Myriad Tables Suite Take a seat.

**display table with data** v: Create a table, and then display it.

display table with data list of any: A list where each item represents the data for a row in the table. The items should be sublists (representing rows) for multi-column tables, or of the same class for a single-column table. Rows with fewer items than the first will be padded out. In each column, all entries must be of the same class.

[with title text]: Title for the window containing the table.

[with prompt text]: The message that appears at the top of the table's window.

[multiple selections allowed boolean]: Whether more than one table row can be selected. Default is false.

[can add and delete boolean]: Whether extra buttons appear at the bottom of the table, allowing you to insert or delete entries. Also enables insertion by dragging files, provided the cursor is within an editable text column when you let the mouse button up; this will add POSIX paths (or names if the shift key is down). Default is false.

[editable columns list of integer]: A list of the indexes of the table columns that should be editable. Pass an empty list to make all columns editable.

[column headings list of text]: A list of the column headings. The default is not to have a heading row. [row numbering boolean]: Whether to include a row number column. Default is false.

[initially selected rows list of integer]: A list of the rows that will be selected when the dialog appears.

Default is none selected.

[empty selection allowed boolean] : If false, the OK button and optional extra button are disabled if no table row is selected. Default is false.

[row template list of any]: By default, column types are based on the first sublist in the table data. However, you can provide a sample 'row' to be used instead. You may do this if the first row of the data could contain 'missing value', you do not want a column to appear, you wish text to be be displayed as bullets, or you wish to use popup menus or combo boxes. If provided, the number of items in this list is the number that will appear in each row, regardless of how many items a row actually contains. The template can consist of dummy values, like {"", 1, true, current date, ...}, or class names like {text, integer, boolean, date, ...}. For a secure column, where entries appear as bullets, provide the text "hidden". See the entries for the 'popup menu' and 'combo box' classes for details on how to specify them

[multiple lines allowed boolean]: If true, row heights will adjust to fit when entries contain multiple paragraphs. Default is false. Requires version 1.0.6 or later.

[giving up after any]: The number of seconds to wait before dismissing the dialog automatically. The default is 0, which means never give up automatically.

[double click means OK boolean]: If true, double-clicking on a cell is the same as clicking the OK button, rather than a way of selecting the contents of an editable cell. Default is false. Requires version 1.0.7 or later.

→ table reply : A table reply record.

**make new table with data** v: Create a table, which you can then modify using 'modify table' and 'modify columns in table', and display using 'display table'.

make new table with data list of any: A list where each item represents the data for a row in the table. The items should be sublists (representing rows) for multi-column tables, or of the same class for a single-column table. Rows with fewer items than the first will be padded out. In each column, all entries must be of the same class.

[with title text]: Title for the window containing the table.

[with prompt text]: The message that appears at the top of the table's window.

[multiple selections allowed boolean]: Whether more than one table row can be selected. Default is false.

[can add and delete boolean]: Whether extra buttons appear at the bottom of the table, allowing you to insert or delete entries. Also enables insertion by dragging files, provided the cursor is within an editable text column when you let the mouse button up; this will add POSIX paths (or names if the shift key is down). Default is false.

[editable columns list of integer]: A list of the indexes of the table columns that should be editable. Pass an empty list to make all columns editable.

[column headings list of text]: A list of the column headings. The default is not to have a heading row. [row numbering boolean]: Whether to include a row number column. Default is false.

[initially selected rows list of integer] : A list of the rows that will be selected when the table appears. Default is none selected.

[empty selection allowed boolean] : If false, the OK button and optional extra button are disabled if no table row is selected. Default is false.

[row template list of any]: By default, column types are based on the first sublist in the table data. However, you can provide a sample 'row' to be used instead. You may do this if the first row of the data could contain 'missing value', you do not want a column to appear, you wish text to be be displayed as bullets, or you wish to use popup menus or combo boxes. If provided, the number of items in this list is the number that will appear in each row, regardless of how many items a row actually contains. The

template can consist of dummy values, like {"", 1, true, current date, ...}, or class names like {text, integer, boolean, date, ...}. For a secure column, where entries appear as bullets, provide the text "hidden". See the entries for the 'popup menu' and 'combo box' classes for details on how to specify them.

[multiple lines allowed boolean]: If true, row heights will adjust to fit when entries contain multiple paragraphs. Default is false. Requires version 1.0.6 or later.

[double click means OK boolean]: If true, double-clicking on a cell is the same as clicking the OK button, rather than a way of selecting the contents of an editable cell. Default is false. Requires version 1.0.7 or later.

→ any : A table you can modify further, or show using 'display table'.

**display table** v: Displays a table created with 'make new table with data'.

display table any: The table.

[giving up after real]: The number of seconds to wait before dismissing the table's window automatically. The default is 0, which means never give up automatically.

[extended results boolean]: Whether to return an 'extended table reply' instead of a standard 'table reply'. Default is false.

→ <u>table reply</u> or <u>extended table reply</u>: A 'table reply' or 'extended table reply' record.

modify table v: Lets you change various aspects of a table created with 'make new table with data'.

modify table any : The table dialog.

[**OK button name** text] : Changes the title of the OK button.

[**OK button is default** boolean] : Controls whether the OK button responds to the return key. Default is true.

 $[\mbox{{\bf cancel button name}}\ \mbox{text}]$  : Changes the title of the Cancel button.

[extra button name text] : If provided, an extra button with this title will be added to the right of the Cancel button.

[grid style grid none/grid between rows/grid between columns/grid between rows dashed/grid both/grid both dashed between rows]: The style for column and row rules. The default is no rules.

[column widths pattern list of integer]: A list that lets you set a pattern for column widths. For example, {1, 2, 2, 1} would mean columns 1 and 4 would be equal width, as would 2 and 3.

[highlighted rows list of integer]: A list of rows to be highlighted with a yellow background.

[alternate backgrounds boolean]: If true, alternate rows will have a shaded background. Default is false.

[row dragging boolean]: If true, rows can be reordered by dragging. Default is false.

[column reordering boolean]: If true, columns can be reordered by dragging. Default is true.

[accessory view any]: One for the serious geeks. Pass in an NSView less than 200pts high and 600pts wide, and it will be added to the dialog above the buttons. Consider it experimental.

[hidden cancel button boolean]: If true, the Cancel button will not be visible. Default is false. Requires version 1.0.6 or later.

[initial position list of number]: A list of either two or four numbers that set the initial position of the dialog. Format is {x, y} to set the top-left position, or {x, y, width, height} to set both position and size. The width must be 200 or greater (300 if the third button is used) and the height 250 or greater, and coordinates may be overridden if required. If not provided or missing value, the dialog will be centered. Requires version 1.0.7 or later.

 $\boldsymbol{grid}\ \boldsymbol{styling}\ \mathit{enum}$  : Grid styling alternatives.

grid none: No grid. This is the default.

grid between rows : Rules between rows.

grid between columns : Rules between columns.

grid between rows dashed: Dashed rules between rows.

**grid both**: Rules between rows and columns.

**grid both dashed between rows**: Rules between rows and columns, with the row rules dashed.

 ${f modify\ columns\ in\ table\ }v:{f Modify\ the\ appearance\ of\ one\ or\ more\ columns\ of\ a\ table\ created\ with\ `make\ new\ table\ with\ data'.}$ 

**modify columns in table** any: The table containing the columns.

[columns list list of integer]: A list of columns to modify. If not specified, or an empty list is passed, the changes apply to all relevant columns.

[column width real]: The column width. A width of 0 means automatic sizing, and the minimum is 10 points. The default is 0.

[sort method sort case insensitive/sort case sensitive/sort localized case insensitive/sort localized case sensitive/sort localized case sensitive/sort as Finder/sort none]: Ignored for all but text, popup and combobox columns, or where the 'sorting column' specified is one of these. The default is localized case sensitive.

[sorting data column integer]: The index of the data column to use as the basis of the specified column's sorting. Use this if you want to sort a column based on a non-visible column, for example.

[truncation style truncate middle/truncate tail/truncate head] : When entries overflow, this determines how they will be truncated. Default is truncate middle for dates, and truncate tail for all others.

[head alignment align natural/align left/align center/align right]: Sets the alignment of the column heading. Default is align natural (matches the direction of the script).

[entry alignment align natural/align left/align center/align right]: Sets the alignment of column entries. Default is align natural for text and dates, and align right for numbers. Ignored for checkboxes, which are always centered, popups, and comboboxes.

[date format text]: Format string for dates. Ignored by non-date columns. Default is the short date format set in System Preferences. See <a href="http://www.unicode.org/reports/tr35/tr35-31/tr35-dates.html#Date\_Format\_Patterns">http://www.unicode.org/reports/tr35/tr35-31/tr35-dates.html#Date\_Format\_Patterns</a>

[user date format list of user format none/user format short/user format medium/user format long/user format full]: Format to be used for dates, based on the format the user has set in System Preferences. You need to provide a list of two 'user date formatting' values, the first for the date and the second for the time. For example: {user format short, user format short}. Ignored by non-date columns, or if a 'date format' parameter has been specified.

[real format text] : Format string for columns of reals. Ignored by other columns. Default is "#,##0.00;#,##0.00". See <a href="http://www.unicode.org/reports/tr35/tr35-31/tr35-">http://www.unicode.org/reports/tr35/tr35-31/tr35-</a>
numbers.html#Number\_Format\_Patterns>

[integer format text]: Format string for columns of integers. Ignored by other columns. Default is "#,###0;-#,##0". See <a href="http://www.unicode.org/reports/tr35/tr35-31/tr35-numbers.html#Number\_Format\_Patterns">http://www.unicode.org/reports/tr35/tr35-31/tr35-numbers.html#Number\_Format\_Patterns</a>

[**bold type** boolean] : Sets whether column entries should appear in bold type. Default is false. Requires version 1.0.6 or later.

[monospaced digits boolean]: Sets whether column entries should use a variation of the San Francisco fonts that has monospaced digits. Default is false. This is only available on macOS 10.11 and later, and will be ignored on earlier versions. Requires version 1.0.6 or later of Myriad Tables Lib.

[red negatives boolean]: Sets whether values in numeric columns should appear in red where they represent negative values. Default is false. Requires version 1.0.6 or later.

**sorting style** *enum*: Sort order for text, popup and combobox columns.

**sort case insensitive**: Sorts ignoring case. **sort case sensitive**: Sorts considering case.

**sort localized case insensitive**: Sorts using the sort order of your locale. **sort localized case sensitive**: Sort considering case and your locale. **sort as Finder**: Sorts considering numeric values, as used by the Finder.

 $\boldsymbol{sort}$   $\boldsymbol{none}$  : Makes the column unsortable.

**truncation method** *enum*: Truncation method for entries that exceed the width of a column.

**truncate middle**: Truncate the middle. **truncate tail**: Truncates the tail. **truncate head**: Truncates the head.

**alignment method** *enum* : How the content is aligned.

align natural: Matches the natural order of the script. Default for text and date entries, and all heads.

align left : Align left.
align center : Align center.
align right : Align right.

**user date formatting** *enum*: How the date or time is formatted, based on the user's System Preferences.

Requires version 1.0.5 or later.

 $\boldsymbol{\mathsf{user}}\ \boldsymbol{\mathsf{format}}\ \boldsymbol{\mathsf{none}}$  : The date or time with this format is omitted.

**user format short**: Specifies a short style, typically numeric only, such as "11/23/37" or "3:30 PM".

**user format medium**: Specifies a medium style, typically with abbreviated text, such as "Nov 23, 1937" or "3:30:32 PM".

user format long: Specifies a long style, typically with full text, such as "November 23, 1937" or "3:30:32 PM PST".

user format full: Specifies a full style with complete details, such as "Tuesday, April 12, 1952 AD" or "3:30:42 PM Pacific Standard Time".

table reply n: Reply record for the `display table with data' and `display table' commands.

PROPERTIES

**button number** (integer, r/o): This is 1 if the OK button was pressed, 2 if the extra button was pressed, and 0 if the dialog timed out.

values returned (list of any, r/o): The table data as modified.

rows selected (list of integer, r/o): A list of the indexes of the selected table rows.

**values selected** (list of any, r/o): A list of the contents of the selected table rows.

**final position** (list of real, r/o): The position of the window when it closed, in the form  $\{x, y, \text{ width, height}\}$ .

Requires version 1.0.7 or later.

timed out (boolean, r/o): Did the dialog time out?

**extended table reply** n: Reply record for the 'display table' command when the 'extended results' paramter is true.

PROPERTIES

**button number** (integer, r/o): This is 1 if the OK button was pressed, 2 if the extra button was pressed, and 0 if the dialog timed out.

values returned (list of any, r/o): The table data as modified.

**rows selected** (list of integer, r/o): A list of the indexes of the selected table rows.

 $\textbf{values selected} \ (\text{list of any, r/o}) \ \dot{\cdot} \ A \ \text{list of the contents of the selected table rows}.$ 

**final position** (list of real, r/o): The position of the window when it closed, in the form  $\{x, y, \text{ width, height}\}$ . Requires version 1.0.7 or later.

timed out (boolean, r/o): Did the dialog time out?

altered rows (list of any, r/o): Returned only if the 'extended results' parameter of the 'display table' command is true. A list of the rows in the output that do not match their equivalent rows in the input. Each entry is a list of two numbers: the index of the row in the original data, and its index in the returned data.

**deleted rows** (list of integer, r/o): Returned only if the 'extended results' parameter of the 'display table' command is true. A list of the indexes of any rows that were deleted from the original data. The indexes are based on their order in the original data.

added rows (list of integer, r/o): Returned only if the 'extended results' parameter of the 'display table' command is true. A list of the indexes of any rows that were added to the returned data. The indexes are based on their order in the returned data.

**order of rows** (list of integer, r/o): Returned only if the 'extended results' parameter of the 'display table' command is true. A list of the indexes of all returned rows, in order. The indexes are based on their order in the original data. Inserted rows are indexed in the order in which they were added.

**combo box** *n* : A type of text field with a menu of suggestions atttached. You use this in the 'row template' parameter to the 'display table with data' and 'make new table with data' commands.

Assuming you wish to have a combo box in the first column, with three items in its menu, you would specify it like this:

display table with data someData row template {{combo box, {"One", "Two", "Three"}}, ...

You can also use the integer 2 instead of combo box

**popup menu** n: A popup menu. You use this in the 'row template' parameter to the 'display table with data' and 'make new table with data' commands.

Assuming you wish to have a popup menu with three items in the first column, you would specify it like this:

display table with data someData row template {{popup menu, {"One", "Two", "Three"}}, ...

You can also use the integer 1 instead of popup menu

## **Myriad Table Utilities Suite**

Some commands for manipulating lists before or after showing a table.

**swap columns and rows in** v: Works on a list of lists. The result will also be a list of lists, where the first list will consist of the first item of each of the original lists, and so on. Calling it a second time effectively returns the list to its original value.

**swap columns and rows in** list of any : A list of sublists, each containing the same number of entries. → list of any : A list of sublists.

 $extract\ column\ v: Extracts\ a\ column\ of\ values\ when\ passed\ a\ list\ of\ sublists\ representing\ rows.$ 

**extract column** integer: The index of the item you wish extracted from each row/sublist.

from list of any: A list of lists, where each sublist represents a row.

 $\rightarrow$  list of any : A list representing the requested column.