

New Excel & Word Object Features

PxPlus 2019 v(16)

Agenda

- Review of PxPlus Excel & Word Objects
- PxPlus 2019 Excel Object Enhancements
- PxPlus 2019 Word Object Enhancements
- 2019 Color Option Enhancements
- PxPlus 2019 Update 1 Enhancements

REVIEW OF PXPLUS EXCEL & WORD OBJECTS

PxPlus Excel and Word Objects

Review

- Introduced in PxPlus 2017 and presented at DireXions 2018
 - Programs are `*obj/excel.pvc` and `*obj/word.pvc`
- A simpler alternative to using a COM object
 - Hides internal workings of Microsoft's objects for newer users while still allowing access for more experienced users
- Instantiation:

```
excel_obj=new("*obj/excel")
```

```
word_obj=new("*obj/word")
```

Running on WindX

Review of PxPlus Excel & Word Objects

- Probably want to run Excel or Word locally on the workstation
- Instantiation:

```
excel_obj=new("[lcl]*obj/excel")
```

```
word_obj=new("[lcl]*obj/word")
```

(Path\$ arguments cannot include [lcl] or [wdx] tags)

Documentation

Review of PxPlus Excel & Word Objects

- Tested on Excel and Word versions 2010 - 2019
- Both objects are documented in our Help file under:
[Introduction to Using PxPlus / External Components / PxPlus COM Support/](#)
 - [PxPlus Excel Object](#)
 - [PxPlus Word Object](#)

PXPLUS 2019 EXCEL OBJECT ENHANCEMENTS

New Excel Properties

PxPlus 2019 Excel Object Enhancements

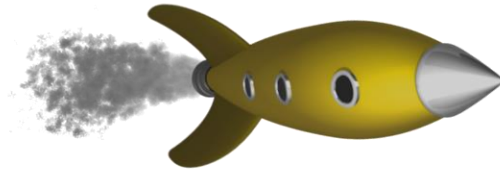
- Two new properties were added in PxPlus 2019:

PROPERTY	DESCRIPTION
Last_Row	Row number of the last row of data in the active spreadsheet
Last_Column	Column number of the last column of data in the active spreadsheet

Excel Object Performance

PxPlus 2019 Excel Object Enhancements

- Methods now applied over a range, with one command, rather than cell by cell
 - Reading by range
 - Writing by range
 - SetColor
 - SetFillColor
 - SetFont
- 900 times faster in some test cases with very large ranges



PXPLUS 2019 WORD OBJECT ENHANCEMENTS

New Word Methods

PxPlus 2019 Word Object Enhancements

- Added new methods to allow more flexibility when editing Word documents
- File Methods
 - Merge another Word document into current Word document
- Paragraph Methods
- Sentence Methods

Word Object *File* Methods

PxPlus 2019 Word Object Enhancements

- AppendFile(path\$ [, document | document_name\$])
- InsertFile(path\$ [, para_num,document | document_name\$])
 - Parameters shown in [square brackets] are optional
 - Document can be specified by index or name. If no document is specified, the active document is assumed
 - If no paragraph number is specified, paragraph 1 will be assumed
 - Numeric methods return **1** for success and **0** for failure

Word Object *Paragraph* Methods

PxPlus 2019 Word Object Enhancements

- AppendParagraph(para_text\$ [, document | document_name\$])
- InsertParagraph(para_text\$ [, para_num, document | document_name\$])
- ReadParagraph\$(para_num [, document | document_name\$])
- DeleteParagraph(para_num [, document | document_name\$])

Word Object *Sentence* Methods

PxPlus 2019 Word Object Enhancements

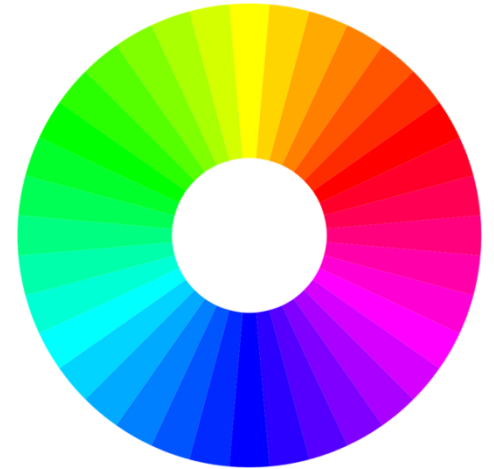
- AppendSentence(sent_text\$ [, document | document_name\$])
- InsertSentence(sent_text\$ [, sent_num, document | document_name\$])
- ReadSentence\$(sent_num [, document | document_name\$])
- DeleteSentence(sent_num [, document | document_name\$])

COLOR OPTION ENHANCEMENTS

Colors

Color Option Enhancements

- Added the ability to accept RGB (Red/Green/Blue) colors in both the Excel and Word objects
- Added the ability to accept constants in the PxPlus Word object
 - No named color constants in the Excel Application
- HSL (Hue/Saturation/Luminosity) color syntax and color blends not supported



Colors in PxPlus Excel Object

Color Option Enhancements

- SetColor & SetFillColor methods take one of two types of color parameters:
 - `color_index` an Excel color index ranging from 1 to 56
 - `color$` parameter now accepts RGB colors in "RGB(rrr,ggg,bbb)" format

Originally only one of 16 basic PxPlus named colors such as "yellow" or "dark blue"

Colors in PxPlus Word Object

Color Option Enhancements

- FindSetColor method takes one of two types of color parameters:
 - `color_index` a Word color index ranging from 1 to 16
 - `color$` parameter now accepts
 - RGB colors in "RGB(rrr,ggg,bbb)" format
 - `wdColorIndex` constant such as "wdColorAqua"
 - `wdColor` constant such as "wdPink"

Originally only one of 16 basic PxPlus named colors such as "yellow" or "dark blue"

PXPLUS 2019 UPDATE 1

PxPlus 2019 Update 1

- New **Keep_Visible** property added to both the PxPlus Excel and Word objects after a request on the PxPlus User Forum

PROPERTY	DESCRIPTION
Keep_Visible	Set to non-zero to keep the application open when the object is dropped

```
excel_obj=new("*obj/excel")
excel_obj'visible=1
excel_obj'keep_visible=1
drop object excel_obj
```

- Excel/Word object must be **VISIBLE** for **Keep_Visible** to have any effect

Excel Demo

Excel & Word Object Features

- Demo of Excel Enhancements
*[demo/2019/prog/excel_demo](#)



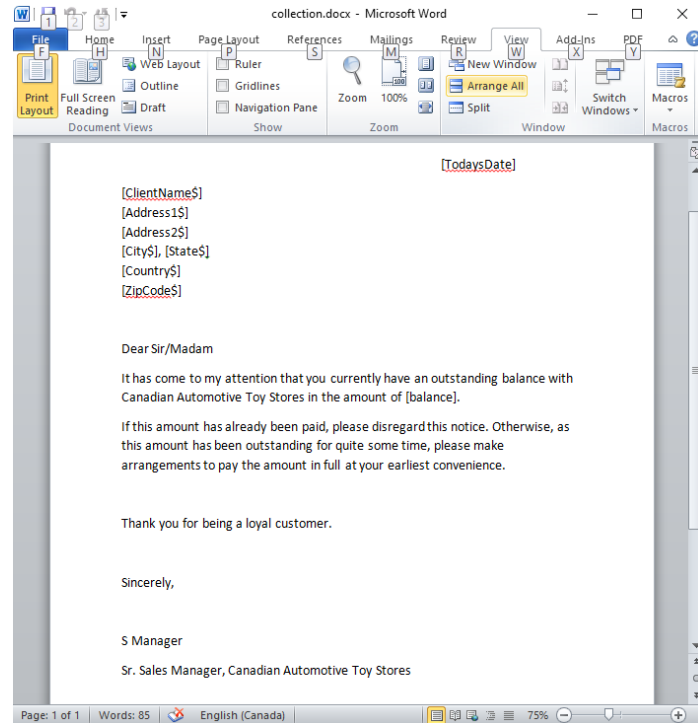
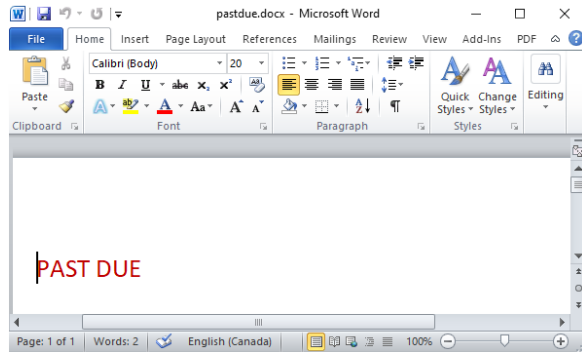
The screenshot shows the Microsoft Excel interface with the following data in the spreadsheet:

	A	B	C	D	E	F	G
1	DireXions 2019 Extra Earnings						
2	Name	Sunday	Monday	Tuesday	Wednesday	Totals	
3							
4	Devon	????	????	????	????	????	
5	Jane	????	????	????	????	????	
6	Susan	????	????	????	????	????	
7							
8							
9							

Word Demo

Excel & Word Object Features

- Demo of Word Enhancements
*demo/2019/prog/word_demo



Recap

- 2019 Enhancements made to PxPlus Excel and Word Objects:
 - New Properties
 - New Methods in Word
 - New Color Options
 - Performance improvements in Excel

Additional Resources

The help link(s) below refer to the current on-line help pages. The functionality may have been further updated since the PxPlus 2019 (version 16) release.

- [PxPlus Excel Object](#)
- [PxPlus Word Object](#)