Version

ODS EXCEL Statement

Opens, manages, or closes the ODS destination for Excel, which produces Excel spreadsheet files compatible with Microsoft Office 2010 and later versions.

Valid in:	Anywhere except SAS Viya
Category:	ODS: Third-Party Formatted
Default:	The default style is Excel.
	PNG is the default device driver for the ODS destination for Excel.
	ODS uses the filename that is specified in the SAS registry. The default filename for the ODS destination for Excel is "sasexcl.xlsx".
Interaction:	By default, when you execute a procedure that uses the FORMCHAR system option (for example, PROC PLOT or PROC CHART), ODS formats the output in SAS Monospace font. If you are creating output that is viewed in an operating environment where SAS software is not installed, this output will not be displayed correctly. This is because without SAS, the SAS Monospace font is not recognized. To make your document display correctly, include the following statement before your SAS program: `OPTIONS FORMCHAR="|----|+|---+=|-/\<>*";`
z/OS specifics:	On z/OS, the ODS destination for Excel works only with the HFS file system. You must use the FILESYSTEM=HFS option. The external file specified by the FILE= option must be an HFS file. If the WORK= option is used, the directory must be an HFS directory

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Syntax

ODS EXCEL <(<ID=> *identifier*)> < *action*> ;

ODS EXCEL <(<ID=> *identifier*)> <*option(s)*> ;

Summary of Optional Arguments

(ID= *identifier*)
Open multiple instances of the same destination at the same time

ANCHOR='*anchor-name*'
Specify the root name for the anchor tag that identifies each output object in the current file

AUTHOR='*text-string*'
Specify the author of the Excel document

BOX_SIZING=(CONTENT_BOX | BORDER_BOX)
Specify how to measure the width of cells. Use to override the default value of BOX_SIZING for a destination

CATEGORY='*text-string*'
Specify the category of the Excel document

CLOSE
Close the destination and the file that is associated with it.

COMMENTS='*text-string*'
Add comments to the properties of the Excel document

CSSSTYLE='*file-specification*'<(*media-type1*<...*media-type-10*>)>
Specify a cascading style sheet to apply to your output

DOM<="*external-file*">
Specify that the ODS document object model is written to the SAS log or to an external file

DPI='*number*'
Specify the image resolution for the graphical output

EXCLUDE *exclusion(s)* | ALL | NONE
Exclude output objects from the destination

FILE='*file-specification*'
Specify the file that contains the Excel created by the destination

GFOOTNOTE | NOGFOOTNOTE
Control the location where footnotes are printed in the graphics output

GTITLE | NOGTITLE
Control the location where titles are printed in the graphics output

IMAGE_DPI='*number*'
Specify the image resolution for the graphical output

KEYWORDS='*text-string*'
Add keywords to the Excel document properties

OPTIONS (< *suboption(s)*>)
Specify destination-specific suboptions

SASDATE
Insert the standard SAS date in the document in place of the default Excel date and time field

SELECT *selection(s)* | ALL | NONE
Select output objects for the destination.

SHOW
Write to the SAS log the current selection or exclusion list for the destination

STATUS='*text-string*'
Insert the status of the Excel document

STYLE= *style-override(s)*
Specify one or more *style-overides* to use when writing output files

TEXT=*text-string*
Insert text into your document

TITLE='*text-string*'
Specify a title for the Excel document

WORK='*fileref*' | '*directory-name*'
Specify an alternate directory for the temporary files

Without Arguments

If you use the ODS EXCEL statement without an action or options, then it opens the ODS destination for Excel and creates Excel output.

Actions

The following actions are available for the ODS EXCEL statement.

CLOSE

closes the destination and any files that are associated with it.

Tip When an ODS destination is closed, ODS does not send output to that destination. Closing an unneeded destination conserves system resources.

EXCLUDE *exclusion(s)* | ALL | NONE

excludes one or more output objects from the destination.

Default	NONE
Restriction	A destination must be open for this action to take effect.
See	ODS EXCLUDE Statement

SELECT *selection(s)* | ALL | NONE

selects output objects for the specified destination.

Default	ALL
Restriction	A destination must be open for this action to take effect.
See	ODS SELECT Statement

SHOW

writes the current selection list or exclusion list for the destination to the SAS log.

Restriction	The destination must be open for this action to take effect.
Tip	If the selection or exclusion list is the default list (SELECT ALL), then SHOW also writes the entire selection or exclusion list. For information about selection and exclusion lists, see Selection and Exclusion Lists.
See	ODS SHOW Statement

Optional Arguments

ANCHOR='*anchor-name*'

specifies the root name for the anchor tag that identifies each output object in the current file.

The ANCHOR= option in ODS EXCEL acts like IDs do in CSS. The ANCHOR= option enables you to change the value of the ID= attribute. ID=attributes can be seen when you use the DOM option. The DOM option is used when adding the #ID selector for style output when using CSS with the ODS Excel destination.

Each output object must have an anchor tag for the bookmarks to reference. The references are automatically created by ODS. These references point to the name of an anchor. Therefore, each anchor name in a file must be unique.

anchor-name
is the root name for the anchor tag that identifies each output object in the current file. Each output object must have an anchor tag for the bookmarks to reference. The references are automatically created by ODS. These references point to the name of an anchor. Therefore, each anchor name in a file must be unique. By default IDX is the default name for the first object.

ODS creates unique anchor names by incrementing the name that you specify. For example, if you specify ANCHOR='TABULATE', then ODS names the first anchor `tabulate`. The second anchor is named `tabulate1`; the third is named `tabulate2`,

and so on. ODS Excel uses anchors to name ID selectors when using CSS to style worksheets.

Requirement You must enclose *anchor-name* in quotation marks.

Example

```
ods excel anchor='Robin';
```

AUTHOR='*text-string*'

specifies the author of the Excel document. This information can be seen in the document properties.

BOX_SIZING=(CONTENT_BOX | BORDER_BOX)

specifies how to measure the width of cells. This option overrides the default value of BOX_SIZING for a destination. The default value can be found in the SAS registry. For information about using the SAS Registry, see Changing SAS Registry Settings for ODS.

BOX_SIZING is defined by the WC3 specification, the CSS3 Module. For more information, refer to the CSS3 Box Model specification at http://www.w3.org/TR/2002/WD-css3-box-20021024/#box-sizing.

CATEGORY='*text-string*'

specifies the category of the Excel document. This information can be seen in the document properties.

COMMENTS='*text-string*'

adds comments to the properties of the Excel document. This information can be seen in the document properties.

CSSSTYLE='*file-specification*'<(*media-type1*<...*media-type-10*>)>

specifies a cascading style sheet to apply to your output.

file-specification
specifies a file, fileref, or URL that contains CSS code.

file-specification is one of the following:

'*external-file*'
is the name of the external file.

Requirement You must enclose *external-file* in quotation marks.

fileref
is a file reference that has been assigned to an external file. Use the FILENAME statement to assign a fileref.

See For information about the FILENAME statement, see *SAS DATA Step Statements: Reference*.

'*URL*'
is a URL to an external file.

Requirement You must enclose *URL* in quotation marks.

(*media-type-1<.. media-type-10>*)
specifies one or more media blocks that correspond to the type of media that your output is rendered on. CSS uses media type blocks to specify how a document is to be presented on different media: on the screen, on paper, with a speech synthesizer, with a braille device, and so on.

The media block is added to your output in addition to the CSS code that is not contained in any media blocks. By using the *media-type* suboption, in addition to the general CSS code, you can import the section of a CSS file intended only for a specific media type.

Default If no *media-type* is specified in your ODS statement, but you do have media types specified in your CSS file, then ODS uses the Screen media type.

Range You can specify up to ten different media types.

Requirements You must enclose *media-type* in parentheses.

You must specify *media-type* next to the *file-specification* specified by the CSSSTYLE= option.

Tip If you specify multiple media types, all of the style information in all of the media types is applied to your output. However, if there is duplicate style information in different media blocks, then the styles from the last media block are used.

Interaction If both the STYLE= option and the CSSSTYLE= option are specified in an ODS statement, the option specified last is the option that is used.

See For an example of a valid for ODS CSS file, see Applying a CSS File to ODS Output.

DOM<="*external-file*">

specifies that the ODS document object model is written to the SAS log or an external file.

external-file
is the name of an external output file.

Requirement You must enclose *external-file* in quotation marks.

See For complete documentation about the ODS document object model, see Working with the ODS Document Object Model in *SAS Output Delivery System: Advanced Topics*.

DPI='*number*'

specifies the image resolution for graphical output.

Alias Image_DPI=

Default 150

CAUTION: **Caution: When using high DPI= or DPI_IMAGE values (values over 1000), you might need to increase memory allocations. To increase memory, set the MEMSIZE= system option to 500M or higher. You can also decrease the DPI= value to ensure that you do not run out of memory.**

FILE='*file-specification*'

specifies the file that contains the Excel created by the destination.

'*file-specification*'
specifies the file or fileref to receive output.

file-specification is one of the following:

external-file
is the name of an external file to receive output.

Requirement You must enclose *external-file* in quotation marks.

fileref
is a file reference that has been assigned to an external file. Use the FILENAME statement to assign a fileref.

Default ODS uses the filename that is specified in the SAS registry. The default filename for the ODS destination for Excel is "sasexcl.xlsx".

GFOOTNOTE | NOGFOOTNOTE

controls the location where footnotes are printed in the graphics output.

GFOOTNOTE
prints footnotes that are created by SAS/GRAPH, the SGPLOT procedure, the SGPANEL procedure, or the SGSCATTER procedure. The footnotes appear inside the graph borders.

NOGFOOTNOTE
prints footnotes that are created by ODS, which appear outside the graph borders.

Default GFOOTNOTE

Restriction This option applies only to SAS programs that produce one or more device-based graphics, or graphics created by the SGPLOT procedure, the SGPANEL procedure, or the SGSCATTER procedure.

See For details about the SAS/GRAPH FOOTNOTE statement, see FOOTNOTE Statement in *SAS/GRAPH: Reference*.

GTITLE | NOGTITLE

controls the location where titles are printed in the graphics output.

GTITLE
prints the title that is created by SAS/GRAPH, the SGPLOT procedure, the SGPANEL procedure, or the SGSCATTER procedure. The title appears inside the graph borders.

NOGTITLE
prints the title that is created by ODS, which appears outside of the graph borders.

Default	GTITLE
Restriction	This option applies only to SAS programs that produce one or more device-based graphics, or graphics created by the SGPLOT procedure, the SGPANEL procedure, or the SGSCATTER procedure.
See	For details about the SAS /GRAPH TITLE statement, see TITLE, FOOTNOTE, and NOTE Statements in *SAS/GRAPH: Reference*.

IMAGE_DPI='*number*'

specifies the image resolution for graphical output.

Alias	DPI=
Default	150
CAUTION:	**Caution: When using high DPI= or DPI_IMAGE values (values over 1000), you might need to increase memory allocations. To increase memory, set the MEMSIZE= system option to 500M or higher. You can also decrease the DPI= value to ensure that you do not run out of memory.**

KEYWORDS='*text-string*'

provides keywords in the Excel document. This information can be seen in the document properties.

Note: The KEYWORDS values are listed next to “Tags” in the properties pane.

(ID= *identifier*)

enables you to run multiple instances of the same destination at the same time. Each instance can have different options.

identifier
specifies another instance of the destination that is already open. *identifier* is numeric or a series of characters that begin with a letter or an underscore. Subsequent characters can include letters, underscores, and numeric characters.

Restriction	If *identifier* is numeric, it must be a positive integer.
Requirement	You must specify the ID= option immediately after the destination name.
Tip	You can omit the ID= option and instead use a name or a number to identify the instance.
Example	Opening Multiple Instances of the Same Destination at the Same Time

OPTIONS (< *suboption(s)*>)

specifies destination-specific suboptions with space-delimited name='value' pairs.

suboption(s) are the following:

(ABSOLUTE_COLUMN_WIDTH ='*number-list* ')

specifies the column widths. Lists widths to use for columns instead of allowing SAS to determine the column width (measured widths). The *number-list* is a comma separated list of numbers. A value of 0 resets the default.
Valid units of measure:

in inches

cm centimeters

em standard typesetting measurement unit for width

ex standard typesetting measurement unit for height

in inches

mm millimeters

pt a printer's point

px pixels

Default Character

Tip Delimit multiple row values with commas.

Example

```
ods excel file='c:\file-path\footer.xlsx'
          options(absolute_column_width='16px');
proc print data=sashelp.class(obs=5);
run;
ods excel close;
```

(ABSOLUTE_ROW_HEIGHT ='*number_list* ')

specifies the row heights. Lists heights to use for each row instead of allowing SAS to determine the column height (measured height). The *number-list* is a comma separated list of numbers.
Valid units of measure:

in inches

cm centimeters

em standard typesetting measurement unit for width

ex standard typesetting measurement unit for height

in inches

mm millimeters

pt a printer's point

px pixels

Default Points

Example

```
ods excel options(absolute_row_height='20');
```

(AUTOFILTER = 'ALL' | 'NONE' | '*range* ' | '*column*'
turns on filtering for specified columns in the worksheet.

ALL
an autofilter is applied to all columns.

NONE
no autofiltering is applied.

range
specifies the range of columns to which filtering is applied. Acceptable values for the range are a numeric range ('3-5') or a column range ('A:C').

column
specifies the column to which filtering is applied. Columns can be written as a number or a letter.

Restriction This option does not support the specification of multiple individual columns (for example, '2,4').

Default NONE.

Example

```
ods excel file='c:\file-path\footer.xlsx'
 options(autofilter='all');
proc print
 data=sashelp.class(obs=5);
run;
ods excel close;
```

(BLACKANDWHITE= 'OFF' | 'ON')
enables printing of the worksheet in black and white.

ON
prints the worksheet in black and white.

Alias YES

OFF
does not print the worksheet in black and white.

Alias NO

Default OFF

Example

```
ods excel options(blackandwhite='on');
```

(BLANK_SHEET='*string*')
creates a blank worksheet with the specified name. The *string* is a string with a length greater than zero. This name is used in combination with a worksheet counter to create a unique name.

Default NONE

Range Worksheet names can be up to 28 characters long.

Example

```
ods excel options(BLANK_SHEET='SAS Sheet 1');
```

(CENTER_HORIZONTAL= 'OFF' | 'ON')
centers the worksheet horizontally when printing.

ON
centers the worksheet horizontally when printing.

Alias YES

OFF
does not center the worksheet horizontally when printing.

Alias NO

Default OFF

Example

```
ods excel options(center_horizontal='yes');
```

(CENTER_VERTICAL= 'OFF' | 'ON')
specifies if the worksheet is to be centered vertically when printing.

ON
centers the worksheet vertically when printing.

Alias YES

OFF
does not center the worksheet vertically when printing.

Alias NO

Default OFF

Example

```
ods excel options(center_vertical='yes');
```

(COLUMN_REPEAT='*column*' | '*range*' | 'HEADER')
controls how column headings are repeated across pages.

HEADER
repeat any of the columns containing headers.

column
specifies that the header of the column specified is repeated on each page. A column can be a number or a letter.

Example The following example specifies that the header for column 1 is repeated across the printed page:

```
ods excel options(column_repeat='1');
```

range
specifies that the headers of the columns within the range specified are repeated on each page. A range can be numbers ('1-3') or columns ('A:C').

Example The following example specifies that the headers for columns 1, 2, and 3 are repeated on each page:

```
ods excel options(column_repeat='1-3');
```

Default nil (no repeating)

(CONTENTS= 'OFF' | 'ON')
creates a worksheet that contains the table of contents.

ON
creates a worksheet that contains the table of contents.

Alias YES

OFF
creates a worksheet that does not contain a table of contents.

Alias NO

Default OFF

Example

```
ods excel options(contents='yes');
```

(DPI='*number*')
specifies the dots per inch for print resolution. *Numbers* allowed are 300, 600, and 1200.

Default 300 DPI

Example

```
ods excel options(dpi='600');
```

(DRAFTQUALITY= 'OFF' | 'ON')
specifies if draft quality should be used for printing

ON
specifies that draft quality should be used for printing.

Alias YES

OFF
specifies that draft quality should not be used for printing.

Alias NO

Default OFF

Note Graphs will not be printed if DRAFTQUALITY =YES.

Example

```
ods excel options(draftquality='on');
```

(EMBEDDED_FOOTNOTES='OFF' | 'ON')
specifies whether footnotes should appear in the worksheet.

ON
embed footnotes in the worksheet.

Alias YES

OFF
do not embed footnotes in the worksheet.

Alias NO

Default OFF

Example

```
ods excel options(embedded_footnotes='yes');
```

(EMBED_FOOTNOTES_ONCE='OFF' | 'ON')
specifies whether embedded footnotes should appear only at the bottom of the worksheet.

ON
embedded footnotes appear only once at the bottom of the worksheet.

Alias YES

OFF
embedded footnotes appear at the bottom of the worksheet.

Alias NO

Alias EMBED_FOOTERS_ONCE =

Default OFF

Example

```
ods excel options(embed_footnotes_once='yes');
```

(EMBEDDED_TITLES= 'OFF' | 'ON')
specifies whether titles should appear in the worksheet.

ON
embed titles in the worksheet.

Alias YES

OFF

do not embed titles in the worksheet.

Alias NO

Default NO

Example
```
ods excel file='c:\file-path\myxml.xlsx' options(embedded_tit
```

Example Customizing Your Excel Output

(EMBED_TITLES_ONCE= 'OFF' | 'ON')
specifies whether embedded titles should appear at the top of the worksheet only once.

ON
embedded titles appear only once at the top of the worksheet.

Alias YES

OFF
titles appear as they normally appear.

Alias NO

Default OFF

Example
```
ods excel options(embed_titles_once='on');
```

Example Customizing Your Excel Output

(FITTOPAGE= 'OFF' | 'ON')
specifies that the worksheet should fit on a page when printing.

ON
fits the worksheet on the page when printing.

Alias YES

OFF
does not try to fit the worksheet on the page when printing.

Alias NO

Default OFF

Interaction If FITTOPAGE="OFF" and either PAGES_FITWIDTH="1" or PAGES_FITHEIGHT="1", FITTOPAGE is turned back on.

Example
```
ods excel options(fittopage='on');
```

FLOW=<*"cell-names"*, "DATA", "HEADERS", "ROWHEADERS", "TABLES", "TEXT" >
specifies that a designated Worksheet area enables Wrap Text and disables newline character insertion. Excel wraps the text to the column width.

cell-names
enables Wrap Text for a single cell such as “A12” or a cell range such as “C1:E4”.

DATA
enables Wrap Text for table data cells.

HEADERS
enables Wrap Text in table column headers.

Alias HEADER

ROWHEADERS
enables Wrap Text for table row headers.

Alias ROWHEADER

TABLES
enables Wrap Text for all parts of a table: HEADER, ROWHEADER, and DATA.

Alias TABLE

TEXT
makes ODS TEXT output work like titles, footnotes, PROC titles, and BY lines. The text is written into multiple merged cells and Wrap Text is enabled.

Examples

```
ods excel file="c:\file-path\test.xlsx" options(flow="A2");
```

```
ods excel file="c:\file-path\test.xlsx" options(flow="tables'
```

```
ods excel file="c:\file-path\test.xlsx" options(flow="text");
```

(FORMULAS= 'OFF' | 'ON')
specifies if data values that begin with an '=' become formulas or cell values.

ON
data values that begin with an '=' become formulas.

Alias YES

OFF
data values that begin with an '=' become cell values.

Alias NO

Default ON

Example

```
ods excel options(formulas='off');
```

(FROZEN_HEADERS= 'OFF' | 'ON' | *number*)
specifies that headers can scroll or not scroll with the scroll bar.

ON

headers do not scroll with the scroll bar.

Alias YES | TRUE

OFF
headers do scroll with the scroll bar.

Alias NO | FALSE

number
the number of the header row that does not scroll with the scroll bar.

Default OFF

Example
```
ods excel options(frozen_headers='on');
```

(FROZEN_ROWHEADERS= 'OFF' | 'ON' | '*number*')
specifies if the row headers are on the left scroll when the table data scrolls.

ON
the row headers on the left are frozen when the table data scrolls.

Alias YES

OFF
the row headers on the left scroll when the table data scrolls.

Alias NO

number
freeze the number of columns specified.

Default OFF

Example
```
ods excel options(frozen_rowheaders='yes');
```

(GRIDLINES= 'OFF' | 'ON')
specifies if grid lines are printed.

ON
grid lines are printed.

Alias YES

OFF
grid lines are not printed.

Alias NO

Default OFF

Example
```
ods excel options(gridlines='on');
```

(HIDDEN_COLUMNS ='*number-listcolumn*'| '*range*')
specifies the columns to hide.

number-list
specifies a comma-delimited list of column numbers

column
specifies the number or letter of a column

range
specifies a cell range. Cell ranges can be written as numbers ('1-3') or letters ('A:C').

Default None. All columns are shown.

Example

```
ods excel options(HIDDEN_COLUMNS='1, 2, 5, 6, 8-10');
```

(HIDDEN_ROWS ='*number_list_range*')
specifies the rows to hide. You can specify a list of rows to hide or a range of rows to hide.

Default All rows are shown.

Examples

```
ods excel options(HIDDEN_ROWS='1,2,5,6,8-10');
```

```
ods excel options(HIDDEN_ROWS='1:10');
```

```
ods excel options(HIDDEN_ROWS='1-10');
```

(INDEX= 'OFF' | 'ON')
creates a worksheet that contains an index of all worksheets.

ON
creates a worksheet that contains an index of all worksheets.

Alias YES

OFF
does not create a worksheet that contains an index of all worksheets.

Alias NO

Default OFF

Example

```
ods excel options(index='on');
```

(MSG_LEVEL= NO NOTES | NO)
suppresses messages from Excel.

NO NOTES
suppresses messages

NO
leaves messages

Default NO

(ORIENTATION= 'PORTRAIT' | 'LANDSCAPE'
orients the printed page as either portrait or landscape.

PORTRAIT
prints a portrait-oriented page.

LANDSCAPE
prints a landscape-oriented page.

Default PORTRAIT

Example
```
ods excel options(orientation='landscape');
```

(PAGE_ORDER_ACROSS= 'OFF' | 'ON')
specifies that the information across the page is printed first followed by the information that is down the page.

ON
print all of the information across the page first, followed by the information down the page.

Alias YES

OFF
print all of the information down the page first, followed by the information across the page.

Alias NO

Default OFF

Example
```
ods excel options(page_order_across='on');
```

(PAGES_FITHEIGHT='*number*')
specifies the number of pages down to fit the worksheet when printing.

Interaction If option PAGES_FITHEIGHT="1", the FITTOPAGE option is turned on.

Example
```
ods excel options(PAGES_FITHEIGHT='3');
```

(PAGES_FITWIDTH='*number*')
specifies the number of pages to fit the worksheet across when printing.

Interaction If option PAGES_FITWIDTH="1", the FITTOPAGE option is turned on.

Example
```
ods excel options(PAGES_FITWIDTH='3');
```

(PRINT_AREA= '*item*')
describes the printed area in terms of the column and row to start and end with. You can use column and row numbers and letters delimited by commas, or you can use a cell range. The following example indicates top left corner and bottom right corner:

```
print_area='a,2,g,20'

print area='A2:G20'
```

Default NONE

Tip Separate each PRINT_AREA item with a comma.

(PRINT_FOOTER='*text-string*')
specifies the text that is placed in the footer when printing. If a footnote is specified, that footnote is used. Otherwise, this text is placed in the footer.

Tip You can specify special formatting and Visual Basic for Applications (VBA) codes in the PRINT_HEADER= and PRINT_FOOTER= options. For more information, see Formatting and VBA Codes for Headers and Footers.

Example

```
ods excel options(PRINT_FOOTER="Draft Copy for Review");
```

(PRINT_FOOTER_MARGIN='*number*')
specifies the footer margin that is set in the page setup window when printing. This margin is measured in inches.

Default 0.5 inches.

Example

```
ods excel options(PRINT_FOOTER_MARGIN="2");
```

(PRINT_HEADER='*text-string*')
specifies the text that is placed in the header when printing. If no title is specified, this text is used by Excel on the printed page. If a title has been specified with the TITLE statement, that title is used.

Tip You can specify special formatting and Visual Basic for Applications (VBA) codes in the PRINT_HEADER= and PRINT_FOOTER= options. For more information, see Formatting and VBA Codes for Headers and Footers.

Example The following example specifies "My custom header"' as the text for headers.

```
ods excel file='c:\file-path\footer.xlsx'
options(print_header='My custom header');
```

(PRINT_HEADER_MARGIN='*number*')
specifies the header margin that is set in the page setup dialog window when printing. This margin is measured in inches.

Default 0.5 inches

Example

```
ods excel options(print_header_margin="1");
```

(PROTECT_WORKSHEET= 'OFF' | 'ON')
protects the worksheet by making it read-only.

ON
read-only access protects the worksheet.

Alias YES

OFF
does not protect the worksheet with read-only access.

Alias NO

Default OFF

Example

```
ods excel options(protect_worksheet="ON");
```

(ROWBREAKS_COUNT='*number*')
specifies that for every *number* data rows, insert a print page for printing.

Example

```
ods excel options(rowbreaks_count="20");
```

(ROWBREAKS_INTERVAL= 'OUTPUT' | 'PROC' | 'NONE')
controls the placement of page breaks. This option places a page break after each output object or after each procedure.

OUTPUT
inserts a page break between output objects.

PROC
inserts a page break between each procedure's output.

NONE
does not insert custom page breaks.

Default NONE

Example

```
ods excel options(rowbreaks_interval='proc');
```

(ROWCOLHEADINGS= 'OFF' | 'ON')
specifies if row and column headings should be printed.

ON
prints row and column headings.

Alias YES

OFF
does not print row and column headings.

Alias NO

Default OFF . Does not print row and column headings.

Example

```
ods excel options(rowcolheadings='on');
```

(ROW_HEIGHTS ='*number_list* ')
specifies the height of the row.

The parameters of this option are positional, but not all values must be specified. A value of 0 means that the height should be taken from the style. The first value is the height for table header rows. The next is the height for the table body rows. The next value is the row height for BY lines. The fourth is for titles, the fifth is for footers, the sixth is the page break height, and the last value is the height for paragraph skip.

Heights can be written in the following units of measurement: in (inches), cm (centimeters), mm (millimeters), px (pixels), ex (x heights), em (m widths), pt (points).

Default Points. By default, the measurement is taken from the font size. The table row he defined by the font size in the header style

Tip Delimit multiple row values with commas.

Example

```
ods excel options(ROW_HEIGHTS='20mm,50mm,100mm,20mm,50mm,100m
```

(ROW_REPEAT='NONE' | 'HEADER' | '*number*' | '*number-range*')
controls how row headings are repeated across pages. For example, `row_repeat="header"` repeats all the row headers, `row_repeat="1"` repeats only one row, and `row_repeat="1-3"` repeats rows 1, 2, and 3.

NONE
specifies that no rows are repeated on each page.

HEADER
specifies that all row headings are repeated on each page.

number
specifies that the header of the row specified is repeated on each page.

Example The following example specifies that the header for row 1 is repeated across the printed page.

```
ods excel options(row_repeat='1');
```

number-range
specifies that the headers of the rows within the range specified are repeated on each page.

Example The following examples specifies that the headers for rows 1, 2, and 3 are repeated across the printed page:

```
ods excel options(row_repeat='1-3');

ods excel options(row_repeat='1:3');
```

Default NONE

(SCALE='*number*')
specifies the scale level for printing.

Default 100

Example

```
ods excel options(scale="10");
```

SCREEN_RESOLUTION_SCALE_FACTOR= '*display-scale-factor*'
specifies the scale factor to optimize viewing of Excel spreadsheets on high-resolution displays.

Default 100%

Tip Typical display scale factors are 125% or 150%

(SHEET_INTERVAL= 'BYGROUP' | 'PAGE' | 'PROC' | 'NONE' | 'NOW' | TABLE')
specifies the criteria for when a new worksheet is created.

BYGROUP
creates a new worksheet after each BYGROUP.

Alias BYGROUPS

NONE
creates one worksheet with all of the data.

Interaction The option SHEET_INTERVAL='NONE' overrides the PAGEBREAK=YES option for PROC ODSTEXT and PROC ODSLIST. That is, if the ODS EXCEL option SHEET_INTERVAL='NONE', the PAGEBREAK=YES option used by either PROC ODSTEXT or PROC ODSLIST is ignored. The ODSLIST and ODSTEXT output are placed on the current worksheet.

NOW
creates a new worksheet. When used, the next output object starts on a new sheet. After SHEET_INTERVAL='NOW' is executed, the SHEET_INTERVAL option reverts to the previous setting.

Interaction The option SHEET_INTERVAL='NONE' overrides the PAGEBREAK=NO option for PROC ODSTEXT and PROC ODSLIST. That is, SHEET_INTERVAL='NOW' creates a new worksheet when PROC ODSLIST or PROC ODSTEXT uses the PAGEBREAK=NO option.

Example ods excel options (sheet_interval='now');

PAGE
creates a worksheet for each page of procedure output.

PROC
creates a worksheet of all of the procedure output.

TABLE
creates a worksheet for each table.

Alias OUTPUT

Default TABLE

Example
```
ods excel file='c:\file-path\myExcel.xlsx' options(sheet_inte
```

Example Customizing Your Excel Output

(SHEET_LABEL='*text-string*' | 'NONE')
used as the first part of the name in the worksheet label instead of the predefined string. This option is used in combination with the various worksheet naming options like SHEET_INTERVAL.

Note: The sheet label prepends to the sheet name.

NONE
creates worksheets named by default.

text-string
names the first part of the label of a worksheet with the specified string.

Default NONE

Example
```
ods excel options(sheet_label="country");
```

Example Customizing Your Excel Output

(SHEET_NAME='*text-string*')
specifies the name for the next worksheet. This name is used along with the worksheet counter to create a unique name.

Range Worksheet names can be up to 28 characters long.

Example
```
ods excel options(sheet_name="PROC REPORT Stats");
```

(START_AT='*string*')
specifies a starting cell for the report. The default is to start at column 1 and row 1 (A1).

Default 1,1 (A1)

Tip This option cannot be changed in the middle of a sheet.

Example

```
ods excel options(start_at="2,2");

ods excel options (start_at="B2");
```

(SUPPRESS_BYLINES= 'OFF' | 'ON')
specifies whether to suppress BY lines in the worksheet.

ON
suppress BY lines in the worksheet.

Alias YES

OFF
BY lines appear in the worksheet.

Alias NO

Default OFF

Example

```
ods excel options(suppress_bylines='on');
```

Example Customizing Your Excel Output

(TAB_COLOR='*string*')
specifies the color for the next worksheet.

Example

```
ods excel options (tab_color='red');
ods excel options (tab_color='#ff0000');
ods excel options (tab_color='rgba(0,100%,0,0.5)';
```

(TITLE_FOOTNOTE_NOBREAK='ON' | 'OFF')
specifies whether procedure titles, titles, BY lines, and footnotes wrap across lines.

OFF
specifies that procedure titles, titles, BY lines, and footnotes wrap across lines.

Alias NO

ON
specifies that procedure titles, titles, BY lines, and footnotes do not wrap across lines.

Alias YES

Default ON

Example

```
ods excel file="c:\file-path\a" options (title_footnote_nobre
embedded_titles='yes');
```

(TITLE_FOOTNOTE_WIDTH='*number*')
specifies the number of columns that titles and footnotes should span. If zero, titles and footnotes are merged across the number of columns currently in use.

Default 0. Titles and footnotes merge across the number of columns currently in use.

Example
```
ods excel options(TITLE_FOOTNOTE_WIDTH="10");
```

(ZOOM='*number*')
indicates the initial zoom level on the worksheet.

Default 100

Example
```
ods excel options(zoom="75");
```

SASDATE

inserts the standard SAS date in the document in place of the default Excel date and time field. Excel formats this date field using the format specified by the Excel Header and Footer dialog box. The date field is updated whenever you open the worksheet. When the SASDATE option is used, instead of a date field, the ODS destination for Excel inserts the date and time that the worksheet was created. Excel does not update the date and time.

STATUS='*text-string*'

specifies the status of the Excel document. This information can be seen in the document properties.

STYLE= *style-override(s)*

specifies one or more *style-overides* to use when writing output files.
You can specify a style override in two ways:

- Specify a style element. A style element is a collection of style attributes that apply to a particular part of the output for a SAS program.
- Specify a style attribute. A style attribute is a name-value pair that describes a single behavioral or visual aspect of a piece of output. This is the most specific method of changing the appearance of your output.

style-override has the following form.

style-element-name | [*style-attribute-name-1=style-attribute-value-1*

<*style-attribute-name-2=style-attribute-value-2 ...*>]

Default Excel is the default style.

See For a complete discussion of style templates, see TEMPLATE Procedure: Creating a Style Template in *SAS Output Delivery System: Procedures Guide*.

Example Custom formats can be specified with a style override on the TAGATTR= style attribute.

```
style={tagattr='format:$#,##0_);[Red]\($#,##0\)
formula:RC[-1]-RC[-2]'};
```

TEXT=*text-string*

inserts text into your document by triggering the paragraph event and specifying a text string to be assigned to the VALUE event variable.

Default By default the TEXT= option is used in a paragraph event.

See For information about events and event variables, see TEMPLATE Procedure: Creating Markup Language Tagsets in *SAS Output Delivery System: Procedures Guide*.

TITLE='*text-string*'

specifies a title for the Excel document. This information can be seen in the document properties.

WORK='*fileref*' | '*directory-name*'

specifies an alternate directory for the temporary files. By default. the ODS destination for Excel uses the SAS Work library to hold temporary files. The WORK= option specifies an alternate directory for the temporary files.

fileref
is a file reference that has been assigned to a directory. Use the FILENAME statement to assign a fileref.

directory-name
is the name of the directory.

Details

Overview

The ODS destination for Excel uses Microsoft Open Office XML Format for Office 2010 and later. The ODS EXCEL statement produces Extensible Markup Language (XML) and represents a way to define and format data for easy exchange.

'Portrait' is the default printing orientation. The orientation can be changed to landscape.

The ODS destination for Excel creates Microsoft spreadsheetML XML. Each table is placed in its own worksheet within a workbook. This destination supports ODS styles, trafficlighting, and custom formats. Numbers, Currency, and percentages are correctly detected and displayed. Style override, TAGATTR= style attribute, can be used to create custom formats for the data. By default, titles and footnotes are included in the worksheet, but they are part of the header and footer of the worksheet.

SAS supports Microsoft Excel 2010 and later. For more information, see

- Microsoft Excel Standards Support
- Base SAS Focus Area
- Using ODS EXCEL and PROC EXPORT to bundle Excel-based reports
- An Introduction to Creating Multi-Sheet Microsoft Excel Workbooks the Easy Way with SAS

Supported File Types

The following table provides descriptions of the supported file types for the ODS destination for Excel.

Description of Supported File Types

File Type	Description
EMF (Enhanced Metafile Format)	Supports standard Enhanced Metafile Format.
JPEG or JPG (Joint Photographic Experts Group)	A file format that is used for storing noninteractive images.
PNG (Portable Network Graphic)	Supports true color, gray-scale, and 8-bit images.

Securing ODS-Generated Excel Files

The ODS destination for Excel does not support password protection at the workbook level. However, you can use the (PROTECT_WORKSHEET= 'OFF' | 'ON') option to protect the worksheet by making it read-only.

Examples

Example 1: Customizing Your Excel Output

Features:	ODS EXCEL Statement options: FILE= OPTIONS (SHEET_INTERVAL=, SUPPRESS_BYLINES=, SHEET_LABEL=, EMBEDDED_TITLES=, EMBED_TITLES_ONCE=);
Other features:	PROC TABULATE

Details

The following example shows you how to create a customized Excel workbook that contains PROC TABULATE output. The ODS EXCEL statement is used to make the following customizations:

- A new sheet is created for each BY group.
- The BY lines are suppressed.
- The title created by the TITLE statement is embedded in the output.
- The worksheet labels are customized.

Program

```
ods excel file="c:\file-path\multitablefinal.xlsx"
   options(sheet_interval="bygroup"
           suppress_bylines="yes"
           sheet_label="country"
           embedded_titles="yes"
           embed_titles_once="yes" );

title "Historical Sales Data";

proc tabulate data=sashelp.prdsale;
   by country;
   var predict actual;
   class region division prodtype year;
   table year=[label=' '],
      region*(division*prodtype all=[label='division total'])
      all=[label='grand total'],
      predict=[label='total predicted sales']*f=dollar10.*sum=[label=''
      actual=[label='total actual sales']*f=dollar10.*sum=[label=''] /
      box=_page_;
run;

ods excel close;
```

Program Description

Open the ODS destination for Excel and specify the options. Open the ODS destination for Excel and provide a filename for the workbook. The SHEET_INTERVAL= option specifies that a new sheet is created after each by group. The SUPPRESS_BYLINES= option is used to suppress the printing of the BY lines text. The SHEET_LABEL= option specifies the text "Country" as the first part of the worksheet label. The EMBEDDED_TITLES= option specifies that the title created by the TITLE statement is embedded in the Excel worksheet. The EMBED_TITLES_ONCE option specifies that the title is embedded once, at the top of each sheet.

```
ods excel file="c:\file-path\multitablefinal.xlsx"
   options(sheet_interval="bygroup"
           suppress_bylines="yes"
           sheet_label="country"
           embedded_titles="yes"
           embed_titles_once="yes" );
```

Specify a title for the workbook

```
title "Historical Sales Data";
```

Produce the procedure output.

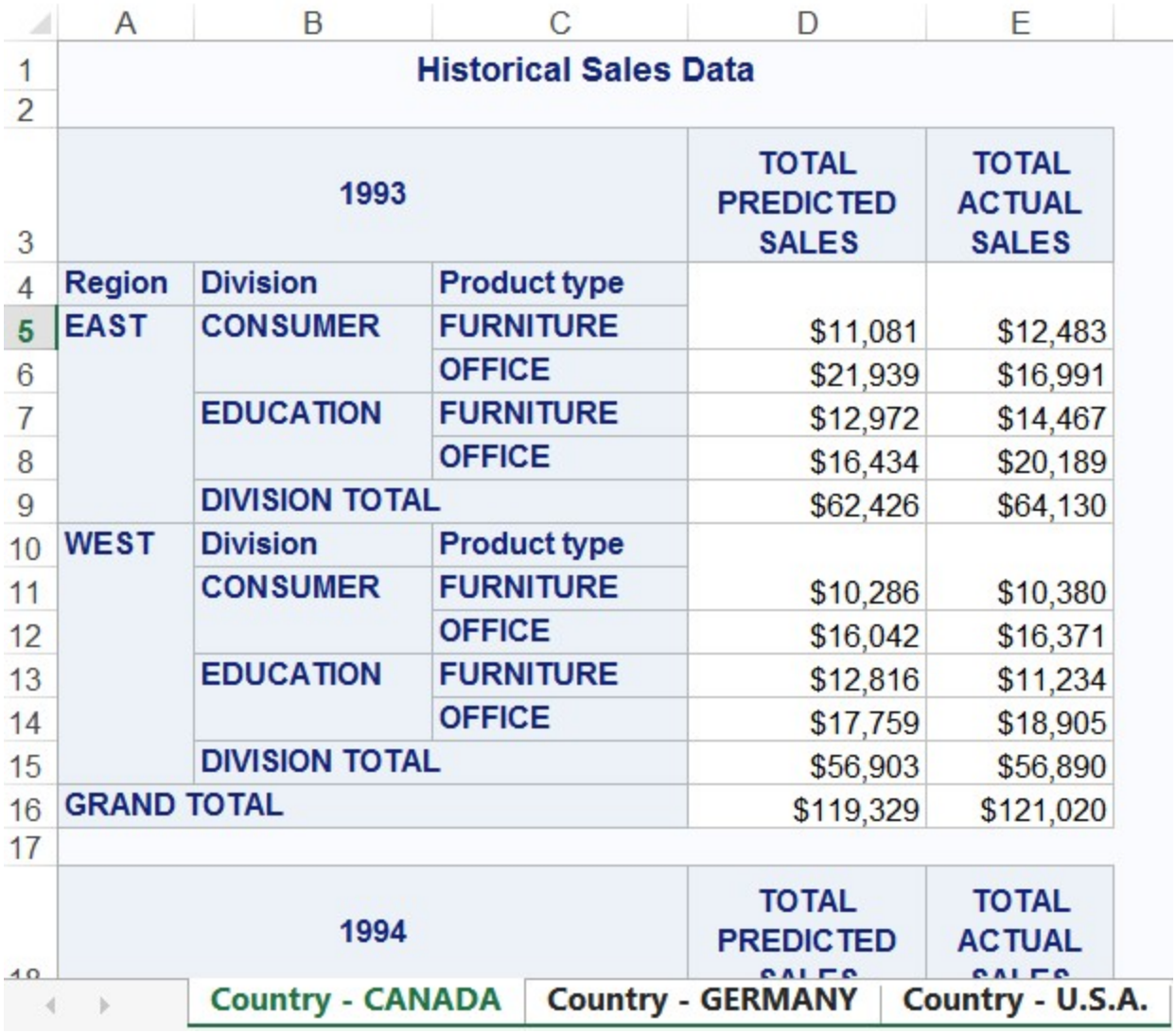
```
proc tabulate data=sashelp.prdsale;
   by country;
   var predict actual;
   class region division prodtype year;
   table year=[label=' '],
      region*(division*prodtype all=[label='division total'])
      all=[label='grand total'],
      predict=[label='total predicted sales']*f=dollar10.*sum=[label='']
      actual=[label='total actual sales']*f=dollar10.*sum=[label=''] /
      box=_page_;
run;
```

Close the ODS destination for Excel.

```
ods excel close;
```

Excel Output

Customized Excel Output



	A	B	C	D	E
1	Historical Sales Data				
2					
3	1993			TOTAL PREDICTED SALES	TOTAL ACTUAL SALES
4	Region	Division	Product type		
5	EAST	CONSUMER	FURNITURE	$11,081	$12,483
6			OFFICE	$21,939	$16,991
7		EDUCATION	FURNITURE	$12,972	$14,467
8			OFFICE	$16,434	$20,189
9		DIVISION TOTAL		$62,426	$64,130
10	WEST	Division	Product type		
11		CONSUMER	FURNITURE	$10,286	$10,380
12			OFFICE	$16,042	$16,371
13		EDUCATION	FURNITURE	$12,816	$11,234
14			OFFICE	$17,759	$18,905
15		DIVISION TOTAL		$56,903	$56,890
16	GRAND TOTAL			$119,329	$121,020
17					
	1994			TOTAL PREDICTED	TOTAL ACTUAL

Country - CANADA | Country - GERMANY | Country - U.S.A.

Example 2: Customizing ODS Excel Output by Using the TAGATTR='format' Style Attribute

Features:	ODS EXCEL Statement
Other features:	PROC SORT PROC PRINT procedure: VAR with STYLE=TAGATTR SUM with STYLE=TAGATTR LABEL

Details

In the following example, the TAGATTR= style attribute enables the user to customize the styles and format of the data in the Excel workbook. Negative values are noted by red font and parenthesis. These are created using the TAGATTR= style attribute.

Program

```
ods html close;

data prdsale;
   set sashelp.prdsale;
   Difference = actual-predict;
run;

proc sort data=prdsale;
   by country region division year;
run;

ods excel file='c:\file-path\tagattr.xlsx';

proc print data=prdsale(obs=15) noobs label split='*';
   id country region division;

var prodtype product quarter month year;
var predict actual /
    style(data)={tagattr='format:$#,##0_);[Red]\($#,##0\)'};

var difference /
    style(data)={tagattr='format:$#,##0_);[Red]\($#,##0\) formula:RC[-1
```

```
sum predict actual difference /
    style(data)={tagattr='format:$#,##0_);[Red]\($#,##0\)'};

label prodtype = 'Product*Type'
      predict  = 'Predicted*Sales*For Area'
      actual   = 'Actual*Sales*Amount';
run;

ods excel close;
ods html;
```

Program Description

Close the HTML destination.

```
ods html close;
```

Create the PRDSALE data set. The DATA step creates the PRDSALE data set that contains the calculated difference between the Actual Sales and the Predicted Sales values.

```
data prdsale;
   set sashelp.prdsale;
   Difference = actual-predict;
run;
```

Sort the data set.

```
proc sort data=prdsale;
   by country region division year;
run;
```

Open the ODS destination for Excel and name the output file.

```
ods excel file='c:\file-path\tagattr.xlsx';
```

Begin the PRINT procedure step.

```
proc print data=prdsale(obs=15) noobs label split='*';
   id country region division;
```

Customize the output format for Predicted Sales and Actual Sales The TAGATTR= style attribute on the first VAR statement specifies the format for the positive values.. The negative numbers are printed in red and are surrounded by parenthesis.

```
var prodtype product quarter month year;
var predict actual /
    style(data)={tagattr='format:$#,##0_);[Red]\($#,##0\)'};
```

Customize the output format for the difference between the Predicted Sales and Actual Sales The TAGATTR= style attribute on the second VAR statement specifies the format for negative values. The negative numbers are printed in red and are surrounded by parenthesis. The difference is calculated using formula: RC[-1] .

```
var difference /
    style(data)={tagattr='format:$#,##0_);[Red]\($#,##0\) formula:RC[-1]
```

Customize the output format for the summary. The TAGATTR= style attribute in the SUM statement specifies the format that is used to show the sums for the Predicted Sales, the Actual Sales, and the Difference. The first TAGATTR= specifies the format for the positive values and the

second format is for negative values. The negative values are printed in red and are surrounded by parenthesis.

```
sum predict actual difference /
    style(data)={tagattr='format:$#,##0_);[Red]\($#,##0\)'};
```

Specify the labels for the column headings.

```
label prodtype = 'Product*Type'
      predict  = 'Predicted*Sales*For Area'
      actual   = 'Actual*Sales*Amount';
run;
```

Close the ODS destination for Excel. Close the ODS destination for Excel and open the HTML destination.

```
ods excel close;
ods html;
```

Excel Output

This output is created using the ODS destination for Excel. It uses the style attribute TAGATTR= to customize the data in the Excel workbook.

Customize the Data in the Excel Workbook Using the TAGATTR= Style Attribute

1	Country	Region	Division	Product Type	Product	Quarter	Month	Year	Predicted Sales For Area	Actual Sales Amount	Difference
2	CANADA	EAST	CONSUMER	FURNITURE	SOFA	1	Jan	1993	$425	$5	($420)
3	CANADA	EAST	CONSUMER	FURNITURE	SOFA	1	Feb	1993	$215	$164	($51)
4	CANADA	EAST	CONSUMER	FURNITURE	SOFA	1	Mar	1993	$948	$422	($526)
5	CANADA	EAST	CONSUMER	FURNITURE	SOFA	2	Apr	1993	$544	$424	($120)
6	CANADA	EAST	CONSUMER	FURNITURE	SOFA	2	May	1993	$764	$854	$90
7	CANADA	EAST	CONSUMER	FURNITURE	SOFA	2	Jun	1993	$446	$168	($278)
8	CANADA	EAST	CONSUMER	FURNITURE	SOFA	3	Jul	1993	$957	$8	($949)
9	CANADA	EAST	CONSUMER	FURNITURE	SOFA	3	Aug	1993	$967	$748	($219)
10	CANADA	EAST	CONSUMER	FURNITURE	SOFA	3	Sep	1993	$11	$682	$671
11	CANADA	EAST	CONSUMER	FURNITURE	SOFA	4	Oct	1993	$110	$300	$190
12	CANADA	EAST	CONSUMER	FURNITURE	SOFA	4	Nov	1993	$263	$672	$409
13	CANADA	EAST	CONSUMER	FURNITURE	SOFA	4	Dec	1993	$215	$894	$679
14	CANADA	EAST	CONSUMER	FURNITURE	BED	1	Jan	1993	$414	$284	($130)
15	CANADA	EAST	CONSUMER	FURNITURE	BED	1	Feb	1993	$770	$705	($65)
16	CANADA	EAST	CONSUMER	FURNITURE	BED	1	Mar	1993	$679	$737	$58
17									$7,728.00	$7,067.00	-661

Example 3: Customizing ODS Excel Output by Using the TAGATTR='type' Style Attribute

Features:	ODS EXCEL Statement

Other features:	PROC PRINT procedure: VAR with STYLE=TAGATTR

Details

In the following example, the TAGATTR= style attribute enables the user to customize the type and format of the data in the Excel workbook. In the example, the data is converted to a number in Excel and formatted using the Japanese Yen with the TAGATTR= style attribute.

Program

```
proc format;
   picture myyen
      low -< 0 = "0000.00" (prefix='-¥')
      other = "0000.00" (prefix='¥');
run;

data;
   input a1 a2 a3;
datalines;
-20   19 -12.34
100 -123  99.99
-123  555  21.00
999    1  13.25
;
run;

ods excel file="c:\file-path\test.xlsx" options(embedded_titles="yes");

title 'TAGATTR';
title2 'The data should be stored as numbers';
title3 'formatted with the Excel format.';

proc print data=_last_ noobs;
   var _numeric_ /
style(data)={tagattr='type:number format:¥#,##0.00_);[Red](¥#,##0.00)'}
   format _numeric_ myyen.;
run;
run;

ods excel close;
```

Program Description

Create a custom format for the data. This format will be used later in the program.

```
proc format;
   picture myyen
      low -< 0 = "0000.00" (prefix='-¥')
      other = "0000.00" (prefix='¥');
run;
```

Create the data set.

```
data;
   input a1 a2 a3;
datalines;
-20   19 -12.34
100 -123  99.99
-123  555  21.00
999    1  13.25
;
run;
```

Open the ODS destination for Excel and name the output file. Create titles that are displayed in the output.

```
ods excel file="c:\file-path\test.xlsx" options(embedded_titles="yes");

title 'TAGATTR';
title2 'The data should be stored as numbers';
title3 'formatted with the Excel format.';
```

Customize the output data type using the TAGATTR= style attribute. The TAGATTR= style attribute on the first VAR statement specifies that Excel stores the values as a number. An additional format is applied, which prints negative values in red and surrounded by parenthesis.

```
proc print data=_last_ noobs;
   var _numeric_ /
style(data)={tagattr='type:number format:¥#,##0.00_);[Red](¥#,##0.00)'};
   format _numeric_ myyen.;
run;
run;
```

Close the ODS destination for Excel.

```
ods excel close;
```

Excel Output

This output is created using the ODS destination for Excel. It uses the style attribute TAGATTR='type' to customize the data in the Excel workbook.

Customize the Data in the Excel Workbook Using the TAGATTR='type' Style Attribute

	A	B	C
1	TAGATTR		
2	The data should be stored as numbers		
3	formatted with the Excel format.		
4			
5	a1	a2	a3
6	(¥20.00)	¥19.00	(¥12.34)
7	¥100.00	(¥123.00)	¥99.99
8	(¥123.00)	¥555.00	¥21.00
9	¥999.00	¥1.00	¥13.25

Example 4: Applying a Style Sheet to Excel Output

Features:	ODS EXCEL Statement: ANCHOR option CSS Style Sheet
Other features:	PROC PRINT Statement

Details

The following program applies a style sheet created in a CSS file to the Excel output. In the StyleSheet, we specify the value for the anchor (the value used with CSS as the ID). The default ID is #IDX, and by renaming the anchor, we can choose the name of the ID so that it does not use the default.

The following example adds the worksheets on the same sheet using option SHEET_INTERVAL= . The CSS styles create different background colors for the headers in the first table and the headers in the second table. ID #expense is specified for the first table and the ID #Reports is specified for the second table using the ANCHOR= option.

The following code is an example of the external CSS file StyleSheet.css. Copy and paste this code into a text editor and save it as StyleSheet.css.

```
#Expense .header {
                  background-color:green
                 }

#Reports  .header {
                  background-color:red
                 }
```

Program

```
ods html close;

ods excel file="c:\file-path\excelAnchorCss.xlsx"
          cssstyle="file-path\Stylesheet.css"
          options(sheet_interval="none");

ods excel anchor="expense";

proc print data=sashelp.class;
run;


ods excel anchor="reports" cssstyle="file-path\Stylesheet.css";

proc print data=sashelp.class;
run;


ods excel close;
ods html;
```

Program Description

Close the HTML destination.

```
ods html close;
```

Open the ODS destination for Excel, provide a filename, and specify the style sheet. Open the destination for Excel, specify the filename for the output. The SHEET_INTERVAL=”NONE” option specifies that all output appears on the same sheet. The CSSSTYLE= option specifies the file StyleSheet.css to provide different background colors to the output..

```
ods excel file="c:\file-path\excelAnchorCss.xlsx"
          cssstyle="file-path\Stylesheet.css"
          options(sheet_interval="none");
```

Apply the CSS styles to the Expense Header. Create a different background color for the header in the first table by adding the ID #Expense for the first table using the ANCHOR= option. The file StyleSheet.css contains a matching ID. By default, the IDs are #IDX and #IDX1 without specifying an anchor ID.

```
ods excel anchor="expense";
```

Create the procedure output.

```
proc print data=sashelp.class;
run;
```

Apply the CSS styles to the Reports Header. Create a different background colors for the header in the second table by adding the ID #Reports using the ANCHOR= option. The file StyleSheet.css contains a matching ID. By default, the ID for the second table is #IDX1 without specifying an anchor ID. However, we have specified a unique ID of #Reports for the second table.

```
ods excel anchor="reports" cssstyle="file-path\Stylesheet.css";
```

Create the procedure output.

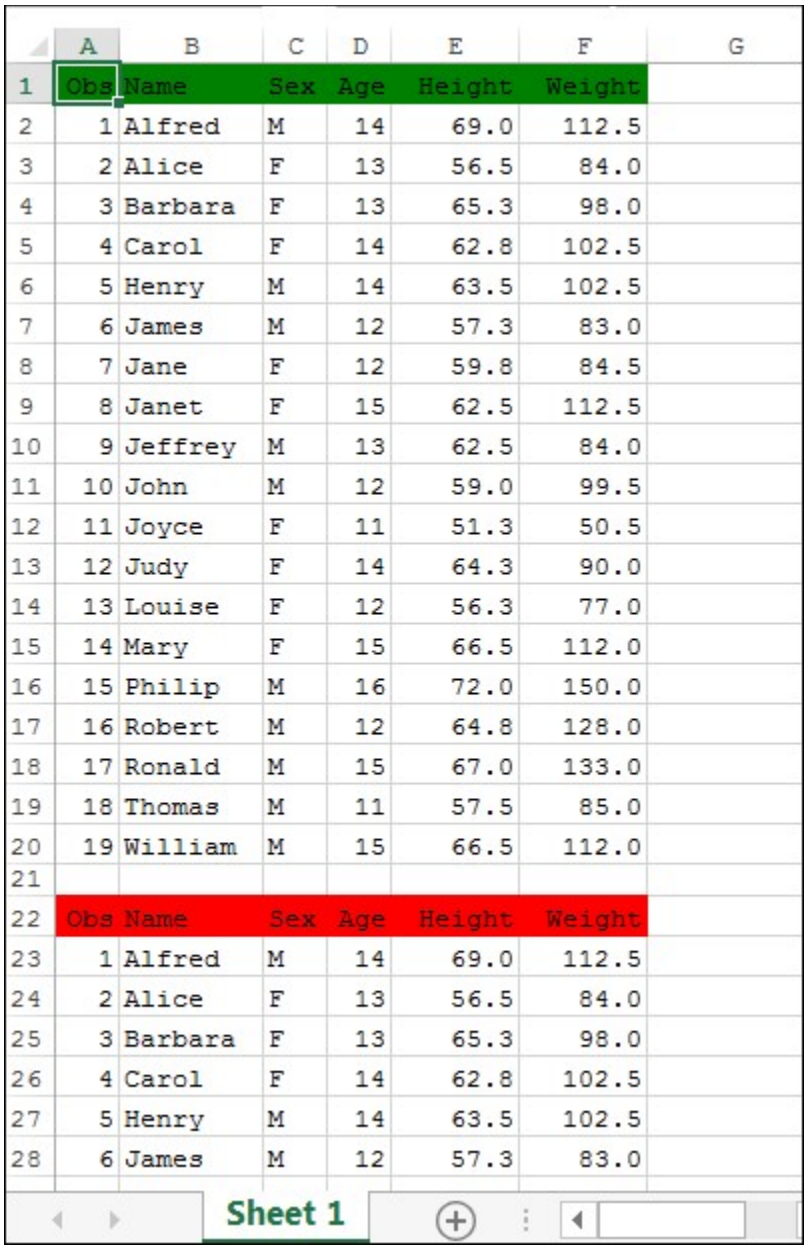
```
proc print data=sashelp.class;
run;
```

Close the ODS destination for Excel. Close the ODS destination for Excel and open the HTML destination.

```
ods excel close;
ods html;
```

Excel Output

Customized ODS Excel Output By Using a Style Sheet



	A	B	C	D	E	F	G
1	Obs	Name	Sex	Age	Height	Weight	
2	1	Alfred	M	14	69.0	112.5	
3	2	Alice	F	13	56.5	84.0	
4	3	Barbara	F	13	65.3	98.0	
5	4	Carol	F	14	62.8	102.5	
6	5	Henry	M	14	63.5	102.5	
7	6	James	M	12	57.3	83.0	
8	7	Jane	F	12	59.8	84.5	
9	8	Janet	F	15	62.5	112.5	
10	9	Jeffrey	M	13	62.5	84.0	
11	10	John	M	12	59.0	99.5	
12	11	Joyce	F	11	51.3	50.5	
13	12	Judy	F	14	64.3	90.0	
14	13	Louise	F	12	56.3	77.0	
15	14	Mary	F	15	66.5	112.0	
16	15	Philip	M	16	72.0	150.0	
17	16	Robert	M	12	64.8	128.0	
18	17	Ronald	M	15	67.0	133.0	
19	18	Thomas	M	11	57.5	85.0	
20	19	William	M	15	66.5	112.0	
21							
22	Obs	Name	Sex	Age	Height	Weight	
23	1	Alfred	M	14	69.0	112.5	
24	2	Alice	F	13	56.5	84.0	
25	3	Barbara	F	13	65.3	98.0	
26	4	Carol	F	14	62.8	102.5	
27	5	Henry	M	14	63.5	102.5	
28	6	James	M	12	57.3	83.0	

Sheet 1

Example 5: Using BORDERBOTTOMCOLOR with Excel Output

Features:	ODS EXCEL Statement options: FILE=
Other features:	PROC REPORT

Details

The following example shows how the thickness of the border is interpreted by EXCEL when using the BORDERBOTTOMCOLOR style attribute.

Program

```
data temp;
z = 0;
a = 1;
b = 2;
c = 3;
d = 4;
e = 5;
f = 6;
run;

ods excel file='c:\file-path\p.xlsx';

proc report data=temp;
    columns z a b c d e f ;
    define z / style(column)=[borderbottomcolor=red borderbottomwidth=0
    define a / style(column)=[borderbottomcolor=red borderbottomwidth=1
    define b / style(column)=[borderbottomcolor=red borderbottomwidth=2
    define c / style(column)=[borderbottomcolor=red borderbottomwidth=3
    define d / style(column)=[borderbottomcolor=red borderbottomwidth=4
    define e / style(column)=[borderbottomcolor=red borderbottomwidth=5
    define f / style(column)=[borderbottomcolor=red borderbottomwidth=6
  run;

ods excel close;
```

Program Description

Create a data set called temp. This data set maps the BORDERBOTTOMWIDTH value to the thickness of the border that it creates.

```
data temp;
z = 0;
a = 1;
b = 2;
c = 3;
d = 4;
e = 5;
f = 6;
run;
```

Open the ODS destination for Excel.

```
ods excel file='c:\file-path\p.xlsx';
```

RESOURCES

Use PROC REPORT to show the thickness of the bottom border.

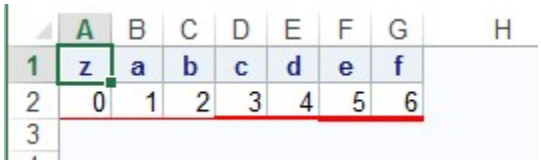
```
proc report data=temp;
    columns z a b c d e f ;
    define z / style(column)=[borderbottomcolor=red borderbottomwidth=0p
    define a / style(column)=[borderbottomcolor=red borderbottomwidth=1p
    define b / style(column)=[borderbottomcolor=red borderbottomwidth=2p
    define c / style(column)=[borderbottomcolor=red borderbottomwidth=3p
    define d / style(column)=[borderbottomcolor=red borderbottomwidth=4p
    define e / style(column)=[borderbottomcolor=red borderbottomwidth=5p
    define f / style(column)=[borderbottomcolor=red borderbottomwidth=6p
  run;
```

Close the ODS destination for Excel.

```
ods excel close;
```

Excel Output

Using BORDERBOTTOMCOLOR with the ODS Destination for Excel



	A	B	C	D	E	F	G	H
1	z	a	b	c	d	e	f	
2	0	1	2	3	4	5	6	
3								

Last updated: December 11, 2018