

***PL/PDF***

**PL/OFFX\_XLSX**

XLSX processor and generator

v4.9.0

# ***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: 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\_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\_setBGColot

Type: procedure

Description: Specifies the cells background color.

Version: v1.0.0

# PL/PDF

## 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:

# PL/PDF

- 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: v4.9.0

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: v1.0.1

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 default null: 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: -

## getDoc

Type: procedure

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

Version: v1.0.1

Parameters:

- p\_blob\_file in out blob: The XLSX file as BLOB variable

Return: -

## getDoc1

Type: procedure

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

Version: v3.1.0

Parameters:

- p\_blob\_file in out blob: The XLSX file as BLOB variable

Return: -

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## parseDoc

Type: procedure

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

Version: v4.9.0

Parameters:

- p\_blob\_file in out blob: The XLSX file as BLOB variable

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.
- p\_descr varchar2 default null: Specifies the description for the image.

Return: -

## setPrinterSettings

Type: procedure

Description: Adds printer setting to a worksheet

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Version: v3.0.0

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.

Return : -

## loadDocument

Type: procedure

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

Version: v4.9.0

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

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

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

## 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

## procedure

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.
- p\_data plofffx\_sheet.CT\_SheetData : The new rows.

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 plofffx\_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 worksheet and sets the added row as current.

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\_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**

Type: procedure

# PL/PDF

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: v4.9.0

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.

Return: -

## deleteRows

Type: procedure

Description: Deletes rows from the worksheet and updates references.

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: number of the rows for delete. null means one row.

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

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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