many things about the appearance of row and column headers, including borders and horizontal or vertical rules, bolding, italics, font color, cell color, margins, and justification.

To change any of these properties for the row headers, click on the **Cell appearance styles** button. In the resulting dialog, click on one of the check boxes for the dimension and level rows, and then select **Table cell type (cell_type)** as the dimension. If you want to change the appearance of row headers, select `row-header` for the level. Alternately, if you want to change the appearance of column headers, select `column-header` for the level. Then click on any of the dialogs tabs—**Borders**, **Diagonals**, **Fonts**, **Shading**, **Margins**, **Alignments**, or **Formats**—and make any appearance changes you want on that tab.

You can even target the appearance change to specific rows or columns. You do that by choosing a second dimension on the dialog. Choose one of the dimensions that is on the rows or columns of your table. Then, select the level of the dimension for the specific row or column header you want to change. Finally, make the appearance changes you want on one of the tabs.

Show/hide factor-variable base levels and empty cells

Many applications of factor variables require that one of the levels in the variable be declared a base level. In those applications, nothing is estimated for that level, making its coefficient effectively 0. By default, tables produced by the Builder include base levels for factor variables in the table with 0s for coefficients or means and blanks for standard errors and other statistics about the coefficient or mean.

If you would rather have base categories dropped from a table, click on the **Show/hide coefficient styles** button. On the resulting dialog, select **Show base levels for factor variables**. You then have several choices for which base levels are shown. You can show base levels for factor variables but not for interactions, show base levels for both factor variables and for interaction, or remove all base levels.

Factor variables can be interacted, and sometimes there are no observations in one of those interactions. Consider the interaction of race (which includes Aleut Eskimo) with city regions in Los Angeles (LA). If there are no Aleutians residing in East LA, then we say that cell of the interaction is empty.

As with base categories, you can control whether empty cells are shown or hidden on the dialog launched by the **Show/hide coefficient styles** button.

We put this discussion in *Changing row and column headers* because showing or hiding factor-variable base levels adds or removes entire rows or columns from the table, including their headers.

Show/hide omitted coefficients

Regressions and other estimators require that covariates not be collinear. If they are, this is flagged in the output with a 0 coefficient and an (omitted) note. By default, tables produced by the Builder include collinear covariates with 0s for coefficients or means, and blanks for standard errors and other statistics about the coefficient or mean.

You can specify that collinear covariates instead be dropped from the results by clicking on the **Show/hide coefficient styles** button. On the resulting dialog, select **Show omitted coefficients**, and then click on the **Off** radio button.

Changing cell/results appearance

You can change just about anything about how the values in your table look—numeric formats, borders, horizontal and vertical rules, bolding, italics, font, text color, cell color, margins, justification, and more. This is all done in the dialog launched by the **Cell appearance styles** button.

If you want to change the default look of everything on the table, including the headers, click on the radio button labeled **Edit base style**. Then click on one of the tabs—**Borders**, **Diagonals**, **Fonts**, **Shading**, **Margins**, **Alignments**, or **Formats**. Whatever changes you make on those tabs will apply to all text or cells throughout the entire table, both cells in the body of the table and in the headers. Because you are modifying the base appearance, if you have previously made changes to more specific tags (dimensions and levels), those changes will still be applied.

To make changes that override the default appearance for everything, first click on the radio button labeled **Edit styles for specified tags**.

If you want to change the appearance of only the results and cells in the body of the table, and not the headers, then select the dimension **Table cell type (cell_type)** and select the level **item**. Now any changes you make on the other tabs applies to all results and cells in the main body of the table, and not to any of the headers.

You can be specific about which results are affected by the appearance changes you make on the other tabs. For example, if your table has regression results, you could select the **Result (result)** dimension, then select **Coefficient (_r_b)**. Any changes you make after that affect only the coefficients. You might then click on the **Formats** tab and change the format type to **Fixed numeric** with 2 digits to the right of the decimal. You could make the same changes to the **Std. error (_r_se)** and **95% CI (_r_ci)** by repeating the process on those levels.

You can get even more specific. So far, we have picked only one dimension. The **Main** tab of the dialog allows you to pick up to 10 dimensions. Continuing with the regression example from the prior paragraph, after selecting **Coefficient (_r_b)** from the **Result (result)** dimension, we might now pick a second dimension, say, **Covariate names and column names (colname)**. Imagine we are trying to highlight the results from one of the covariates in our regression. We would then select that covariate from the *Level* drop-down list. So we have two things: the coefficient and the covariate we want to emphasize. With those two tags chosen, any changes we make on the other tabs affect only the coefficient and our chosen covariate. We can highlight those results any way we wish—bold, italics, text color, cell color, etc. You could make the same changes to the **Std. error (_r_se)** and **95% CI (_r_ci)** of the covariate by repeating the process on those levels.

It is important to realize that not all appearance edits can be rendered on all export formats. For example, plain text (`.txt`) is called "plain" for a reason. Aside from numeric formats and some horizontal and vertical rules, nothing from the appearance edits can be rendered in plain text. Most appearance edits can be rendered in HTML, PDF, Microsoft Word, and Microsoft Excel. Many, but fewer, can be rendered in LaTeX. No export format can render all the changes you can make on this dialog.

Because the Preview pane renders one of the exports, you also will not be able to see all appearance edits in the Preview pane. On Windows and Macintosh, the preview is HTML, so you will see most appearance edits. On Linux, the preview is plain text, so you will see almost none of your edits.

Numeric formats

Make changes to numeric formats on the **Formats** tab. There you can also specify the delimiters for confidence and credible intervals.

Borders and horizontal or vertical rules

Add or remove borders around cells on the **Borders** tab. You can create horizontal rules by specifying borders only on the top or bottom of cells. You can create vertical rules by specifying borders only on the left or right of cells.

Bold, italics, text color, and such

Make table text bold or italic, or change its color on the **Fonts** tab. You can also underline text on the **Fonts** tab, or render it with a strikeout. You can even put text in all capitals or initial capitals. There are also some special settings for LaTeX and SMCL export. You can specify the font family, but that must be done in a way that is supported by your intended export format.

Cell color

Change background and foreground cell color on the **Shading** tab. You can also set fill patterns on that tab.

Margins

Set margins for the cells on the **Margins** tab. You can add "in", "cm", or "pt" to any value you type here to specify that the margin is to be in inches, centimeters, or printers points.

Justification/alignment

Align text to the left or right and to the top or bottom on the **Alignments** tab.

Adding significance stars

You can add significance stars to coefficients in the dialog launched by clicking on the **Construct significance stars**. In fact, you can add any text you like to any result you like using rules on the value of any result you like. You can even limit the application of the "stars" to selected tags. A tag is defined by a dimension and one of its levels.

Adding a custom table title

You can add a custom table title in the dialog launched by clicking on the **Custom table title**.

Changing table title appearance

You can change the appearance of table titles in the dialog launched by the **Table title styles** button. Click on the **Fonts** tab to change the font, size, text color, bolding, italics, and more. Click on the **Shading** tab to change the background color, foreground color, and fill pattern.

Adding table notes

You can add table notes in the dialog launched by clicking on the **Table notes**.

Changing table note appearance

You can change the appearance of table notes in the dialog launched by the **Table notes styles** button. Click on the **Fonts** tab to change the font, size, text color, bolding, italics, and more. Click on the **Shading** tab to change the background color, foreground color, and fill pattern.

Exporting a table

Export your table by clicking on the **Export ...** button. You can choose from several export formats—Microsoft Word, Microsoft Excel, PDF, HTML, LATEX, SMCL, Markdown, and plain text.

Advanced tools

Position of intercept

When your table contains regression results, the intercept is placed by default after all the other coefficients. If you prefer, you can have it placed before the other coefficients. Use the dialog launched from the **Intercept position** button.

Automatic dimension levels

If you requested specific results when creating your collection, the meaning of a dimension used alone in the Builder has been changed. For example, to collect results, you could type

```
. collect _r_b _r_ci: regress ...
```

If you then add the **Result (result)** dimension to one of the *Rows* or *Columns* boxes without choosing any levels from the Level list, that dimension will no longer represent the result dimension and all of its levels. It will instead represent only the levels you specified on dimension result when you collected the results.

Another way automatic levels are defined is when your collection was created by the table command and you specified one or more command() options. table makes some choices on its own about what you would like to see in your table.

Regardless of whether you requested specific results at collection time or table made some choices for you, you can change these "automatic" dimension levels by clicking on the **Automatic dimension levels** button. On that dialog, you can clear the automatic levels for any dimension. You can redefine the automatic levels for any dimension. Or you can create a new list of automatic levels for any dimension.

All of this can be tremendously helpful when typing commands to lay out a table. The Builder makes it so easy to select levels while you are choosing dimensions for the rows or columns that automatic levels are rarely helpful.

The most likely surprise you will encounter in the Builder occurs after a `table` command that included regressions specified in the `command()` option. You might then place the **Results (results)** dimension into the *Rows* or *Columns* boxes without selecting specific levels. If you do, only the coefficients will be shown. That is because `table` set the automatic levels of dimension `result` to be just the coefficients.

You could click on the **Automatic dimension levels** button and redefine the automatic levels for `result`. But why? You can just click on the ⌄ on the result ⌄ term, select **Edit**, and click on whatever levels you want in the *Modify term* dialog.

Rename dimension levels

You can rename, or formally recode, any level from any dimension in the dialog launched by clicking on the **Recode dimension levels** button. That would rarely be done from the Builder.

Remap tags

Another, even more advanced, operation you can perform from the Builder is to remap dimensions and their tags. Click on the **Remap tags** button to launch a dialog. On that dialog, you can move a level from one dimension to another dimension, create new dimensions and populate them from existing levels in existing dimensions, and rename a dimension. You can even limit this remapping to values where combinations of other tags are set.

For suggested citations, see the FAQ on citing Stata documentation.