

PL/OFFX_XLSX

XLSX processor and generator

v5.0

PL/PDF

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Introduction

PL/OFFX_XLSX is a PL/SQL based XLSX Spreadsheet document generator from Oracle databases. Use PL/OFFX_XLSX to quickly and easily develop applications with dynamic content but also quality presentation and printing capabilities.

Links

Overview of the XML file formats in Office 2010: <http://technet.microsoft.com/en-us/library/cc179190.aspx>

XML Spreadsheet document structure: [http://msdn.microsoft.com/en-us/library/office/qq278316\(v=office.15\).aspx](http://msdn.microsoft.com/en-us/library/office/qq278316(v=office.15).aspx)

Installation

System requirements: Oracle 11g RDBMS Release 2 or higher. Oracle 11g Express Edition is supported.

PL/OFFX_XLSX is a collection of PL/SQL packages. Before using PL/OFFX_XLSX, make sure that the steps described in the InstallationGuide were completed.

Using PL/OFFX_XLSX

Essentially, PL/OFFX_XLSX is a series of calls to PL/OFFX_XLSX procedures and functions from a PL/SQL script, package, procedure or function. If you are not familiar with the PL/SQL programming language, study the Oracle documentation.

Contact

Contact us at: <mailto:info@plpdf.com>

setTableMode

Type: procedure
Description: Sets table storage for sharedstrings and sheet data in runtime.
Version: v3.3.0
Parameters: -
Return: -

isMemoryMode

Type: function
Description: Checks the runtime storage setting.
Version: v3.3.0
Parameters: -
Return: boolean: boolean value of the check

setClobMode

Type: procedure
Description: Sets clob storage for sharedstrings and sheet data in memory instead of structures.
Version: v3.6.0
Parameters: -
Return: -

setSharedstringUnique

Type: procedure
Description: Sets unique checking execution for string table storage.
Version: v4.9.0
Parameters: -
Return: -

isSharedstringUnique

Type: function
Description: Checks the shared strings storage setting.
Version: v4.9.0
Parameters: -
Return: boolean: boolean value of the check

Init

Type: procedure
Description: Initializes generator program variables.
Version: v1.2.0
Parameters:
- p_date1904 boolean default true: date system is 1904 (true) or 1900 (false)
Return: -

setProducer

Type: procedure

Description: Set the Producer property of the XLSX file.

Version: v4.7.0

Parameters:

- p_producer varchar2: The name of the producer

Return: -

setCurrentFormat

Type: procedure

Description: Sets the format to actual format.

Version: v1.0.0

Parameters:

- p_idx pls_integer: Index of format

Return: -

setCurrentWorksheet

Type: procedure

Description: Sets the Worksheet to actual worksheet.

Version: v1.0.0

Parameters:

- p_idx pls_integer: Index of Worksheet

Return: -

setCurrentRow

Type: procedure

Description: Sets the Row to actual row.

Version: v1.0.0

Parameters:

- p_idx pls_integer: Index of Row

Return: -

setCurrentCell

Type: procedure

Description: Sets the Cell to actual cell.

Version: v1.0.0

Parameters:

- p_idx pls_integer: Index of Cell

Return: -

getCurrentFormat

Type: function

Description: Returns the index of current format.

Version: v1.0.0

Parameters: -

Return: pls_integer: Index of current format

getCurrentWorksheet

Type: function

Description: Returns the index of current worksheet.

Version: v1.0.0

Parameters: -

Return: pls_integer: Index of current worksheet

getCurrentRow

Type: function

Description: Returns the index of current row.

Version: v1.0.0

Parameters: -

Return: pls_integer: Index of current row

getCurrentCell

Type: function

Description: Returns the index of current cell.

Version: v1.0.0

Parameters: -

Return: pls_integer: Index of current cell

isFormatMask

Type: function

Description: Checks the index is a Format Mask.

Version: v1.0.0

Parameters:

- p_format_mask_idx pls_integer: index of the format

Return: boolean

- o true: index is a format
- o false: index is not a format

isWorksheet

Type: function

Description: Checks the index is a Worksheet.

Version: v1.0.0

Parameters:

- p_ws_idx pls_integer: index of the worksheet

Return: isWorksheetboolean

- o true: index is a worksheet
- o false: index is not a worksheet

isRow

Type: function

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Description: Checks the index is a Row.

Version: v1.0.0

Parameters:

- p_ws_idx pls_integer: index of the worksheet
- p_Row_idx pls_integer: index of the row

Return: boolean

- o true: index is a row
- o false: index is not a row

isCell

Type: function

Description: Checks the index is a Cell.

Version: v1.0.0

Parameters:

- p_ws_idx pls_integer: index of the worksheet
- p_Row_idx pls_integer: index of the row
- p_Cell_idx pls_integer: index of the cell

Return: boolean

- o true: index is a cell
- o false: index is not a cell

setDocumentProperties

Type: procedure

Description: Excel documents store metadata related to the document for example, the title, subject, keywords, etc.

Version: v1.0.0

Parameters:

- p_title varchar2 default null: Title
- p_subject varchar2 default null: Subject
- p_keywords varchar2 default null: Keywords
- p_description varchar2 default null: Description
- p_category varchar2 default null: Category
- p_contentStatus varchar2 default null: ContentStatus

Return: -

GetVersion

Type: function

Description: Gets the version number of PL/XLS package.

Version: v1.0.0

Parameters: -

Return: varchar2: number of current version

GetProduct

Type: function

Description: Gets the name of product.

Version: v1.0.0

Parameters: -

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Return: varchar2: name of current product

addWorksheet

Type: function

Description: Defines a worksheet within the current workbook. Sets index to the current worksheet.

Version: v1.0.0

Parameters:

- p_Name varchar2: This tag specifies the name of this worksheet. This value must be unique within the list of sheet names in this workbook.

Return: pls_integer: index of the new worksheet

addWorksheet

Type: procedure

Description: Defines a worksheet within the current workbook. Sets index to the current worksheet.

Version: v1.0.0

Parameters:

- p_Name varchar2: This tag specifies the name of this worksheet. This value must be unique within the list of sheet names in this workbook.

Return: -

getWorksheetName

Type: function

Description: Get the selected worksheet name.

Version: v1.3.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.

Return: varchar2: Name of the worksheet.

getWorksheetId

Type: function

Description: Get the selected worksheet id.

Version: v4.9.0

Parameters:

- p_Name varchar2: Name of the worksheet.

Return: pls_integer: Id of the worksheet.

getLastWorksheetNum

Type: function

Description: Get the last worksheet index for looping in sheets.

Version: v4.9.0

Parameters: -

Return: pls_integer: the index of the last worksheet.

addRow

Type: function

Description: Defines the formatting and data for one or more adjacent rows. If this element contains cell data, it must not contain the Span attribute. Each Row element may contain one or more Cell elements defining the table's data. Sets index to the current row.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.

Return: pls_integer: index of the new row

addRow

Type: procedure

Description: Adds row to the worksheet and sets index to the added row.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.

Return: -

addRows

Type: function

Description: Adds rows to the worksheet and sets index to the last added row.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_num pls_integer default 1: Number of new rows

Return: pls_integer: index of the last new row

addRow

Type: procedure

Description: Adds rows to the worksheet and sets index to the added row.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_num pls_integer default 1: Number of new rows

Return: -

getLastRowNum

Type: function

Description: Get last row index of the the worksheet.

Version: v4.9.0

Parameters:

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- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.

Return : pls_integer : index of the last row

Row_Height

Type: procedure

Description : Sets property of an existing row.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_Height number : Specifies the height of a row in points. This value must be greater than or equal to 0.

Return : -

Row_Format

Type: procedure

Description : Sets property of an existing row.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_format_id pls_integer : Specifies a reference to a previously defined format.

Return : -

Row_Freeze

Type: procedure

Description : Sets property of an existing row.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_number_rows pls_integer default null : Numbers of rows what you freeze. The default value is 1.

Return : -

Row_Hide

Type: procedure

Description : Flag indicating if the affected row is hidden on this worksheet.

Version: v4.3.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the

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current Worksheet.

- p_number_rows pls_integer default null: Numbers of rows what you freeze. The default value is 1.
- p_hide boolean default true: Affected row is hidden or not on this worksheet.

Return: -

Row_Collapse

Type: procedure

Description: Flag indicating if the outlining of the affected row is in the collapsed state.

Version: v4.3.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_number_rows pls_integer default null: Numbers of rows what you freeze. The default value is 1.
- p_collapse boolean default true: Affected row is collapsed or not on this worksheet.

Return: -

Row_outlineLevel

Type: procedure

Description: Outline level of affected row. Range is 0 to 7.

Version: v4.3.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_number_rows pls_integer default null: Numbers of rows what you freeze. The default value is 1.
- p_outlineLevel pls_integer default null: Affected row's outline level.

Return: -

Column_Width

Type: procedure

Description: Sets property of an column.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_column pls_integer default null: Index of the column. null means the current Columns.
- p_Width number: Specifies the width of a column in characters. This value must be greater than or equal to 0.

Return: -

Column_Freeze

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Type: procedure

Description: Sets property of an existing column.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_number_columns pls_integer default null: Numbers of columns what you freeze. The default value is 1.

Return: -

Column_Hide

Type: procedure

Description: Flag indicating if the affected column is hidden on this worksheet.

Version: v4.3.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_column pls_integer default null: Index of the column. null means the current Columns.
- p_hide boolean default true: Affected column is hidden or not on this worksheet.

Return: -

Column_collapse

Type: procedure

Description: Flag indicating if the outlining of the affected column is in the collapsed state.

Version: v4.3.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_column pls_integer default null: Index of the column. null means the current Columns.
- p_collapse boolean default true: Affected column is collapsed or not on this worksheet.

Return: -

Column_outlineLevel

Type: procedure

Description: Outline level of affected column(s). Range is 0 to 7.

Version: v4.3.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_column pls_integer default null: Index of the column. null means the current Columns.
- p_outlineLevel pls_integer default null: Affected column's outline level.

Return : -

addValidation_List

Type: function

Description: Set cell validation list

Version: v1.3.0

Parameters :

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_values varchar2: Sets the values of list, separator comma or semicolon
- p_allow_blank boolean default true: The data validation treats empty or blank entries as valid.

Return : pls_integer: index of the new validation

Validation_addApplied

Type: procedure

Description: Set cell validation list

Version: v1.3.0

Parameters :

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_values varchar2: Sets the values of list, separator comma or semicolon
- p_allow_blank boolean default true: The data validation treats empty or blank entries as valid.

Return : -

setDefaultFont

Type: procedure

Description: Sets the default font properties

Version: v1.0.0

Parameters :

- p_FontName varchar2 default c_default_font_name: Name of the font-family. Default value is Calibri
- p_Size pls_integer default c_default_font_size: Size of the font. The default value is 11.

Return : -

addFill

Type: function

Description: Defines the formatting and data for one or more adjacent rows.If this element contains cell data, it must not contain the Span attribute.Each

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Row element may contain one or more Cell elements defining the table's data. Sets index to the current row.

Version: v1.0.0

Parameters :

- p_pattern_type varchar2 default null : Sets the pattern type.
- p_color varchar2 default null : The color of the pattern.

Return : pls_integer : index of the new filling pattern

addBorder

Type: function

Description : Defines the cell borders.

Version: v1.0.0

Parameters :

- p_border_top_style varchar2 default null : Style of the top side border
- p_border_top_color varchar2 default null : Color of the top side border
- p_border_bottom_style varchar2 default null : Style of the bottom side border
- p_border_bottom_color varchar2 default null : Color of the bottom side border
- p_border_left_style varchar2 default null : Style of the left side border
- p_border_top_left varchar2 default null : Color of the left side border
- p_border_right_style varchar2 default null : Style of the right side border
- p_border_right_color varchar2 default null : Color of the right side border

Return : pls_integer : Index of the new border

addFormatMask

Type: function

Description : Defines a format mask.

Version: v1.0.0

Parameters :

- p_format_mask varchar2 : Implementation of the format mask

Return : pls_integer : Index of the new mask.

addFont

Type: function

Description : Defines a font.

Version: v1.0.0

Parameters :

- p_font_name varchar2 default null : Font-family name
- p_font_size pls_integer default null : Font size.
- p_italic boolean default false : Set to italic
- p_underline boolean default false : Set to underline
- p_bold boolean default false : Set to bold
- p_color varchar2 default null : Sets the font color.

Return : pls_integer : Index of the new font.

addFormat

Type: function

Description: Defines a format style.

Version: v1.0.0

Parameters:

- p_numFmtId pls_integer default null: Index of numeric format, predefined IDs:
 - o 0 General
 - o 1 0
 - o 2 0.00
 - o 3 #,##0
 - o 4 #,##0.00
 - o 9 0%
 - o 10 0.00%
 - o 11 0.00E+00
 - o 12 # ?/?
 - o 13 # ??/??
 - o 14 mm-dd-yy
 - o 15 d-mmm-yy
 - o 16 d-mmm
 - o 17 mmm-yy
 - o 18 h:mm AM/PM
 - o 19 h:mm:ss AM/PM
 - o 20 h:mm
 - o 21 h:mm:ss
 - o 22 m/d/yy h:mm
 - o 37 #,##0 ;(#,##0)
 - o 38 #,##0 ;[Red](#,##0)
 - o 39 #,##0.00;(#,##0.00)
 - o 40 #,##0.00;[Red](#,##0.00)
 - o 45 mm:ss
 - o 46 [h]:mm:ss
 - o 47 mmss.0
 - o 48 ##0.0E+0
 - o 49 @
- p_fontId pls_integer default null: Index of font
- p_fillId pls_integer default null: Index of filling style
- p_borderId pls_integer default null: Index of border style
- p_horizontal_align varchar2 default null: Horizontal alignment
- p_vertical_align varchar2 default null: Vertical alignment
- p_textRotation pls_integer default null: Text rotation in cells. Expressed in degrees. Values range from 0 to 180.
- p_wrap_text boolean default false: Wrap text

Return: pls_integer: Index of the new format.

addFormat1

Type: function

Description: Defines a format style.

Version: v1.0.0

Parameters:

- p_font_name varchar2 default null: Font name

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- p_font_size pls_integer default null : Font size.
- p_italic boolean default false : Set to italic
- p_underline boolean default false : Set to underline
- p_bold boolean default false : Set to bold
- p_color varchar2 default null : Sets the font color.
- p_pattern_type varchar2 default null : Sets the pattern type.
- p_pattern_color varchar2 default null : Sets the pattern color.
- p_border_top_style varchar2 default null : Style of the top side border
- p_border_top_color varchar2 default null : Color of the top side border
- p_border_bottom_style varchar2 default null : Style of the bottom side border
- p_border_bottom_color varchar2 default null : Color of the bottom side border
- p_border_left_style varchar2 default null : Style of the left side border
- p_border_top_left varchar2 default null : Color of the left side border
- p_border_right_style varchar2 default null : Style of the right side border
- p_border_right_color varchar2 default null : Color of the right side border
- p_horizontal_align varchar2 default null : Horizontal alignment
- p_vertical_align varchar2 default null : Vertical alignment
- p_textRotation pls_integer default null : Text rotation in cells. Expressed in degrees. Values range from 0 to 180.
- p_wrap_text boolean default false : Wrap text
- p_format_mask varchar2 default null : Format mask

Return : pls_integer : Index of the new format.

addCell_Number

Type: procedure

Description : Defines a single cell within the contained row. Sets index to the current cell.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.
- p_data number : Specifies the value of this cell.
- p_format_id pls_integer default null : Specifies a reference to a previously defined format.

Return : -

addCell_String

Type: procedure

Description : Defines a single cell within the contained row. Sets index to the current cell.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.

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- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_data varchar2: Specifies the value of this cell.
- p_format_id pls_integer default null: Specifies a reference to a previously defined format.

Return: -

addCell_Date

Type: procedure

Description: Defines a single cell within the contained row. Sets index to the current cell.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_data date: Specifies the value of this cell.
- p_format varchar2 default c_default_date_format: Specifies the date format strings.
- p_format_mask varchar2 default c_default_date_format: Specifies a custom date format.
- p_format_id pls_integer default null: Specifies a reference to a previously defined format.

Return: -

Cell_setFont

Type: procedure

Description: Set cell font properties

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_FontName varchar2: Sets the font name.
- p_Size pls_integer default 11: Sets the font size. Default value is 11.

Return: -

Cell_setBold

Type: procedure

Description: Set cell style to bold.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the

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current Worksheet.

- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

Cell_setItalic

Type: procedure

Description: Set cell style to italic.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

Cell_setUnderline

Type: procedure

Description: Set cell style to underline.

Version: v4.11

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_style varchar2 default 'single': The style is single or double

Return: -

Cell_setColor

Type: procedure

Description: Specifies the color of celltext.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_color varchar2: Specifies a reference to a previously defined color.

Return: -

Cell_setBGColor

Type: procedure

Description: Specifies the cells background color.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.
- p_color varchar2 : Specifies a reference to a previously defined color.

Return : -

Cell_setHLeft

Type: procedure

Description : Set the horizontal alignment to left.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.

Return : -

Cell_setHCenter

Type: procedure

Description : Set the horizontal alignment to center.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.

Return : -

Cell_setHRight

Type: procedure

Description : Set the horizontal alignment to right.

Version: v1.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.

Return : -

Cell_setVTOP

Type: procedure

Description: Set the vertical alignment to top.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

Cell_setVCenter

Type: procedure

Description: Set the vertical alignment to center.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

Cell_setVBottom

Type: procedure

Description: Set the vertical alignment to bottom.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

Cell_setBorder_Top

Type: procedure

Description: Sets a top side border for the cell.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_LineStyle varchar2 default c_thin: Specifies the border line style.
- p_color varchar2 default c_black: Specifies the border color

Return: -

Cell_setBorder_Bottom

Type: procedure

Description: Sets a bottom side border for the cell.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_LineStyle varchar2 default c_thin: Specifies the border line style.
- p_color varchar2 default c_black: Specifies the border color

Return: -

Cell_setBorder_Left

Type: procedure

Description: Sets a left side border for the cell.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_LineStyle varchar2 default c_thin: Specifies the border line style.
- p_color varchar2 default c_black: Specifies the border color

Return: -

Cell_setBorder_Right

Type: procedure

Description: Sets a right side border for the cell.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_LineStyle varchar2 default c_thin: Specifies the border line style.
- p_color varchar2 default c_black: Specifies the border color

Return: -

Cell_setBorder

Type: procedure

Description: Sets border for the cell.

Version: v1.0.0

Parameters:

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- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_LineStyle varchar2 default c_thin: Specifies the border line style.
- p_color varchar2 default c_black: Specifies the border color

Return: -

Cell_setWrapText

Type: procedure

Description: Wrap up the text.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

mergeCells

Type: procedure

Description: Merge two or more cells into one cell.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell_from varchar2: The first cell of merging.
- p_cell_to varchar2: The last cell of merging.

Return: -

mergeRows

Type: procedure

Description: Merges two or more cells into one cell.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_num_rows pls_integer: Number of rows

Return: -

setShowGridLines

Type: procedure

Description: Sets the grid line showing for the worksheet.

Version: v4.9.4

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_visible boolean default null: Visible or not

Return: -

setAutoFilter

Type: procedure

Description: Create AutoFilter in the table.

Version: v2.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_column_start varchar2 default null: First column of the filter.
- p_column_end varchar2 default null: Last column of the filter.
- p_row_start pls_integer default null: First row of the filter.
- p_row_end pls_integer default null: Last row of the filter.

Return: -

Cell_setHyperlink

Type: procedure

Description: Add a hyperlink to the cell

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_hyperlink varchar2: The URL text.

Return: -

Cell_setFormatMask

Type: procedure

Description: Sets the cell format mask.

Version: v1.0.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_format_mask varchar2: Specifies a custom format mask.

Return: -

Cell_setComment

Type: procedure

Description: Contains the comment to be associated with this cell.

Version: v4.9.3

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_text varchar2: Specifies the text of the comment
- p_author varchar2: Specifies the author of this comment.
- p_width number default 96: Specifies the width of this comment.
- p_height number default 96: Specifies the height of this comment.

Return: -

Cell_setFormula

Type: procedure

Description: Set formula of the cell.

Version: v1.2.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_formula varchar2: Specifies the text of the formula

Return: -

Cell_getFormula

Type: function

Description: Get formula of the cell.

Version: v4.9.4

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: varchar2: The formula of the cell

Cell_clearContent

Type: procedure

Description: Clear the value of the cell.

Version: v4.9.2

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the

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current Worksheet.

- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

Cell_getConditionalFormatting

Type: function

Description: Get formula of the cell.

Version: v4.9.4

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: varchar2: The formula of the cell

Cell_setConditionalFormatting

Type: procedure

Description: Set the conditional formatting of the cell.

Version: v4.9.4

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.
- p_cf ploffx_sheet.CT_ConditionalFormatting: The defined conditional formatting

Return: -

Cell_delConditionalFormatting

Type: procedure

Description: Delete the conditional formatting of the cell.

Version: v4.9.4

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: -

getDoc

Type: procedure

Description: ?Returns the generated document. The document is closed and then

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returned.

Version: v4.9.2

Parameters :

- p_blob_file in out nocopy blob : The XLSX file as BLOB variable

Return : -

parseDoc

Type: procedure

Description : Parses the XLSX file and store in PLXLSX internal structure.

Version: v4.9.5

Parameters :

- p_blob_file in out blob : The XLSX file as BLOB variable
- p_parse_style boolean default true : Parsing styles or not in XLSX file

Return : -

getDocument

Type: function

Description : Gets the XLSX as PLXLSX internal structure.

Version: v4.9.0

Parameters : -

Return : t_xlsx : The XLSX as t_xlsx structure

setDocument

Type: procedure

Description : Sets the XLSX structure and store in PLXLSX internal structure.

Version: v4.9.0

Parameters :

- p_xlsx t_xlsx : The XLSX internal structure

Return : -

AddImage

Type: procedure

Description : Adds image to the worksheet

Version: v3.0.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row_from pls_integer : Index of the row.
- p_row_from_offset number default 0 : Specifies the offset from the row in pixels
- p_cell_from varchar2 : Index of the cell.
- p_cell_from_offset number default 0 : Specifies the offset from the cell in pixels
- p_name varchar2 : Specifies the name of the image with extension.
- p_image blob : Specifies the image file.
- p_height number : Specifies the height to display in pixels.
- p_width number : Specifies the width to display in pixels.

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- p_descr varchar2 default null : Specifies the description for the image.

Return : -

setPrinterSettings

Type: procedure

Description : Adds printer setting to a worksheet

Version: v4.9.1

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_blackAndWhite boolean default null : Specifies the printing setting black and white
- p_orientation ploffx_sheet.ST_Orientation default null : Specifies the orientation of the printing.
- p_paperSize ploffx_sheet.XT_PaperSize default ploffx_sheet.paperSize_A4 : Specifies the paper size for the printing.
- p_fitToHeight pls_integer default null : Number of vertical pages to fit on.
- p_fitToWidth pls_integer default null : Number of horizontal pages to fit on.

Return : -

loadDocument

Type: procedure

Description : Loads XLSX file into the internal PLOFFX structure for modifying or filling cells and rows.

Version: v4.9.1

Parameters :

- p_xls in out nocopy blob : The XLSX file as BLOB variable

Return : -

setCellValue

Type: procedure

Description : Set the value property for the referenced cell.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.
- p_data number : Specifies the value of this cell.

Return : -

setCellValue

Type: procedure

Description : Set the value property for the referenced cell.

Version: v4.9.0

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Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.
- p_data varchar2 : Specifies the value of this cell.

Return : -

setCellValue

Type: procedure

Description : Set the value property for the referenced cell.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.
- p_data date : Specifies the value of this cell.

Return : -

getCellValue

Type: function

Description : Gets the text value property for the referenced cell.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.

Return : varchar2 : The value of the cell

getCellValueString

Type: function

Description : Gets the text value of the referenced cell.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_cell varchar2 : Specifies a reference to a previously defined cell.

Return : varchar2 : The value of the cell

getCellValueDate

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Type: function

Description: Gets the date value of the referenced cell.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: date: The value of the cell

getCellValueNumber

Type: function

Description: Gets the number value of the referenced cell.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: number: The value of the cell

getCellDataType

Type: function

Description: Gets the data type of the referenced cell.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: varchar2: The value of the cell, possible values are: text/date/number

getCellFormatString

Type: function

Description: Gets the format string of the referenced cell, it works for number and date cell.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_cell varchar2: Specifies a reference to a previously defined cell.

Return: varchar2: The format string of the cell.

getLastCellNum

Type: function

Description: Gets the last cell index of a sheet row.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.

Return: pls_integer: The index of the last cell

getMergeCells

Type: function

Description: Gets the merged cell range of a sheet row.

Version: v4.11

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.

Return: ploffx_util.t_cellranges: The cell range

insertRowsAfter

Type: function

Description: Inserts empty rows after the setted row into the worksheet and sets the last added row as current.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_num pls_integer default 1: The number of new rows.

Return: pls_integer: The index of the last added row

insertRowsAfter

Type: function

Description: Inserts empty rows after the setted row into the worksheet and sets the last added row as current.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_num pls_integer default 1: The number of new rows.

Return: -

insertRowAfter

Type: function

Description: Inserts empty row after the setted row into the worksheet and sets the added row as current.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.

Return: pls_integer: The index of the last added row

insertRowAfter

Type: procedure

Description: Inserts empty row after the setted row into the worksheet and sets the added row as current.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.

Return: -

insertRowsAfter

Type: function

Description: Inserts existing rows (see [getRows](#)) after the setted row into the worksheet and sets the last added row as current.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.
- p_data plofffx_sheet.CT_SheetData: The new rows.

Return: pls_integer: The index of the last added row

insertRowsAfter

Type: procedure

Description: Inserts existing rows (see [getRows](#)) after the setted row into the worksheet and sets the last added row as current.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.

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- p_data ploffx_sheet.CT_SheetData : The new rows.

Return : -

insertRowsAfterMulti

Type: function

Description : Inserts existing rows (see [getRows](#)) after the setted row into the worksheet and sets the last added row as current.

Version: v4.9.4

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_data ploffx_sheet.CT_SheetData : The new rows.
- p_num pls_integer default 1 : The number of multiplication.

Return : pls_integer : The index of the last added row

insertRowsAfterMulti

Type: procedure

Description : Inserts existing rows (see [getRows](#)) after the setted row into the worksheet and sets the last added row as current.

Version: v4.9.4

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_data ploffx_sheet.CT_SheetData : The new rows.
- p_num pls_integer default 1 : The number of multiplication.

Return : -

insertRowAfter

Type: function

Description : Inserts existing row (see [getRow](#)) after the setted row into the worksheet and sets the added row as current.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_data ploffx_sheet.CT_row : The new row.

Return : pls_integer : The index of the added row

insertRowAfter

Type: procedure

Description : Inserts existing row (see [getRow](#)) after the setted row into the

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worksheet and sets the added row as current.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.
- p_data plofffx_sheet.CT_row : The new row.

Return : -

getRow

Type: function

Description : Gets a row from the worksheet and return as the internal data format.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.

Return : plofffx_sheet.CT_row : The row as structure

getRows

Type: function

Description : Gets a rows from the worksheet and return as the internal data format.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the start row. null means the current Row.
- p_num pls_integer default 1 : The number of the rows.

Return : plofffx_sheet.CT_SheetData : The rows as structure

duplicateRow

Type: function

Description : Duplicates an existing row after the setted row into the worksheet and sets the added row as current.

Version: v4.9.0

Parameters :

- p_ws pls_integer default null : Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null : Index of the row. null means the current Row.

Return : pls_integer : The index of the new row

duplicateRow

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Type: procedure

Description: Duplicates an existing row after the setted row into the worksheet and sets the added row as current.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.

Return: -

deleteRow

Type: procedure

Description: Deletes row from the worksheet and updates references.

Version: v4.9.4

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_start pls_integer default null: Index of the row. null means the current Row.
- p_check_refs boolean default true: Check and update the cell related referencies or not

Return: -

deleteRows

Type: procedure

Description: Deletes rows from the worksheet and updates references.

Version: v4.9.4

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the start row. null means the current Row.
- p_num pls_integer default 1: number of the rows for delete. null means one row.
- p_check_refs boolean default true: Check and update the cell related referencies or not

Return: -

clearRow

Type: procedure

Description: Clears the value property of the all cell in the row.

Version: v4.9.0

Parameters:

- p_ws pls_integer default null: Index of the worksheet. null means the current Worksheet.
- p_row pls_integer default null: Index of the row. null means the current Row.

Return : -

searchArrayName

Type: function

Description: Searches for a predefined named cell array.

Version: v4.9.0

Parameters :

- p_name varchar2: The name of the predefined array

Return: t_cell_arr_ref: the structure of the array reference

searchCellName

Type: function

Description: Searches for a predefined named cell.

Version: v4.9.0

Parameters :

- p_name varchar2: The name of the predefined cell

Return: t_cell_ref: the structure of the cell reference

searchCellName

Type: procedure

Description: Searches for a predefined named cell.

Version: v4.9.0

Parameters :

- p_name varchar2: The name of the predefined cell
- p_ws out pls_integer: Index of the worksheet.
- p_row out pls_integer: Index of the row.
- p_cell varchar2: the reference of the cell.

Return : -

searchCellValue

Type: function

Description: Searches for a cell value on the sheet.

Version: v4.9.0

Parameters :

- p_ws out pls_integer default null: Index of the worksheet, null means the current sheet.
- p_value varchar2: The value of the cell

Return: t_cell_ref: the structure of the cell reference