

***PL/PDF***

**PL/OFFX\_DOCX**

DOCX processor and generator

v5.0

# ***PL/PDF***

## Contents

Introduction .....	1
Links .....	1
Installation .....	1
Using PL/OFFX_DOCX .....	1
Contact .....	1
Init .....	2
getScaleFactor .....	2
setPageSize .....	2
crParagraph .....	2
crSectionParagraph .....	3
addParagraph .....	3
addParagraph .....	3
addText .....	3
addText .....	4
addInstrText .....	5
addfldChar .....	5
crRun .....	5
addRun .....	5
addRun .....	6
addBR .....	6
addBR .....	6
setListLevel .....	6
AddHeader .....	7
AddFooter .....	7
crTable .....	7
addTable .....	7
addTable .....	8
setTableBorders .....	8
setTableTopBorder .....	8
setTableBottomBorder .....	8
setTableLeftBorder .....	9
setTableRightBorder .....	9
setTableInsideBorder .....	9
setTableInsideVBorder .....	10
AddRow .....	10
AddCell .....	10
TableaddParagraph .....	11
TableaddParagraph .....	11
addInlineImage .....	11
addInlineImage .....	11
SetBackground .....	12
addTabStop .....	12
addImage .....	12
addImage .....	13
AddSectionP .....	13
AddSectionB .....	14

# ***PL/PDF***

setSectPrPg .....	14
addSectionColumn .....	15
addPageNumField .....	15
addPageNumField .....	15
addDateField .....	15
addDateField .....	15
addAuthorField .....	16
addAuthorField .....	16
addHyperLink .....	16
addHyperLink .....	17
addTableOfContent .....	18
addTableOfContent .....	18
addField .....	18
getDoc .....	18
parseDoc .....	18
crList .....	18
AddListElement .....	19
crParagraphBorder .....	19
crBorder .....	19
crIndentation .....	20
crSpacing .....	20
crCellBorder .....	20
getDocument .....	21
crUnderline .....	21
AddToHeader .....	21
AddToFooter .....	21

# ***PL/PDF***

## **Introduction**

PL/OFFX\_DOCX is a PL/SQL based DOCX document generator from Oracle databases. Use PL/OFFX\_DOCX 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 Wordprocessing document structure: [http://msdn.microsoft.com/en-us/library/office/qq278308\(v=office.15\).aspx](http://msdn.microsoft.com/en-us/library/office/qq278308(v=office.15).aspx)

## **Installation**

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

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

## **Using PL/OFFX\_DOCX**

Essentially, PL/OFFX\_DOCX is a series of calls to PL/OFFX\_DOCX 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>

# PL/PDF

## Init

Type: procedure

Description: Initializes generator program variables.

Version: v2.0.0

Parameters:

- p\_unit varchar2 default 'mm': Default measurement unit
- p\_orientation ploffx\_document\_type.ST\_PageOrientation default ploffx\_document\_type.c\_portrait: Page orientation

Return: -

## getScaleFactor

Type: function

Description: Gets the scale multiplier between user OUM and internal point.

Version: v4.8.0

Parameters:

-

Return: number: The multiplier

## setPageSize

Type: procedure

Description: Set page size setting.

Version: v4.7.0

Parameters:

- p\_w number: Page width
- p\_h number: Page height

Return: -

## crParagraph

Type: function

Description: Create empty paragraph for content.

Version: v2.0.0

Parameters:

- p\_bidi boolean default null: Right to Left Paragraph Layout
- p\_contextualSpacing boolean default null: Ignore Spacing Above and Below When Using Identical Styles
- p\_ind ploffx\_document\_type.CT\_Ind default null: Set paragraph indentation
- p\_alignment varchar2 default null: Paragraph horizontal alignment (left, center, right, justify)
- p\_numPr ploffx\_document\_type.CT\_NumPr default null: Numbering properties
- p\_pageBreakBefore boolean default null: Start Paragraph on Next Page
- p\_border ploffx\_document\_type.CT\_PBdr default null: Paragraph Borders
- p\_pStyle varchar2 default null: Referenced Paragraph Style
- p\_spacing ploffx\_document\_type.CT\_Spacing default null: Spacing Between Lines and Above/Below Paragraph
- p\_suppressAutoHyphens boolean default null: Suppress Hyphenation for Paragraph

# PL/PDF

- p\_suppressLineNumbers boolean default null : Suppress Line Numbers for Paragraph
- p\_textAlignment varchar2 default null : Vertical Character Alignment on Line
- p\_widowControl boolean default null : Allow First/Last Line to Display on a Separate Page

Return : pls\_integer : Index of the created paragraph

## crSectionParagraph

Type: function

Description : Create section paragraph for content.

Version: v4.8.0

Parameters :

- p\_cols\_space varchar2 default null : Column Definitions
- p\_docgrid\_linePitch varchar2 default null : Document Grid
- p\_pgmar\_bottom varchar2 default null : Page Margins Bottom
- p\_pgmar\_footer varchar2 default null : Page MArgins Footer
- p\_pgmar\_gutter varchar2 default null : Page Margins Gutter
- p\_pgmar\_header varchar2 default null : Page Margins Header
- p\_pgmar\_left varchar2 default null : Page Margins Left
- p\_pgmar\_right varchar2 default null : Page Margins Right
- p\_pgmar\_top varchar2 default null : Page Margins Top
- p\_pgSz\_w varchar2 default null : Page Size Width
- p\_pgSz\_h varchar2 default null : Page Size Height
- p\_pgSz\_orient varchar2 default null : Page Size Orientation

Return : pls\_integer : Index of the created paragraph

## addParagraph

Type: procedure

Description : Add paragraph to the document

Version: v2.0.0

Parameters :

- p\_paragraph\_id pls\_integer : Existing paragraph ID

Return : -

## addParagraph

Type: function

Description : Add paragraph to document

Version: v2.0.0

Parameters :

- p\_paragraph\_id pls\_integer : Existing paragraph ID

Return : pls\_integer : The internal index of the new paragraph

## addText

Type: procedure

Description : Add text to an existing paragraph.

Version: v4.10

Parameters :

# PL/PDF

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_text varchar2 : Specifies the value of this text.
- p\_bold boolean default null : Bold text.
- p\_border ploffx\_document\_type.CT\_Border default null : Specifies text border properties
- p\_case varchar2 default null : Specifies U(pper) or L(ower) case
- p\_color varchar2 default null : Specifies text color in hexadecimal format
- p\_fitText number default null : Display text in fix width.
- p\_highlight varchar2 default null : Specifies highlight color around the text.
- p\_italic boolean default null : Italic text.
- p\_vertPosition number default null : Specifies the amount to be raised or lowered the text relation to the default baseline of the
- p\_FontName varchar2 default null : Specifies font family
- p\_style varchar2 default null : Specifies the text style
- p\_spacing number default null : Specifies the character spacing.
- p\_strikeout number default null : Strikeout.
- p\_FontSize number default null : Specifies the font size.
- p\_underline ploffx\_document\_type.CT\_Underline default null : Specifies the underline properties.
- p\_vertAlign varchar2 default null : Specifies the vertical alignment of the text.
  - o baseline
  - o subscript
  - o superscript
- p\_w number default null : This element specifies the amount by which each character shall be expanded.

Return : -

## addText

Type: function

Description : Add text to an existing paragraph.

Version: v2.0.0

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_text varchar2 : Specifies the value of this text.
- p\_bold boolean default null : Bold text.
- p\_border ploffx\_document\_type.CT\_Border default null : Specifies text border properties
- p\_case varchar2 default null : Specifies U(pper) or L(ower) case
- p\_color varchar2 default null : Specifies text color in hexadecimal format
- p\_fitText number default null : Display text in fix width.
- p\_highlight varchar2 default null : Specifies highlight color around the text.
- p\_italic boolean default null : Italic text.
- p\_vertPosition number default null : Specifies the amount to be raised or lowered the text relation to the default baseline of the
- p\_FontName varchar2 default nul : Specifies font family

# PL/PDF

- p\_style varchar2 default null : Specifies the text style
- p\_spacing number default null : Specifies the character spacing.
- p\_strikeout number default null : Strikeout.
- p\_FontSize number default null : Specifies the font size.
- p\_underline ploffx\_document\_type.CT\_Underline default null : Specifies the underline properties.
- p\_vertAlign varchar2 default null : Specifies the vertical alignment of the text.
  - o baseline
  - o subscript
  - o superscript
- p\_w number default null : This element specifies the amount by which each character shall be expanded.

Return : pls\_integer : The internal index of the text object

## addInstrText

Type: function

Description : Adds Field Code to an existing paragraph.

Version: v4.9.4

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_instrText varchar2 : Specifies the value of this field code.
- p\_RPr ploffx\_document\_type.CT\_RPr default null : the field code run properties

Return : pls\_integer : The internal index of the text object

## addfldChar

Type: function

Description : Adds Complex Field Char to an existing paragraph.

Version: v4.8.2

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_fldCharType varchar2 : Specifies the value of this field char.

Return : pls\_integer : The internal index of the text object

## crRun

Type: function

Description : Creates text run structure from text and run properties.

Version: v4.8.0

Parameters :

- p\_text varchar2 : The text as string
- p\_RPr ploffx\_document\_type.CT\_RPr : The run properties

Return : pls\_integer : The internal structure of the created object

## addRun



# PL/PDF

Type: function

Description: Adds Run as a structure to an existing paragraph.

Version: v4.8.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_run ploffx\_document\_type.CT\_R: The run as internal structure

Return: pls\_integer: The internal index of the run object

## addRun

Type: procedure

Description: Adds Run as a structure to an existing paragraph.

Version: v4.8.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_run ploffx\_document\_type.CT\_R: The run as internal structure

Return: -

## addBR

Type: function

Description: Adds Break to an existing paragraph.

Version: v4.5.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_clear varchar2 default null: Restart Location For Text Wrapping Break
- p\_type varchar2 default null: Break Type, see ploffx\_document\_type.ST\_BrType
  - o column: Column Break
  - o page: Page Break
  - o textWrapping: Line Break

Return: pls\_integer: The internal index of the run object

## addBR

Type: procedure

Description: Adds Break to an existing paragraph.

Version: v4.8.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_clear varchar2 default null: Restart Location For Text Wrapping Break
- p\_type varchar2 default null: Break Type, see ploffx\_document\_type.ST\_BrType
  - o column: Column Break
  - o page: Page Break
  - o textWrapping: Line Break

Return: -

## setListLevel

Type: procedure

Description: Set paragraph to a list element.

Version: v2.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_level pls\_integer default 0: Specifies the list level.
- p\_numId pls\_integer default 1: Specifies a reference to the list.

Return: -

## AddHeader

Type: procedure

Description: Add paragraph to the document header.

Version: v3.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_type ploffx\_document\_type.ST\_HdrFtr default ploffx\_document\_type.c\_default: Specifies the type of header.
  - o default
  - o even
  - o first

Return:

## AddFooter

Type: procedure

Description: Add paragraph to the document footer.

Version: v3.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_type ploffx\_document\_type.ST\_HdrFtr default ploffx\_document\_type.c\_default: Specifies the type of footer.
  - o default
  - o even
  - o first

Return:

## crTable

Type: function

Description: Create table.

Version: v4.8.1

Parameters:

- p\_width number default null: Specifies the table width.
- p\_alignment varchar2 default ploffx\_document\_type.c\_left: Specifies the table alignment.
- p\_tblStyle varchar2 default null: Specifies the table style.

Return: pls\_integer: Index of the created table

## **addTable**

Type: function

Description: Add previously defined table to the document.

Version: v2.0.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.

Return: pls\_integer: Index of the created table.

## **addTable**

Type: procedure

Description: Add previously defined table to the document.

Version: v4.8.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.

Return: -

## **setTableBorders**

Type: procedure

Description: Customize a previously defined table border properties.

Version: v2.0.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.
- p\_style varchar2 default null: Specifies the border style.
- p\_width number default null: Specifies the border width.
- p\_space number default null: Specifies the space between the border and the content.
- p\_color varchar2 default null: Specifies the border color.

Return: -

## **setTableTopBorder**

Type: procedure

Description: Customize a previously defined table top border properties.

Version: v4.7.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.
- p\_style varchar2 default null: Specifies the border style.
- p\_width number default null: Specifies the border width.
- p\_space number default null: Specifies the space between the border and the content.
- p\_color varchar2 default null: Specifies the border color.

Return: -

## **setTableBottomBorder**

Type: procedure

Description: Customize a previously defined table bottom border properties.

Version: v4.7.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.
- p\_style varchar2 default null: Specifies the border style.
- p\_width number default null: Specifies the border width.
- p\_space number default null: Specifies the space between the border and the content.
- p\_color varchar2 default null: Specifies the border color.

Return: -

## **setTableLeftBorder**

Type: procedure

Description: Customize a previously defined table left border properties.

Version: v4.7.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.
- p\_style varchar2 default null: Specifies the border style.
- p\_width number default null: Specifies the border width.
- p\_space number default null: Specifies the space between the border and the content.
- p\_color varchar2 default null: Specifies the border color.

Return: -

## **setTableRightBorder**

Type: procedure

Description: Customize a previously defined table right border properties.

Version: v4.7.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.
- p\_style varchar2 default null: Specifies the border style.
- p\_width number default null: Specifies the border width.
- p\_space number default null: Specifies the space between the border and the content.
- p\_color varchar2 default null: Specifies the border color.

Return: -

## **setTableInsideBorder**

Type: procedure

Description: Customize a previously defined table InsideH border properties.

Version: v4.7.0

Parameters:

- p\_table\_id pls\_integer: Specifies a reference to a previously defined table.

# PL/PDF

- p\_style varchar2 default null : Specifies the border style.
- p\_width number default null : Specifies the border width.
- p\_space number default null : Specifies the space between the border and the content.
- p\_color varchar2 default null : Specifies the border color.

Return : -

## setTableInsideVBorder

Type: procedure

Description : Customize a previously defined table InsideV border properties.

Version: v4.7.0

Parameters :

- p\_table\_id pls\_integer : Specifies a reference to a previously defined table.
- p\_style varchar2 default null : Specifies the border style.
- p\_width number default null : Specifies the border width.
- p\_space number default null : Specifies the space between the border and the content.
- p\_color varchar2 default null : Specifies the border color.

Return : -

## AddRow

Type: function

Description : Add row to a previously defined table.

Version: v4.5.0

Parameters :

- p\_table\_id pls\_integer : Specifies a reference to a previously defined table.
- p\_alignment varchar2 default null : Specifies the alignment of the row.
- p\_height number default null : Specifies the height of the row.
- p\_tblrheader boolean default null : Repeat table row on every new page.

Return : pls\_integer : Index of the created row.

## AddCell

Type: function

Description : Add cell to a previously defined table row.

Version: v4.9.7

Parameters :

- p\_table\_id pls\_integer : Specifies a reference to a previously defined table.
- p\_row\_id pls\_integer : Specifies a reference to a previously defined row.
- p\_noWrap boolean default null : NoWrap.
- p\_width number default null : Specifies the width of the cell.
- p\_gridSpan pls\_integer default null : This element specifies the number of grid columns which shall be spanned by the current cell.
- p\_vMerge plofff\_document\_type.CT\_VMerge default null : This element specifies that this cell is part of a vertically merged set of cells in a table.

# PL/PDF

- p\_cellBorder ploffx\_document\_type.CT\_TcBorders default null : Specifies the border of the cell.
- p\_background ploffx\_document\_type.ST\_HexColor default null : Specifies the background color of the cell.

Return : pls\_integer : Index of the created cell.

## TableaddParagraph

Type: procedure

Description : Add previously defined paragraph to a cell of table.

Version: v2.0.0

Parameters :

- p\_table\_id pls\_integer : Specifies a reference to a previously defined table.
- p\_row\_id pls\_integer : Specifies a reference to a previously defined row.
- p\_cell\_id pls\_integer : Specifies a reference to a previously defined cell.
- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.

## TableaddParagraph

Type: function

Description : Add previously defined paragraph to a cell of table.

Version: v2.0.0

Parameters :

- p\_table\_id pls\_integer : Specifies a reference to a previously defined table.
- p\_row\_id pls\_integer : Specifies a reference to a previously defined row.
- p\_cell\_id pls\_integer : Specifies a reference to a previously defined cell.
- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.

Return : pls\_integer : The internal index of the paragraph

## addInlineImage

Type: procedure

Description : Add inline image to a paragraph.

Version: v4.9.1

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_name varchar2 : Specifies the image name.
- p\_file in out nocopy blob : Specifies a reference to the image source blob.
- p\_width number default null : Specifies the image width.
- p\_height number default null : Specifies the image height.

## addInlineImage

Type: function

Description : Add inline image to a paragraph.

Version: v4.9.1

# PL/PDF

## Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_name varchar2 : Specifies the image name.
- p\_file in out nocopy blob : Specifies a reference to the image source blob.
- p\_width number default null : Specifies the image width.
- p\_height number default null : Specifies the image height.

Return : pls\_integer : tThe internal index of the image

## **SetBackground**

Type: procedure

Description : Change the background color of document.

Version: v2.0.0

## Parameters :

- p\_backcolor varchar2 : Specifies the background color of document, in hexadecimal RGB code.

Return : -

## **addTabStop**

Type: procedure

Description : Add tab stop to a selected paragraph

Version: v2.0.0

## Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_val ploffx\_document\_type.ST\_TabJc : Specifies the type of tab stop.
- p\_pos number : Specifies the position of tab stop.
- p\_leader ploffx\_document\_type.ST\_TabTlc default ploffx\_document\_type.c\_none\_Tlc : Specifies the character which shall be used to fill in the space created by a tab which ends at this custom tab stop

Return : -

## **addImage**

Type: function

Description : Add inline image to a paragraph.

Version: v4.9.1

## Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_name varchar2 : Specifies the image name.
- p\_file in out nocopy blob : Specifies a reference to the image source blob.
- p\_width number default null : Specifies the image width.
- p\_height number default null : Specifies the image height.
- p\_x number : Specifies the image x coordinate of position.
- p\_y number : Specifies the image y coordinate of position.
- p\_textWrap varchar2 default 'wrapSquare' : Specifies the text wrap around the image.
- p\_relativeFromH varchar2 default 'column' : This element specifies the

# PL/PDF

horizontal positioning of the image.

- `p_relativeFromV` varchar2 default 'paragraph': This element specifies the vertical positioning of the image.
- `p_locked` boolean default false: Lock the image location when an application edits the document.
- `p_layoutInCell` boolean default true: Specifies how image shall behave when its anchor is located in a table cell.
- `p_allowOverlap` boolean default true: Specifies how image shall behave when its anchor is located in a table cell display time shall be allowed to overlap the contents of the other image.
- `p_behindDoc` varchar2 default 'false': Specifies the image to be displayed behind or above of the content.

Return: `pls_integer`: Index of the added image.

## addImage

Type: procedure

Description: Add inline image to a paragraph.

Version: v4.9.4

Parameters:

- `p_paragraph_id` pls\_integer: Specifies a reference to a previously defined paragraph.
- `p_name` varchar2: Specifies the image name.
- `p_file` in out nocopy blob: Specifies a reference to the image source blob.
- `p_width` number default null: Specifies the image width.
- `p_height` number default null: Specifies the image height.
- `p_x` number: Specifies the image x coordinate of position.
- `?p_y` number: Specifies the image y coordinate of position.
- `p_textWrap` varchar2 default 'wrapSquare': Specifies the text wrap around the image.
- `p_relativeFromH` varchar2 default 'column': This element specifies the horizontal positioning of the image.
- `p_relativeFromV` varchar2 default 'paragraph': This element specifies the vertical positioning of the image.
- `p_locked` boolean default false: Lock the image location when an application edits the document.
- `p_layoutInCell` boolean default true: Specifies how image shall behave when its anchor is located in a table cell.
- `p_allowOverlap` boolean default true: Specifies how image shall behave when its anchor is located in a table cell display time shall be allowed to overlap the contents of the other image.
- `p_behindDoc` varchar2 default 'false': Specifies the image to be displayed behind or above of the content.

Return: -

## AddSectionP

Type: function

Description: Add section for paragraph.

Version: v2.0.0

Parameters:



# PL/PDF

- `p_paragraph_id pls_integer`: Specifies a reference to a previously defined paragraph.
- `p_num number default null`: Specifies the number of columns.
- `p_space number default null`: Specifies the space between the columns.
- `p_type ploffx_document_type.ST_SectionMark`: Specifies the type of the break point.

Return: `pls_integer`: Index of the added section.

## AddSectionB

Type: function

Description: Add section for body.

Version: v2.0.0

Parameters:

- `p_paragraph_id pls_integer default null`: Specifies a reference to a previously defined paragraph. If null, then will be create a new paragraph.
- `p_num number default null`: Specifies the number of columns.
- `p_space number default null`: Specifies the space between the columns.
- `p_type ploffx_document_type.ST_SectionMark`: Specifies the type of the break point.

Return: `pls_integer`: Index of the added section.

## setSectPrPg

Type: procedure

Description: Set section properties.

Version: v2.0.0

Parameters:

- `p_section_id pls_integer default 0`: Specifies a reference to a previously defined section.
- `p_w plx_sc.normalv2 default null`: Specifies the page width.
- `p_h plx_sc.normalv2 default null`: Specifies the page height.
- `p_orient ploffx_util.t_string default null`: Specifies the page orientation.
- `p_code plx_sc.normalv2 default null`: Specifies a printer-specific paper code.
- `p_bottom plx_sc.normalv2 default null`: Specifies the distance between the bottom of the text margins for the main document and the bottom of the page for all pages in this section.
- `p_footer plx_sc.normalv2 default null`: Specifies the distance from the bottom edge of the page to the bottom edge of the footer.
- `p_gutter plx_sc.normalv2 default null`: Specifies the page gutter for each page in the current section.
- `p_header plx_sc.normalv2 default null`: Specifies the distance from the top edge of the page to the top edge of the header.
- `p_left plx_sc.normalv2 default null`: Specifies the distance between the left edge of the page and the left edge of the text extents for this document
- `p_right plx_sc.normalv2 default null`: Specifies the distance between the right edge of the page and the right edge of the text extents for this document.

# PL/PDF

- p\_top plx\_sc.normalv2 default null : Specifies the distance between the top of the text margins for the main document and the top of the page for all pages in this section.

Return : -

## addSectionColumn

Type: procedure

Description : Add section column to a previously created section.

Version: v2.0.0

Parameters :

- p\_section\_id pls\_integer default 0 : Specifies a reference to a previously defined section.
- p\_num number : Number of columns.
- p\_space number : Space between columns.

Return : -

## addPageNumField

Type: function

Description : Add page number to a header or footer paragraph.

Version: v2.0.0

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph. If null, then will be create a new paragraph.
- p\_format varchar2 default ' \\* Arabic ' : Specifies the format of the page number. In default case it use the arabic numbers.

Return : pls\_integer : Index of the added page number.

## addPageNumField

Type: procedure

Description : Add page number to a header or footer paragraph.

Version: v4.9.4

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph. If null, then will be create a new paragraph.
- p\_format varchar2 default ' \\* Arabic ' : Specifies the format of the page number. In default case it use the arabic numbers.

Return : -

## addDateField

Type: function

Description : Add date field to a paragraph.

Version: v2.0.0

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_format varchar2 default ' \@ yyyy-MM-dd ' : Specifies the date format.

Return : pls\_integer : Index of the added date field.

## addDateField

Type: procedure

Description: Add date field to a paragraph.

Version: v4.9.4

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_format varchar2 default '@ yyyy-MM-dd': Specifies the date format.

Return: -

## addAuthorField

Type: function

Description: Add author field to a previously defined paragraph.

Version: v2.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_format varchar2 default null: Specifies the date format.

Return: pls\_integer: Index of the added author field.

## addAuthorField

Type: procedure

Description: Add author field to a previously defined paragraph.

Version: v4.9.4

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_format varchar2 default null: Specifies the date format.

Return: -

## addHyperLink

Type: procedure

Description: Add hyperlink to a previously defined paragraph.

Version: v2.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_text varchar2: The hyperlink text.
- p\_url varchar2: The hyperlink URL
- p\_bold boolean default null: Bold text.
- p\_border plofffx\_document\_type.CT\_Border default null: Specifies hyperlink border.
- p\_case varchar2 default null: U(pper)/L(ower)case.
- p\_color varchar2 default null: Specifies hyperlink text color.
- p\_fitText number default null: Display text in fix width.
- p\_highlight varchar2 default null: Specifies highlight color around the text.

# PL/PDF

- p\_italic boolean default null : Italic text.
- p\_vertPosition number default null : Specifies the amount to be raised or lowered the text relation to the default baseline of the
- p\_FontName varchar2 default null : Specifies font family
- p\_style varchar2 default null : Specifies the text style
- p\_spacing number default null : Specifies the character spacing.
- p\_strikeout number default null : Strikeout.
- p\_FontSize number default null : Specifies the font size.
- p\_underline ploffx\_document\_type.CT\_Underline default null : Specifies the underline properties.
- p\_vertAlign varchar2 default null : Specifies the vertical alignment of the text.
  - o baseline
  - o subscript
  - o superscript
- p\_w number default null : This element specifies the amount by which each character shall be expanded.

Return : pls\_integer : The internal index of the hyperlink object.

## addHyperLink

Type: function

Description : Add hyperlink to a previously defined paragraph.

Version: v2.0.0

Parameters :

- p\_paragraph\_id pls\_integer : Specifies a reference to a previously defined paragraph.
- p\_text varchar2 : The hyperlink text.
- p\_url varchar2 : The hyperlink URL
- p\_bold boolean default null : Bold text.
- p\_border ploffx\_document\_type.CT\_Border default null : Specifies hyperlink border.
- p\_case varchar2 default null : U(pper)/L(ower)case.
- p\_color varchar2 default null : Specifies hyperlink text color.
- p\_fitText number default null : Display text in fix width.
- p\_highlight varchar2 default null : Specifies highlight color around the text.
- p\_italic boolean default null : Italic text.
- p\_vertPosition number default null : Specifies the amount to be raised or lowered the text relation to the default baseline of the
- p\_FontName varchar2 default null : Specifies font family
- p\_style varchar2 default null : Specifies the text style
- p\_spacing number default null : Specifies the character spacing.
- p\_strikeout number default null : Strikeout.
- p\_FontSize number default null : Specifies the font size.
- p\_underline ploffx\_document\_type.CT\_Underline default null : Specifies the underline properties.
- p\_vertAlign varchar2 default null : Specifies the vertical alignment of the text.
  - o baseline
  - o subscript

# PL/PDF

o superscriptp

- p\_w number default null: This element specifies the amount by which each character shall be expanded.

## addTableOfContent

Type: function

Description: Add table of content to a previously defined paragraph.

Version: v2.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.

Return: pls\_integer: Index of the added table of content.

## addTableOfContent

Type: procedure

Description: Add table of content to a previously defined paragraph.

Version: v4.9.4

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.

Return: -

## addField

Type: function

Description: Add field to a perviously defined paragraph.

Version: v2.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies a reference to a previously defined paragraph.
- p\_code varchar2: Specifies the field codes for the simple field.

Return: pls\_integer: Index of the added field.

## getDoc

Type: procedure

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

Version: v2.0.0

Parameters: -

Return: -

## parseDoc

Type: Processing docx files.

Description:

Version: v2.0.0

Parameters: -

Return: -

## crList

Type: function

Description: Returns the ID of the created list.

Version: v3.0.0

Parameters:

- p\_startValue pls\_integer default 1: Specifies the starting number for the listing.
- p\_symbol XT\_NUMBERING default numbering\_symbol: Specifies the style of the list.

Return: pls\_integer

## AddListElement

Type: procedure

Description: Adds an element to a list

Version: v3.0.0

Parameters:

- p\_paragraph\_id pls\_integer: Specifies the paragraph of the element that will be added to the list
- p\_level pls\_integer default 0: Specifies the level of the element(0-8)
- p\_list pls\_integer default 1: Specifies the list for the element to be added to.

Return: -

## crParagraphBorder

Type: function

Description: Creates a paragraph border

Version: v3.0.0

Parameters:

- p\_top ploffx\_document\_type.CT\_Border default null: Specifies the top border of the paragraph
- p\_bottom ploffx\_document\_type.CT\_Border default null: Specifies the bottom border of the paragraph
- p\_left ploffx\_document\_type.CT\_Border default null: Specifies the left border of the paragraph
- p\_right ploffx\_document\_type.CT\_Border default null: Specifies the right border of the paragraph

Return: ploffx\_document\_type.CT\_PBdr: Returns a paragraph border which can be passed to crParagraph function

## crBorder

Type: function

Description: Creates a paragraph border

Version: v3.0.0

Parameters:

- p\_style ploffx\_document\_type.ST\_Border default null: Specifies the style of the border
- p\_color ploffx\_document\_type.ST\_HexColor default null: Specifies the color

of the border

- p\_width number default null : Specifies the width of the border in points
- p\_spacing number default null : Specifies the spacing between the border and the area
- p\_shadow boolean default null : Specifies the border has shadow
- p\_frame boolean default null : Specifies the border has frame

Return : ploffx\_document\_type.CT\_Border : Returns a border which can be passed to crParagraphBorder function or AddText procedure

## crIndentation

Type: function

Description : Creates an indentation

Version: v3.0.0

Parameters :

- p\_left number default null : Specifies the left indentation of the paragraph in units
- p\_right number default null : Specifies the right indentation of the paragraph in units
- p\_hanging number default null : Specifies the hanging indentation in units
- p\_firstLine number default null : Specifies the indentation of the first of the paragraph in units

Return : ploffx\_document\_type.CT\_PBdr : Returns an indentation which can be passed to crParagraph function

## crSpacing

Type: function

Description : Creates a paragraph spacing

Version: v3.0.0

Parameters :

- p\_before number default null : Specifies the spacing before the paragraph in points
- p\_after number default null : Specifies the spacing after the paragraph in points
- p\_linespace number default null : Specifies the line spacing of the paragraph in lines

Return : ploffx\_document\_type.CT\_Spacing : Returns a paragraph spacing which can be passed to crParagraph function

## crCellBorder

Type: function

Description : Creates a table cell border

Version: v3.5.0

Parameters :

- p\_top ploffx\_document\_type.CT\_Border default null : Specifies the top side border
- p\_bottom ploffx\_document\_type.CT\_Border default null : Specifies the bottom side border
- p\_left ploffx\_document\_type.CT\_Border default null : Specifies the left side

# PL/PDF

border

- p\_right ploffx\_document\_type.CT\_Border default null: Specifies the right side border

Return: ploffx\_document\_type.CT\_TcBorders: Returns a border which can be passed to crCell function

## getDocument

Type: function

Description: Get the full docx document structure.

Version: v3.6.0

Parameters: -

Return: -

## crUnderline

Type: function

Description: Create underline line type.

Version: v3.6.0

Parameters:

- p\_type ploffx\_document\_type.ST\_Underline: Create underline type.

Return: ploffx\_document\_type.CT\_Underline: Return a line type which using to underline.

## AddToHeader

Type: procedure

Description: Add an existing element to the document header.

Version: v3.0.0

Parameters:

- p\_header ploffx\_document\_type.ST\_HdrFtr default  
ploffx\_document\_type.c\_default\_hfr: Specifies the header type
- p\_element\_id pls\_integer: Specifies the element id.

Return: -

## AddToFooter

Type: procedure

Description: Add an existing element to the document footer.

Version: v3.0.0

Parameters:

- p\_footer ploffx\_document\_type.ST\_HdrFtr default  
ploffx\_document\_type.c\_default\_hfr: Specifies the header type
- p\_element\_id pls\_integer: Specifies the element id.

Return: -