



Kofax Power PDF

Automation and Command Line Developer's Guide

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TUNGSTEN
AUTOMATION
FORMERLY KOFAX

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Table of Contents

Preface.....	8
System requirements	8
Training	8
Getting help with Kofax products.....	8
Chapter 1: Command line reference	10
Parameters for opening PDF files	10
Command line examples.....	11
Chapter 2: Automation interfaces	12
Overview	12
IApp interface	13
Method Exit	13
Method CloseAllDocs	13
Method GetActiveDoc.....	13
Method GetActiveTool.....	13
Method GetDVDoc	14
Method GetLanguage	14
Method GetNumDVDocs.....	14
Method Hide.....	15
Method Show.....	15
Method Minimize	15
Method Maximize	15
Method Restore	15
Method SetActiveTool	16
Method MenuItemExecute.....	16
Method MenuItemIsEnabled	16
Method MenuItemIsMarked	16
Method MenuItemRemove	16
Method GetFrame	17
Method SetFrame	17
Method ToolButtonIsEnabled	17
Method ToolButtonRemove.....	17
Method GetPreferenceEx.....	17
Method SetPreferenceEx.....	18
Method Lock.....	18
Method UnlockEx	18
IDDDoc interface	19
Method Create	19
Method Open	19
Method Save.....	20
Method Close.....	21

Method DeletePages	21
Method GetFileName	21
Method MovePage	21
Method ReplacePages	22
Method InsertPages	22
Method GetFlags	23
Method SetFlags	23
Method ClearFlags	24
Method GetPageMode	24
Method SetPageMode	24
Method OpenDVDoc	24
Method DeleteThumbs	25
Method CreateThumbs	25
Method GetInfo	25
Method SetInfo	25
Method GetPermanentID	25
Method GetInstanceID	26
Method CropPages	26
Method AcquirePage	26
Method CreateTextSelect	26
Method GetNumPages	27
Method GetJSONObject	27
IDVDoc interface	28
Method GetDDDoc	28
Method Open	28
Method Close	28
Method PrintPages	29
Method PrintPagesSilent	29
Method GetTitle	29
Method Maximize	29
Method GetFrame	30
Method IsValid	30
Method GetViewMode	30
Method SetViewMode	30
Method GetDVPageView	30
Method SetTextSelection	31
Method ShowTextSelect	31
Method ClearSelection	31
Method BringToFront	31
Method SetTitle	31
Method PrintPagesEx	32
Method PrintPagesSilentEx	32
Method GetParentDDDoc	33
Method FindText	33
Method OpenInWindowEx	33
IDDPage Interface	35
Method GetRotate	35

Method SetRotate.....	35
Method GetNumAnnots	35
Method RemoveAnnot.....	35
Method GetNumber.....	36
Method CropPage.....	36
Method GetAnnot.....	36
Method AddAnnot	36
Method AddNewAnnot.....	37
Method GetDoc.....	37
Method GetAnnotIndex.....	37
Method GetSize	37
Method CreateWordHilite.....	38
Method CreatePageHilite.....	38
Method DrawEx	38
Method CopyToClipboard.....	39
IDDBookmark interface.....	40
Method Destroy	40
Method GetByTitle.....	40
Method getTitle	40
Method IsValid.....	40
Method Perform.....	41
Method SetTitle	41
iDDAnnot interface	42
Method GetColor	42
Method SetColor.....	42
Method GetDate	42
Method SetDate.....	42
Method GetRect.....	43
Method SetRect	43
Method getTitle	43
Method SetTitle	43
Method GetSubType	43
Method IsValid	43
Method IsOpen	44
Method SetOpen	44
Method GetContents.....	44
Method SetContents	44
Method IsEqual	44
Method Perform	45
IDVPageView	46
Method DoGoBack	46
Method DoGoForward	46
Method GetDVDoc	46
Method GetDoc	46
Method GetPage	47
Method GetPageNum.....	47
Method GetZoom	47

Method GetZoomType.....	47
Method Goto	47
Method ReadPageDown.....	48
Method ReadPageUp.....	48
Method ScrollTo.....	48
Method ZoomTo	48
Method DevicePointToPage.....	48
Method PointToDevice	49
Method GetAperture	49
iHiliteList.....	50
Method Add.....	50
iDDTextSelect	50
Method Destroy	50
Method GetBoundingRect	50
Method GetNumText.....	51
Method GetPage	51
Method GetText.....	51
Helper interfaces.....	52
iRect interface	52
ITime interface	52
IPoint interface	52
ActiveXIEHelper	53
Method GoBackwardStack.....	53
Method GoForwardStack.....	53
Method GotoFirstPage.....	53
Method GotoLastPage	53
Method GotoNextPage	53
Method GotoPreviousPage.....	54
Method Print	54
Method PrintAll	54
Method PrintAllFit.....	54
Method PrintPages.....	55
Method PrintPagesFit.....	55
Method PrintWithDialog	55
Method SetCurrentPage	56
Method SetLayoutMode	56
Method SetNamedDest.....	56
Method SetPageMode.....	56
Method SetShowToolbar	57
Method SetView	57
Method SetViewRect.....	57
Method SetViewScroll	57
Method SetZoom.....	58
Method SetZoomScroll.....	58
Property Src.....	58
Chapter 3: Code examples	59
Example 1 – Inserting pages into a document	59

Referenced methods.....	59
C++	59
VB	61
Example 2 – Highlighting words in a PDF document.....	62
Referenced methods.....	62
C++	62
VB	64
Example 3 – Adding annotations.....	66
Referenced methods.....	66
C++	66
VB	67
Example 4 – Opening PDF in browser with OLE automation	69
Prerequisites.....	69
C++	69
VB	69
Example 5 – Form field access via JavaScript object	70
VB	70
Example 6 – Unattended file comparison	72
VB	72
Appendix	73
Action and menu names	73
File menu	73
Home tab	74
Edit tab	75
View tab	76
Comments tab	77
Advanced Processing tab.....	78
Security tab.....	78
Forms tab.....	79
Help tab.....	80
Panels.....	80

Preface

This guide provides instructions for developers on how to launch and manage Kofax Power PDF and its functionalities using command line parameters and automation interfaces.

System requirements

The primary source of information about Kofax Power PDF 5.1.0 system requirements and dependencies on other products is the *Technical Specifications* document, which is available on the [Product Documentation](#) page. The document is updated regularly, and we recommend that you review it carefully to ensure success with your Kofax Power PDF product.

Training

Kofax offers both classroom and online training to help you make the most of your product. To learn more about training courses and schedules, visit the [Kofax Education Portal](#) on the Kofax website.

Getting help with Kofax products

The [Kofax Knowledge Portal](#) repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Portal to obtain answers to your product questions.

To access the Kofax Knowledge Portal, go to <https://knowledge.kofax.com>.

 The Kofax Knowledge Portal is optimized for use with Google Chrome, Mozilla Firefox, or Microsoft Edge.

The Kofax Knowledge Portal provides:

- Powerful search capabilities to help you quickly locate the information you need. Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.

To locate articles, go to the Knowledge Portal home page and select the applicable Solution Family for your product, or click the View All Products button.

From the Knowledge Portal home page, you can:

- Access the Kofax Community (for all customers). On the Resources menu, click the **Community** link.

- Access the Kofax Customer Portal (for eligible customers).
Go to the [Support Portal Information](#) page and click **Log in to the Customer Portal**.
- Access the Kofax Partner Portal (for eligible partners).
Go to the [Support Portal Information](#) page and click **Log in to the Partner Portal**.
- Access Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.
Go to the [Support Details](#) page and select the appropriate article.

Chapter 1

Command line reference

This chapter describes command line parameters for Kofax Power PDF, for both 32-bit and 64-bit versions.

Parameters for opening PDF files

Use the following parameters to call Kofax Power PDF (PowerPDF.exe) from the command line. See [Command line examples](#) for command line samples with short descriptions.

The default location of the executable may vary:

- The default path for Power PDF on a 32-bit version of Windows:
`C:\Program Files\Kofax\Power PDF 51\bin\PowerPDF.exe`
- The default path for Power PDF on a 64-bit version of Windows:
`C:\Program Files (x86)\Kofax\Power PDF 51\bin\PowerPDF.exe`

i Parameters go into effect only if Power PDF is not yet running when it is called from the command line.

Parameter	Extensial parameter	Effect
z0		Sets zoom to default.
z1		Sets zoom to Fit Page.
z2		Sets zoom to Fit Width.
z3		Sets zoom to Fit Height.
z4		Sets zoom to Fit Visible.
zs	Numeric; zoom level in percent	Sets zoom to the percent specified in the extensial parameter value.
pl1		Sets View/Scroll Options to Single Page.
pl2		Sets View/Scroll Options to Continuous.
pl4		Sets View/Scroll Options to Continuous Facing.
pl6		Sets View/Scroll Options to Facing.
pn	Numeric; page number	Displays the page specified in the extensial parameter value.
/p	Text; path with filename	Opens the PDF file specified in the parameter, prints it to the system default printer, then closes the PDF file.
/t	Text; path with filename Text; printer name	Opens the PDF file specified in the first parameter, prints it to the printer defined in the second parameter, then closes the PDF file.

Command line examples

Command with parameters	Description
"C:\Program Files (x86)\Kofax\Power PDF 51\bin\PowerPDF.exe" /zs 150 "D:\test1.pdf"	Calls Power PDF on a 64-bit version of Windows to open D:\test1.pdf with 150% zoom.
"C:\Program Files (x86)\Kofax\Power PDF 51\bin\PowerPDF.exe" /pn 10 "D:\test1.pdf"	Calls Power PDF on a 64-bit version of Windows to open D:\test1.pdf and go to page 10.
" C:\Program Files\Kofax\Power PDF 51\bin\PowerPDF.exe" /z1 "D:\test1.pdf"	Calls Power PDF on a 32-bit version of Windows to open D:\test1.pdf with Fit Page zoom.

Chapter 2

Automation interfaces

This chapter describes automation interfaces for Kofax Power PDF, for both 32-bit and 64-bit versions.

Overview

Power PDF provides the automation interfaces listed in the following table. These interfaces provide a wide range of functionality to control the application itself and to manage and manipulate PDF documents, along with their properties, pages, and annotations.

Interface	Lifetime	Description
IApp	Creatable	Controls the Power PDF application.
IDDDoc	Creatable	Controls the PDF documents.
IDVDoc	Creatable	Controls the view of PDF documents.
IDDPage	Non-creatable	Accessible through the IDDDoc interface. Controls the pages within a PDF document.
IDDBookmark	Creatable	Designed to access bookmarks in PDF documents.
iDDAnnot	Non-creatable	Accessible through the IDDPage interface.
IDVPageView	Non-creatable	Accessible through the IDVDoc interface. Controls viewing PDF pages.
iHiliteList	Creatable	Designed to specify the location of highlighted contents within a PDF document.
iDDTextSelect	Creatable	Designed to set and show the highlights within a PDF document.
ActiveXIEHelper	Creatable	Facilitates the movement to various pages within a document and specifies various display and print choices.
iRect	Creatable	Designed to set or retrieve special properties of different objects.
ITime	Creatable	Designed to set or retrieve special properties of different objects.
IPoint	Creatable	Designed to set or retrieve special properties of different objects.

This chapter provides full details of these interfaces and gives usage examples, along with implementation details and relationships between the different interfaces.

Methods are listed with their definition and input and return parameters, along with a short description of their usage and links to corresponding examples, which are listed in [Code examples](#).

IApp interface

The IApp interface is designed to drive the Power PDF application. It provides control over the application main window and its UI elements, ribbons, groups, tools, as well as drop-down menus and toolbars. The opened documents are also accessible through the interface.

The application main window can be hidden if the automation client performs document level operations only.

Method Exit

Syntax:	VARIANT_BOOL Exit();
Parameters:	None
Return value:	VARIANT_TRUE if powerpdf.exe exited properly.
Remarks:	Closes all opened documents and quits the application.
Example:	Example 1 ; Example 2

Method CloseAllDocs

Syntax:	VARIANT_BOOL CloseAllDocs();
Parameters:	None
Return value:	Closes all documents opened in the application.
Remarks:	Closes all documents referred by the IDVDoc interface pointer. The DDDoc objects must be closed by the Automation client application.
Example:	Example 2

Method GetActiveDoc

Syntax:	IDispatch* GetActiveDoc();
Parameters:	None
Return value:	Retrieves an interface to the active DVDoc object.
Remarks:	Retrieves the topmost document selected by the user.

Method GetActiveTool

Syntax:	BSTR GetActiveTool();
Parameters:	None
Return value:	Returns the name of the selected tool. The return value can be a NULL pointer.
Remarks:	Retrieves the name of the selected tool.

Method GetDVDoc

Syntax:	<code>IDispatch* GetDVDoc(long nIndex);</code>
Parameters:	long nIndex: The identifier for the DVDoc object.
Return value:	Retrieves an interface to the DVDoc object identified by its index.
Remarks:	The application object maintains a list of open PDF documents. You can get any of them by referring to their index.

Method GetLanguage

Syntax:	<code>BSTR GetLanguage();</code>
Parameters:	None
Return value:	Returns the abbreviated string of the language. The available language codes are the following:
ARA	Arabic
CHT	Chinese Simplified
CHS	Chinese Traditional
CSY	Czech
DAN	Danish
NLD	Dutch
ENU	English
FIN	Finnish
FRA	French
DEU	German
HUN	Hungarian
ITA	Italian
JPN	Japanese
KOR	Korean
NOR	Norwegian
PLK	Polish
PTB	Portuguese (Brazil)
RUS	Russian
ESP	Spanish
SVE	Swedish
TRK	Turkish
Remarks:	Identifies the product installation language.

Method GetNumDVDocs

Syntax:	<code>long GetNumDVDocs();</code>
Parameters:	None
Return value:	Returns the number of opened documents.
Remarks:	Use this method for the enumeration of open documents.

Method Hide

Syntax:	VARIANT_BOOL Hide();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Hides the application main window.

Method Show

Syntax:	VARIANT_BOOL Show();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Makes the application main window visible.

Method Minimize

Syntax:	VARIANT_BOOL Minimize(long bMinimize);
Parameters:	long bMinimize: If a positive number, the application is minimized. If 0, the normal state of the application is restored.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Shows the application main window minimized.

Method Maximize

Syntax:	VARIANT_BOOL Maximize(long bMaximize);
Parameters:	long bMaximize: If a positive number, the application is maximized. If 0, the normal state of the application is restored.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Shows the application main window minimized.

Method Restore

Syntax:	VARIANT_BOOL Restore(long bRestore);
Parameters:	long bRestore: If a positive number, the application is restored to its original size and position and becomes active.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Shows the application main window maximized.

Method SetActiveTool

Syntax:	VARIANT_BOOL SetActiveTool(BSTR szButtonName, long bPersistent);
Parameters:	BSTR szButtonName: The name of the tool. long bPersistent: if a positive number, the tool remains active after it has been used; 0 otherwise.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Activates a particular tool.

Method MenuItemExecute

Syntax:	VARIANT_BOOL MenuItemExecute(BSTR szMenuItemName);
Parameters:	BSTR szMenuItemName: Specifies the action to be performed. For a list of menu names, see the Appendix .
Return value:	VARIANT_TRUE if the action was started; VARIANT_FALSE otherwise.
Remarks:	Executes the action the same way as when the user presses the corresponding button or selects the application menu item.

Method MenuItemIsEnabled

Syntax:	VARIANT_BOOL MenuItemIsEnabled(BSTR szMenuItemName);
Parameters:	BSTR szMenuItemName: Specifies the action. For a list of menu names, see the Appendix .
Return value:	VARIANT_TRUE if action exists with this name, it is enabled and can be executed. Otherwise, the return value is VARIANT_FALSE.
Remarks:	Checks if a specific action is enabled and can be executed.

Method MenuItemIsMarked

Syntax:	VARIANT_BOOL MenuItemIsMarked(BSTR szMenuItemName);
Parameters:	BSTR szMenuItemName: Specifies the menu item.
Return value:	
Remarks:	Not supported in this release.

Method MenuItemRemove

Syntax:	VARIANT_BOOL MenuItemRemove(BSTR szMenuItemName);
Parameters:	BSTR szMenuItemName: Specifies the menu item.
Return value:	
Remarks:	Not supported in this release.

Method GetFrame

Syntax:	<code>IDispatch* GetFrame();</code>
Parameters:	None
Return value:	Returns a reference to a Rect object.
Remarks:	Retrieves the position and the size of the main application window.

Method SetFrame

Syntax:	<code>VARIANT_BOOL SetFrame(IDispatch* iRect);</code>
Parameters:	<code>IDispatch* iRect</code> : Dispatch interface of a Rect object that specifies the coordinates of the main application window.
Return value:	<code>VARIANT_TRUE</code> if the operation succeeded.
Remarks:	Specifies the coordinates of the main application window.

Method ToolButtonIsEnabled

Syntax:	<code>VARIANT_BOOL ToolButtonIsEnabled(BSTR szButtonName);</code>
Parameters:	<code>BSTR szButtonName</code> : Specifies the toolbar button.
Return value:	
Remarks:	Not supported in this release.

Method ToolButtonRemove

Syntax:	<code>VARIANT_BOOL ToolButtonRemove(BSTR szButtonName);</code>
Parameters:	<code>BSTR szButtonName</code> : Specifies the toolbar button.
Return value:	
Remarks:	Not supported in this release.

Method GetPreferenceEx

Syntax:	<code>VARIANT GetPreferenceEx(short nType);</code>
Parameters:	<code>short nType</code> : Specifies the application preference item by its name.
Return value:	The value of the preference item.
Remarks:	Obtains the value of a specific preference item.

Method SetPreferenceEx

Syntax:	VARIANT_BOOL SetPreferenceEx (short nType, VARIANT * pVal);
Parameters:	short nType: Name of the preference item. VARIANT * pVal: Value to be set.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Sets the value of a specific preference item.

Method Lock

Syntax:	VARIANT_BOOL Lock(BSTR szLockedBy);
Parameters:	BSTR szLockedBy: Used as the name of the application that locks Power PDF.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Locks the application. After calling this method, UnlockEx must be called. Prevents users from using the user interface of Power PDF. Also prevents opening any documents in the application.

Method UnlockEx

Syntax:	VARIANT_BOOL UnlockEx(BSTR szLockedBy);
Parameters:	BSTR szLockedBy: Used as the name of the application that locked Power PDF.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Unlocks the application. Must be called if Lock was called previously.

IDDDoc interface

This interface controls PDF documents at the file level without involving user interface-related operations. The files can be opened, modified, saved, and closed. The interface provides a number of page operations within and between the documents.

Method Create

Syntax:	VARIANT_BOOL Create();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Creates a new PDF document. The file does not contain any pages.

Method Open

Syntax:	VARIANT_BOOL Open(BSTR szFullPath);
Parameters:	BSTR szFullPath: Specifies the PDF file to be opened.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Opens the specified PDF file. A document opened in this way is not displayed in the application window. Note that the maximum number of open documents is 50.
Example:	Example 1

Method Save

Syntax:	VARIANT_BOOL Save(short nType, BSTR szFullPath);
Parameters:	<p>short nType: Specifies the method for how the document should be saved. The parameter can be a combination (with logical OR) of the following values:</p> <p>DDSaveIncremental (0): Write changes only, not the complete file. This always results in a larger file, even if objects have been deleted.</p> <p>DDSaveFull (1): Write the entire file to the filename specified by szFullPath.</p> <p>DDSaveCopy (2): Write a copy of the file into the file specified by szFullPath, but keep using the old file. This flag can only be specified if DDSaveFull is also used.</p> <p>DDSaveCollectGarbage (32): Remove unreferenced objects; this often reduces the file size, and its usage is encouraged. This flag can only be specified if DDSaveFull is also used.</p> <p>DDSaveLinearized (4): Save the file optimized for the web, providing hint tables. This allows the PDF file to be byte-served. This flag can only be specified if DDSaveFull is also used.</p> <p>BSTR szFullPath: Specifies the file name. You are allowed to use the original file name that was used for the Open method.</p>
Return value:	VARIANT_TRUE if the saving operation succeeded.
Remarks:	Saves the content of the document to the specified file.
Example:	Example 1

Method Close

Syntax:	VARIANT_BOOL Close();
Parameters:	None
Return value:	VARIANT_TRUE if the document was closed properly.
Remarks:	Closes the DDDoc object.
Example:	Example 1

Method DeletePages

Syntax:	VARIANT_BOOL DeletePages(long nStartPage, long nEndPage);
Parameters:	long nStartPage: Specifies the first page to be deleted. long nEndPage: Specifies the last page to be deleted.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Deletes the specified pages from the document.

Method GetFileName

Syntax:	BSTR GetFileName();
Parameters:	None
Return value:	Returns with the name of the file referenced by the DDDoc object.
Remarks:	Retrieves the name of the opened document.

Method MovePage

Syntax:	VARIANT_BOOL MovePage(long nMoveAfterThisPage, long nPageToMove);
Parameters:	long nMoveAfterThisPage: Specifies the page number after which the moved page is placed. long nPageToMove: Specifies the page to be moved.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Moves a page to a new position within the document.

Method ReplacePages

Syntax:	VARIANT_BOOL ReplacePages(long nStartPage, IDispatch* iDDDocSource, long nStartSourcePage, long nNumPages, long bMergeTextAnnotations);
Parameters:	<p>long nStartPage: Specifies the first page in the target document to be replaced. The next nNumPages pages are replaced.</p> <p>IDispatch* iDDDocSource: Specifies the source document from where the document pages are copied.</p> <p>long nStartSourcePage: Specifies the first page of the source document to be moved.</p> <p>long nNumPages: Specifies the number of pages to be moved to the target document.</p> <p>long bMergeTextAnnotations: Set it to value 1 to merge the annotations of the original and the new pages. In case of value 0, the text annotations are not merged.</p>
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Replaces a given number of pages of the document with pages of another document. The annotations of the affected pages are optionally merged.

Method InsertPages

Syntax:	VARIANT_BOOL InsertPages(long nInsertPageAfter, IDispatch* iDDDocSource, long nStartPage, long nNumPages, long bBookmarks);
Parameters:	<p>long nInsertPagesAfter: Specifies a page in the target document after which the new pages are inserted. Use a value of -1 to insert pages in the beginning of the document.</p> <p>IDispatch* iDDDocSource: Specifies the source document from which the new pages are being inserted.</p> <p>long nStartPage: Specifies the first page of the source document that must be inserted into the target document.</p> <p>long nNumPages: Specifies the number of pages following the start page to be inserted.</p> <p>long bBookmarks: Set this parameter to 1 to copy the bookmarks along with the pages. Note that all bookmarks are copied, even if they do not point to existing pages in the new document.</p>
Return value:	VARIANT_TRUE if the operation succeeded.

Remarks: Copies one or more pages from a PDF document and inserts them after the specified page in the current PDF file.

Example: [Example 1](#)

Method GetFlags

Syntax: long GetFlags();

Parameters: None

Return value: Returns the document flags. The return value is made by a logical OR operation of the following values.

DDDocNeedsSave = 1:
The document has been modified.

DDDocRequiresFullSave = 2:
Incremental saving would not be enough. Use the DDSaveFull flag when document is saved.

DDDocIsModified = 4:
The document is modified (bookmarks or annotations have been added).

DDDocDeleteOnClose = 8:
The document is temporary and must be deleted when the file is closed.

DDDocWasRepaired = 16:
The original document was repaired during the method DDDoc.Open.
The reason for the repair might be a damaged or incorrectly saved PDF file.

DDDocIsLinearized = 1024:
The document is linearized.

DDDocIsOptimized = 2048:
The document is optimized.

Remarks: Retrieves the current state and other document parameters.

Method SetFlags

Syntax: VARIANT_BOOL SetFlags(long nFlags);

Parameters: long nFlags: The required value of the document flags.

Return value: VARIANT_TRUE if the operation succeeded.

Remarks: Sets the document flags. The possible values are described under the method GetFlags. Most of the flags are read-only and cannot be set or cleared. DDDocNeedsSave and DDDocDeleteOnClose flags can be set and cleared.

Method ClearFlags

Syntax:	VARIANT_BOOL ClearFlags(long nFlags);
Parameters:	long nFlags: Specify the document flags to be cleared.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Clears document flags. Most flags are read-only and cannot be set or cleared. DDDocNeedsSave and DDDocDeleteOnClose flags can be set and cleared.

Method GetPageMode

Syntax:	long GetPageMode();
Parameters:	None
Return value:	The return value can be one the following: DDDontCare = 0, DDUseNone = 1, DDUseThumbs = 2, DDUseBookmarks = 3, DDFullScreen = 4
Remarks:	Retrieves the current page mode of the document. This property controls how the document is displayed initially: displays only the document pages, the pages and the thumbnails, or the pages and the bookmarks. The document can also be displayed in full screen mode.

Method SetPageMode

Syntax:	VARIANT_BOOL SetPageMode(long nPageMode);
Parameters:	long nPageMode: Specifies the required Page Mode.
Return value:	VARIANT_TRUE if the Page Mode was set properly.
Remarks:	Sets the Page Mode of the document. The possible values of the Page Mode property are described under the method GetPageMode.

Method OpenDVDoc

Syntax:	IDispatch* OpenDVDoc(BSTR szTitle);
Parameters:	BSTR szTitle: The title of the document view.
Return value:	Returns a DVDoc object referring to the DDDoc object.
Remarks:	Creates a DVDoc object associated to the DDDoc object. A new document view is displayed that shows the document referred by the DDDoc object. This call makes the application visible if it was hidden originally.

Method DeleteThumbs

Syntax:	VARIANT_BOOL DeleteThumbs(long nStartPage, long nEndPage);
Parameters:	long nStartPage, nEndPage: These two values specify the interval of pages. The thumbnails of these pages are removed from the file.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Removes embedded thumbnail images of the pages.

Method CreateThumbs

Syntax:	VARIANT_BOOL CreateThumbs(long nFirstPage, long nLastPage);
Parameters:	long nFirstPage, nLastPage: These two values specify the interval of pages. The thumbnails for these pages are added to the file.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Creates embedded thumbnail images of the pages or a range of pages.

Method GetInfo

Syntax:	BSTR GetInfo(BSTR szInfoKey);
Parameters:	BSTR szInfoKey: Specifies the key whose value is required.
Return value:	Retrieves the value of the specified key.
Remarks:	Retrieves the document information values such as Author and Title.

Method SetInfo

Syntax:	VARIANT_BOOL SetInfo(BSTR szInfoKey, BSTR szBuffer);
Parameters:	BSTR szInfoKey: Specifies the key whose value must be set. BSTR szBuffer: Specifies the value.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Sets the different document information parameters, such as Author and Title.

Method GetPermanentID

Syntax:	BSTR GetPermanentID();
Parameters:	None
Return value:	Returns the permanent ID of the document.

Method GetInstanceID

Syntax:	BSTR GetInstanceID();
Parameters:	None
Return value:	Returns the instance ID of the document.

Method CropPages

Syntax:	VARIANT_BOOL CropPages(long nStartPage, long nEndPage, short nEvenOrOddPagesOnly, IDispatch* iRect);
Parameters:	<p>long nStartPage: Specifies the first page to be cropped.</p> <p>long nEndPage: Specifies the last page to be cropped.</p> <p>short nEvenOrOddPagesOnly: 0 – Crop all pages in the range 1 – Crop odd pages in the range 2 – Crop even pages in the range</p> <p>IDispatch* iRect: Specifies the cropping rectangle. The coordinates should be given in user space.</p>
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Crops the pages in the given page range.

Method AcquirePage

Syntax:	IDispatch* AcquirePage(long nPage);
Parameters:	long nPage: Specifies the index of the page to be acquired.
Return value:	Returns a reference to the specified PDF page.
Remarks:	Retrieves a reference to a document page. The reference can be used for different page operations. The reference is the IDispatch interface of a DDPAGE object.
Example:	Example 2 ; Example 3 ;

Method CreateTextSelect

Syntax:	IDispatch* CreateTextSelect(long nPage, IDispatch* iRect);
Parameters:	<p>long nPage: Specifies the page where the selection should be created.</p> <p>IDispatch* iRect: Specifies the area of the text selection.</p>
Return value:	Returns a reference to a text selection object.
Remarks:	Creates a text selection based on a specific area of a page.

Method GetNumPages

Syntax:	long GetNumPages();
Parameters:	None
Return value:	Returns the number of pages in the document.

Method GetJSObject

Syntax:	IDispatch GetJSObject();
Parameters:	None
Return value:	Returns the JavaScript object for this document.
Remarks:	With the use of the JavaScript Object, runs JavaScript code.
Example:	Example 5;

IDVDoc interface

This interface is closely related to the DDDoc interface. While DDDoc provides the file-level operations, this interface supplies methods to support viewing documents. Similar to the other interface, you can open and close documents using DVDoc methods, but all of them control the document window and make that visible along with the application main window. The strong relationship between IDVDoc and DDDoc is represented with the method of GetDDDoc, which gives access to file level operations on the document opened in the document window.

Method GetDDDoc

Syntax:	<code>IDispatch* GetDDDoc()</code>
Parameters:	None
Return value:	Returns the IDispatch interface of the associated DDDoc object.
Remarks:	Allows access to the DDDoc object of the DVDoc object. You may need this method to reach the properties of the DDDoc object or call its methods.
Example:	Example 2 ; Example 3 ;

Method Open

Syntax:	<code>VARIANT_BOOL Open(BSTR szFullPath);</code>
Parameters:	<code>BSTR szFullPath</code> : Specifies the PDF file or a document type that can be converted to PDF in Power PDF.
Return value:	<code>VARIANT_TRUE</code> if the file was opened.
Remarks:	Opens the specified file and displays it in a child window of the main application window.
Example:	Example 2 ; Example 3 ;

Method Close

Syntax:	<code>VARIANT_BOOL Close(long bNoSave);</code>
Parameters:	<code>long bNoSave</code> : Set it to 1 if you do not want to save the file; 0 value means that the application prompts for saving modifications.
Return value:	<code>VARIANT_TRUE</code> if the file was closed properly.
Remarks:	This method closes the document along with its window.

Method PrintPages

Syntax:	VARIANT_BOOL PrintPages(long nFirstPage, long nLastPage, long nPSLevel, long bBinaryOk, long bShrinkToFit);
Parameters:	<p>nFirstPage: The first page to be printed. It is zero-based.</p> <p>nLastPage: The last page to be printed.</p> <p>nPSLevel: If 2, PostScript Level 2 operators are used; if 3, PostScript Language Level 3 operators are also used.</p> <p>bBinaryOk: If 0, all data is encoded as 7-bit ASCII; if a positive number, binary data may be included in the PostScript program.</p> <p>bShrinkToFit: If a positive number, the page is shrunk to fit within the usable area of the printed page; if 0, it is not.</p>
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Displays the Print dialog and prints the specified range of pages.

Method PrintPagesSilent

Syntax:	VARIANT_BOOL PrintPagesSilent(long nFirstPage, long nLastPage, long nPSLevel, long bBinaryOk, long bShrinkToFit);
Parameters:	<p>nFirstPage: The first page to be printed. It is zero-based.</p> <p>nLastPage: The last page to be printed.</p> <p>nPSLevel: If 2, PostScript Level 2 operators are used; if 3, PostScript Language Level 3 operators are also used.</p> <p>bBinaryOk: If 0, all data is encoded as 7-bit ASCII; if a positive number, binary data may be included in the PostScript program.</p> <p>bShrinkToFit: If a positive number, the page is shrunk to fit within the usable area of the printed page; if 0, it is not.</p>
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Prints the specified ranges of pages without displaying the Print dialog box.

Method GetTitle

Syntax:	BSTR GetTitle();
Parameters:	None
Return value:	Returns the title of the window associated with the document.

Method Maximize

Syntax:	VARIANT_BOOL Maximize(long bMaxSize);
Parameters:	long bMaxSize: If the value of the input parameter is greater than zero, the document window is within the application main window.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Maximizes the size of the document window associated to the DVDoc object.

Method GetFrame

Syntax:	<code>IDispatch* GetFrame();</code>
Parameters:	None
Return value:	Returns the IDispatch interface of a Rect object specifying the coordinates of the window associated with the document.
Remarks:	The returned IDispatch interface refers to the CPowerPDFRect object that contains the coordinates of the document window.

Method IsValid

Syntax:	<code>VARIANT_BOOL IsValid();</code>
Parameters:	None
Return value:	<code>VARIANT_TRUE</code> if the document is a valid PDF document.

Method GetViewMode

Syntax:	<code>long GetViewMode();</code>
Parameters:	None
Return value:	The return value indicates how the document is displayed.
Remarks:	The return values can be the following: <code>DD DontCare:0</code> – Leave the view mode as it is <code>DD UseNone:1</code> – Display without bookmarks or thumbnails <code>DD UseThumbs:2</code> – Display using thumbnails <code>DD UseBookmarks:3</code> – Display using bookmarks <code>DD FullScreen:4</code> – Display in full screen mode

Method SetViewMode

Syntax:	<code>VARIANT_BOOL SetViewMode(long nType);</code>
Parameters:	<code>long nType</code>
Return value:	<code>VARIANT_TRUE</code> if the operation succeeded.
Remarks:	Modifies the view of the document. The possible values are listed under the GetViewMode method.

Method GetDVPageView

Syntax:	<code>IDispatch* GetDVPageView();</code>
Parameters:	None
Return value:	The method returns the IDispatch interface of the DVPageView object.
Remarks:	Allows access to methods in the IDVPageView interface.

Method SetTextSelection

Syntax:	VARIANT_BOOL SetTextSelection(IDispatch* iDDTextSelect);
Parameters:	IDispatch* iDDTextSelect: Reference to an iDDTextSelect object that specifies the text selection in the document.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Sets the required text selection.
Example:	Example 3 ;

Method ShowTextSelect

Syntax:	VARIANT_BOOL ShowTextSelect();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Shows the selected text.
Example:	Example 3 ;

Method ClearSelection

Syntax:	VARIANT_BOOL ClearSelection();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Clears the text selection.

Method BringToFront

Syntax:	VARIANT_BOOL BringToFront();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Makes the document window topmost among other document windows within the application window. This window gets the focus.

Method SetTitle

Syntax:	VARIANT_BOOL SetTitle(BSTR szTitle);
Parameters:	BSTR szTitle: Specifies the new title of the document window.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Changes the title of the document window.

Method PrintPagesEx

Syntax:	VARIANT_BOOL PrintPagesEx(long nFirstPage, long nLastPage, long nPSLevel, long bBinaryOk, long bShrinkToFit, long bReverse, long bFarEastFontOpt, long bEmitHalftones, long iPageOption);
Parameters:	<p>nFirstPage: The first page to be printed. It is zero-based.</p> <p>nLastPage: The last page to be printed.</p> <p>nPSLevel: If 2, PostScript Level 2 operators are used; if 3, PostScript Language Level 3 operators are also used.</p> <p>bBinaryOk: If 0, all data is encoded as 7-bit ASCII; if a positive number, binary data can be included in the PostScript program.</p> <p>bShrinkToFit: If a positive number, the page is shrunk to fit within the usable area of the printed page; if 0, it is not.</p> <p>bReverse: (PostScript printing only) If a positive number, print the pages in reverse order. If 0, print the pages in the regular order.</p> <p>bFarEastFontOpt: (PostScript printing only) Set to a positive number if the destination printer has multi-byte fonts; set to 0 otherwise.</p> <p>bEmitHalftones: (PostScript printing only) If a positive number, emit the halftones specified in the document. If 0, do not.</p> <p>iPageOption: Pages in the range to print. Must be one of: DDAllPages (-3), DDEvenPagesOnly (-4), or DDOddPagesOnly (-5).</p>
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Displays the Print dialog box and prints the specified pages.

Method PrintPagesSilentEx

Syntax:	VARIANT_BOOL PrintPagesSilentEx(long nFirstPage, long nLastPage, long nPSLevel, long bBinaryOk, long bShrinkToFit, long bReverse, long bFarEastFontOpt, long bEmitHalftones, long iPageOption);
Parameters:	<p>long nFirstPage: The first page to be printed. It is zero-based.</p> <p>long nLastPage: The last page to be printed.</p> <p>long nPSLevel: If 2, PostScript Level 2 operators are used; if 3, PostScript Language Level 3 operators are also used.</p> <p>long bBinaryOk: If 0, all data is encoded as 7-bit ASCII; if a positive number, binary data may be included in the PostScript program.</p> <p>long bShrinkToFit: If a positive number, the page is shrunk to fit within the usable area of the printed page; if 0, it is not.</p>

long bReverse: (PostScript printing only) If a positive number, print the pages in reverse order. If 0, print the pages in the regular order.

long bFarEastFontOpt: (PostScript printing only) Set to a positive number if the destination printer has multi-byte fonts; set to 0 otherwise.

long bEmitHalftones: (PostScript printing only) If a positive number, emit the halftones specified in the document. If 0, do not.

long iPageOption: Pages in the range to print. Must be one of: DDAAllPages (-3), DDEvenPagesOnly (-4), or DDODDPagesOnly(-5).

Return value: VARIANT_TRUE if the operation succeeded.

Remarks: Prints the specified pages silently without displaying the Print dialog box.

Method GetParentDDDoc

Syntax: IDispatch* GetParentDDDoc();

Parameters: None

Return value: Returns the IDispatch interface of a Doc object or NULL if the function fails.

Remarks: Returns a reference to the parent document if the document is inside a package; NULL otherwise.

Method FindText

Syntax: VARIANT_BOOL FindText(BSTR szText, long bCaseSensitive, long bWholeWordOnly, long bReset);

Parameters: BSTR szText: Text to be found.

long bCaseSensitive: 0 – Not case-sensitive; positive number – case-sensitive.

long bWholeWordOnly: 0 – Only whole words are matched; positive number – partial words are matched.

long bReset: 0 – Search starts from current page; positive number – search starts from the beginning of the document.

Return value: VARIANT_TRUE if text is found.

Remarks: Finds text in the document and make it visible by scrolling the document to the text. The text is highlighted.

Method OpenInWindowEx

Syntax: VARIANT_BOOL OpenInWindowEx(BSTR szFullPath, long hWnd, long openFlags, long useOpenParams, long pgNum, short pageMode, short

zoomType, long zoom, short top, short left);

Parameters: BSTR szFullPath: Specifies the PDF file to be opened.

long hWnd: Handle for the window in which the file is displayed

long openFlags:

AV_EXTERNAL_VIEW – Display the pageview, scrollbars, toolbars, and bookmark pane.

AV_DOC_VIEW – Display the pageview, scrollbars, and bookmark pane

AV_PAGE_VIEW – Display only the pageview.

long useOpenParams: 0 – Document defined open action is used;
positive number – open action is defined in methods' parameters.

long pgNum: page number to be opened. Valid if useOpenParams is positive.

short pageMode:

DDDontCare = 0 – Leave the mode as it is

DDUseNone = 1 – Display without bookmark

DDUseThumbs = 2 – Display using thumbnails

DDUseBookmarks = 3 – Display usingbookmarks

DDFullScreen = 4 – Display in full screen mode

short zoomType:

DVZoomNoVary (0) A fixed zoom, such as 75%

DVZoomFitPage (1) Fits the page in the window

DVZoomFitWidth (2) Fits the page width to the window

DVZoomFitHeight (3) Fits the page height to the window

DVZoomFitVisibleWidth (4) Fits the visible content of the page width into the window

long zoom: Zoom factor, used only for DVZoomNoVary if useOpenParams is a positive number.

short top: Currently not used

short left: Currently not used

Return value: VARIANT_TRUE if the operation succeeded.

Remarks: Opens a file in a user-specified window.

IDDPage Interface

This interface represents a page of a PDF document. Certain page level operations – cropping and rotating pages – and managing annotations and text highlights can be performed by its methods. The interface can be retrieved by the method AcquirePage of the DDDoc interface.

Method GetRotate

Syntax:	short GetRotate();
Parameters:	None
Return value:	The method returns the rotation value of the page in degrees. The possible values are listed under the method SetRotate.
Remarks:	Determines the rotation degree of the page.

Method SetRotate

Syntax:	VARIANT_BOOL SetRotate(short nRotate);
Parameters:	short nRotate: Rotates the page with the given degree. The acceptable values are 0, 90, 180, and 270.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Influences the view of the document page. To make the changes permanent, the PDF file must be saved.

Method GetNumAnnots

Syntax:	long GetNumAnnots();
Parameters:	None
Return value:	Returns the number of annotations on the given page.
Remarks:	Typically used when the annotations must be enumerated.
Example:	Example 4 ;

Method RemoveAnnot

Syntax:	VARIANT_BOOL RemoveAnnot(long nIndex);
Parameters:	long nIndex: Specifies the index of the annotation to be deleted from the page. First annotation has 0 index.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Removes specified annotation from the page.

Method GetNumber

Syntax:	long GetNumber();
Parameters:	None
Return value:	Retrieves the index of the page. Note that the page indexes start from zero.
Remarks:	Certain methods expect a page index as the input parameter. Use this method to retrieve the appropriate value for the given page.

Method CropPage

Syntax:	VARIANT_BOOL CropPage(IDispatch* iRect);
Parameters:	IDispatch* iRect: The IDispatch interface to a Rect object that determines the size of the crop area of the page.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Adjusts the visible area of the page. The coordinates must be given in the user space.

Method GetAnnot

Syntax:	IDispatch* GetAnnot(long nIndex);
Parameters:	long nIndex: Specifies the index of the requested annotation on the page.
Return value:	The method retrieves the IDispatch interface of the selected annotation (DDAnnot) object.
Remarks:	Retrieves the given page annotation. The properties of the annotation can be accessed through the returned interface pointer.

Method AddAnnot

Syntax:	VARIANT_BOOL AddAnnot(long nIndexAddAfter, IDispatch* iDDAnnot);
Parameters:	<p>long nIndexAddAfter: Specifies the index of the new annotation. The annotation is inserted after the specified index. Use a value of -1 in case of insertion at the very first position or if the given annotation is the first one on the page.</p> <p>IDispatch* iDDAnnot: The reference to the annotation to be inserted. Note that the DDAnnot object is not a creatable one. You can get this interface pointer using other methods of the IDDPage interface.</p>
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Adds an annotation to the page. Typical usage of the method is to copy or move existing annotations to another page. The annotation can also be retrieved from another document. To create a new annotation, use the method AddNewAnnot.

Method AddNewAnnot

Syntax:	<code>IDispatch* AddNewAnnot(long nIndexAddAfter, BSTR szSubType, IDispatch* iRect);</code>
Parameters:	<p><code>long nIndexAddAfter</code>: Specifies the index of the new annotation. The annotation is inserted after the specified index. Use a value of -1 in case of insertion at the very first position or if the given annotation is the first one on the page.</p> <p><code>BSTR szSubType</code>: Specifies the type of annotation. It supports the "Text" subtype only.</p> <p><code>IDispatch* iRect</code>: The IDispatch interface of a Rect object specifies the location and the size of the annotation.</p>
Return value:	The method returns the IDispatch interface of the new DDA annot object if the insertion succeeded. You can use this value to set additional properties of the annotation (such as color). The return value is NULL if the operation failed.
Remarks:	Creates a new annotation on the given page.
Example:	Example 3 ;

Method GetDoc

Syntax:	<code>IDispatch* GetDoc();</code>
Parameters:	None
Return value:	Returns the IDispatch interface of the DDDoc object associated to the DDPage object.

Method GetAnnotIndex

Syntax:	<code>long GetAnnotIndex(IDispatch* iDDAnnot);</code>
Parameters:	<code>IDispatch* iDDAnnot</code> : The IDispatch interface of the DDA annot object whose index must be retrieved.
Return value:	Returns the zero-based index of the given annotation.

Method GetSize

Syntax:	<code>IDispatch* GetSize();</code>
Parameters:	None
Return value:	Returns the IDispatch interface of a Point object.
Remarks:	Retrieves the size of the page measured in points.

Method CreateWordHilite

Syntax:	<code>IDispatch* CreateWordHilite(IDispatch* iHiliteList);</code>
Parameters:	<code>IDispatch* iHiliteList</code> : Specifies the series of characters to be highlighted.
Return value:	The method returns the <code>IDispatch</code> interface of a <code>DDTextSelect</code> object.
Remarks:	Highlights a series of words on the given page. The <code>DDHiliteList</code> object may specify several series of words.
Example:	Example 2 , Example 2 (code)

Method CreatePageHilite

Syntax:	<code>IDispatch* CreatePageHilite(IDispatch* iHiliteList);</code>
Parameters:	<code>IDispatch* iHiliteList</code> : Specifies the series of characters to be highlighted.
Return value:	The method returns the <code>IDispatch</code> interface of a <code>DDTextSelect</code> object.
Remarks:	Highlights a series of characters on the given page. The <code>DDHiliteList</code> object may specify several series of characters.
Example:	The example provided for the method <code>CreateWordHilite</code> is applicable with the appropriate changes. See Example 3 .

Method DrawEx

Syntax:	<code>VARIANT_BOOL DrawEx (long window, long displayContext, IDispatch * updateRect, short nxOrigin, short nyOrigin, short zoom);</code>
Parameters:	<p><code>long window</code>: Handle for the window into which the content is to be drawn</p> <p><code>long displayContext</code>: Not used, leave it zero.</p> <p><code>IDispatch * updateRect</code>: Reference to the area of the page in user space coordinates to be drawn. Any content outside the area is not drawn.</p> <p><code>short nxOrigin</code>: X coordinate of the part of the page to be drawn.</p> <p><code>short nyOrigin</code>: Y coordinate of the part of the page to be drawn.</p> <p><code>short zoom</code>: Zoom value with which page content will be drawn as a percentage. 100 means magnification 1.</p>
Return value:	<code>VARIANT_TRUE</code> if the operation succeeded.
Remarks:	Draws the specified part of the page into a user-specified window.

Method CopyToClipboard

Syntax:	VARIANT_BOOL CopyToClipboard (IDispatch * boundRect, short nXOrigin, short nYOrigin, short nZoom);
Parameters:	<p>IDispatch * boundRect: Reference to the bounding rect in device space coordinates to be drawn. Any content outside the area will not be drawn.</p> <p>short xOrigin: X coordinate of the part of the page to be drawn.</p> <p>short yOrigin: Y coordinate of the part of the page to be drawn.</p> <p>short zoom: Zoom value with which page content will be drawn as a percentage. 100 means magnification 1.</p>
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Copies page content as an image to the clipboard. This method is only available on 32-bit systems.

IDDBookmark interface

This interface provides access to bookmarks in documents. New bookmarks cannot be created with the OLE Automation interface but can be permanently removed. Basically, bookmarks are designed to navigate to specified areas of a document.

Method Destroy

Syntax:	VARIANT_BOOL Destroy ();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Removes bookmark from the document.

Method GetByTitle

Syntax:	VARIANT_BOOL GetByTitle (IDispatch *IDDDoc, BSTR bookmarkTitle);
Parameters:	IDispatch * IDDDoc: Reference to the document object to get the bookmark from. BSTR bookmarkTitle: Title of the bookmark to get. Title is case-sensitive.
Return value:	VARIANT_TRUE if the bookmark exists with the given title and the operation succeeded.
Remarks:	Gets bookmark by its title. The bookmark is not the return value of the document. The object's reference is set to the bookmark instead.

Method GetTitle

Syntax:	BSTR GetTitle ();
Parameters:	None
Return value:	Returns the title of the bookmark object.

Method IsValid

Syntax:	VARIANT_BOOL IsValid ();
Parameters:	None
Return value:	VARIANT_TRUE if the bookmark is valid.
Remarks:	It does not make a thorough test on the bookmark's data structure.

Method Perform

Syntax:	VARIANT_BOOL Perform (IDispatch * IDVDoc);
Parameters:	IDispatch * IDVDoc: Reference to the document object where the bookmark exists.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Performs an action of the bookmark.

Method SetTitle

Syntax:	VARIANT_BOOL SetTitle (_bstr_t szNewTitle);
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Sets the title of the bookmark.

iDDAnnot interface

This interface provides access to properties of the annotations, such as color, date, title, content, coordinates measured in user space, open state, and subtype. Because the list of annotations is maintained by the DDPAGE object, the interface is accessible by method DDPAGE::GetAnnot. The annotations are identified by their index within the given page. You can also add annotations to a page using the DDPAGE object. Please note that only annotations with a "Text" subtype are creatable.

Method GetColor

Syntax:	long GetColor();
Parameters:	None
Return value:	Returns the color of the annotation in RGB values. The values are represented in this form: 0xBBGGRR. So the value of 0xFF (255) represents a light red color, 0xFF00 (65280) is a light green value, and 0xFF0000 (16711680) is light blue.

Method SetColor

Syntax:	VARIANT_BOOL SetColor(long nRGBColor);
Parameters:	long nRGBColor: Specifies the color of the annotation
Return value:	VARIANT_TRUE if the operation succeeded.
Example:	Example 4

Method GetDate

Syntax:	IDispatch* GetDate();
Parameters:	None
Return value:	The method returns an IDispatch interface to a Time object.
Remarks:	Uses the properties of the Time object to retrieve the date of the annotation.

Method SetDate

Syntax:	VARIANT_BOOL SetDate(IDispatch* ITime);
Parameters:	IDispatch* ITime: Specifies the creation time of the annotation.
Return value:	VARIANT_TRUE if the operation succeeded.

Method GetRect

Syntax:	<code>IDispatch* GetRect();</code>
Parameters:	None
Return value:	Returns the IDispatch interface for the Rect object.
Remarks:	Returns the bounding rectangle of the annotation. Use the properties of the Rect object to determine the location of the annotation on the page.

Method SetRect

Syntax:	<code>VARIANT_BOOL SetRect(IDispatch* iRect);</code>
Parameters:	None
Return value:	<code>VARIANT_TRUE</code> if the operation succeeded.
Remarks:	Sets or changes the location and size of the annotation.

Method GetTitle

Syntax:	<code>BSTR GetTitle();</code>
Parameters:	None
Return value:	Returns the title of the annotation.

Method SetTitle

Syntax:	<code>VARIANT_BOOL SetTitle(BSTR szTitle);</code>
Parameters:	
Return value:	<code>VARIANT_TRUE</code> if the operation succeeded.
Remarks:	Sets or changes the title of the annotation.

Method GetSubType

Syntax:	<code>BSTR GetSubtype();</code>
Parameters:	None
Return value:	Returns the subtype property of the annotation.

Method IsValid

Syntax:	<code>VARIANT_BOOL IsValid();</code>
Parameters:	None
Return value:	<code>VARIANT_TRUE</code> if the annotation is valid.
Remarks:	Verifies the annotation object and checks whether it is deleted.

Method IsOpen

Syntax:	VARIANT_BOOL IsOpen();
Parameters:	None
Return value:	VARIANT_TRUE if the text annotation is open.
Remarks:	Verifies whether a text annotation is open.

Method SetOpen

Syntax:	VARIANT_BOOL SetOpen(long bisOpen);
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Opens a text annotation.

Method GetContents

Syntax:	BSTR GetContents();
Parameters:	None
Return value:	Retrieves the content of an annotation.

Method SetContents

Syntax:	VARIANT_BOOL SetContents(BSTR szContents);
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Sets or modifies the content of the annotation.
Example:	Example 3 ;

Method IsEqual

Syntax:	VARIANT_BOOL IsEqual(IDispatch* iDDAnnot);
Parameters:	None
Return value:	VARIANT_TRUE if the two compared annotations are equal.
Remarks:	Determines whether the current annotation is the same as a specified one.

Method Perform

Syntax:	VARIANT_BOOL Perform(IDispatch* IDVDoc);
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Refers to Link type annotations and performs the action associated with the Link object.

IDVPageView

Similar to the DVDoc interface, this interface provides a set of methods related to viewing PDF pages. The interface is not creatable, but accessible via the method GetDVPageView in the DVDoc interface.

Method DoGoBack

Syntax:	VARIANT_BOOL DoGoBack();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	The application tracks the views displayed in each document window. Use this method to step back to the previous view of the document window.

Method DoGoForward

Syntax:	VARIANT_BOOL DoGoForward();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	The application tracks the views displayed in each document window. Use this method to step forward to the next view of the document window.

Method GetDVDoc

Syntax:	IDispatch* GetDVDoc();
Parameters:	None
Return value:	Returns the IDispatch interface of the DVDoc object displayed in the page view.
Remarks:	Retrieves the DVDoc object displayed in the view.

Method GetDoc

Syntax:	IDispatch* GetDoc();
Parameters:	None
Return value:	Returns the IDispatch interface of the DDDoc object displayed in the page view.
Remarks:	Retrieves the DDDoc object displayed in the view.

Method GetPage

Syntax:	<code>IDispatch* GetPage();</code>
Parameters:	None
Return value:	Returns the IDispatch interface of the DDPAGE object referring to the current PDF page displayed in the page view.
Remarks:	Retrieves the DDPAGE object displayed in the view.

Method GetPageNum

Syntax:	<code>long GetPageNum();</code>
Parameters:	None
Return value:	Returns the zero-based index of the current PDF page displayed in the page view.
Remarks:	Retrieves the index of the displayed page.

Method GetZoom

Syntax:	<code>long GetZoom();</code>
Parameters:	None
Return value:	Returns the current zoom factor as a percentage.

Method GetZoomType

Syntax:	<code>short GetZoomType();</code>										
Parameters:	None										
Return value:	The method returns a given zoom type.										
Remarks:	The possible return values are the following: <table><tr><td>DVZoomNoVary (0)</td><td>A fixed zoom, such as 75%.</td></tr><tr><td>DVZoomFitPage (1)</td><td>Fits the page in the window.</td></tr><tr><td>DVZoomFitWidth (2)</td><td>Fits the page width to the window.</td></tr><tr><td>DVZoomFitHeight (3)</td><td>Fits the page height to the window.</td></tr><tr><td>DVZoomFitVisibleWidth (4)</td><td>Fits the visible content of the page width into the window.</td></tr></table>	DVZoomNoVary (0)	A fixed zoom, such as 75%.	DVZoomFitPage (1)	Fits the page in the window.	DVZoomFitWidth (2)	Fits the page width to the window.	DVZoomFitHeight (3)	Fits the page height to the window.	DVZoomFitVisibleWidth (4)	Fits the visible content of the page width into the window.
DVZoomNoVary (0)	A fixed zoom, such as 75%.										
DVZoomFitPage (1)	Fits the page in the window.										
DVZoomFitWidth (2)	Fits the page width to the window.										
DVZoomFitHeight (3)	Fits the page height to the window.										
DVZoomFitVisibleWidth (4)	Fits the visible content of the page width into the window.										

Method Goto

Syntax:	<code>VARIANT_BOOL Goto(long nPage);</code>
Parameters:	long nPage: Zero-based index of the page
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Makes a page specified with its index visible.

Method ReadPageDown

Syntax:	VARIANT_BOOL ReadPageDown();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Scrolls the document down by one screen area.

Method ReadPageUp

Syntax:	VARIANT_BOOL ReadPageUp(long nPage);
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Scrolls the document up by one screen area.

Method ScrollTo

Syntax:	VARIANT_BOOL ScrollTo(short nX, short nY);
Parameters:	short nX, short nY: Specifies the scrolling coordinates within the current page.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Scrolls the current page to the given position. The coordinates specify the left top corner of the visible area in user space.

Method ZoomTo

Syntax:	VARIANT_BOOL ZoomTo(short nType, short nScale);
Parameters:	short nType: Specifies the Zoom type (see also the method GetZoomType) short nScale: Specifies the scale of zoom as a percentage.
Return value:	VARIANT_TRUE if the operation succeeded.

Method DevicePointToPage

Syntax:	IDispatch* DevicePointToPage(IDispatch* IPoint);
Parameters:	IDispatch* IPoint: Point to be converted.
Return value:	The method returns the converted values.
Remarks:	Conversion from device space to user space.

Method PointToDevice

Syntax: IDispatch* PointToDevice(IDispatch* IPoint);

Parameters: IDispatch* IPoint: Point to be converted.

Return value: The method returns the converted values.

Remarks: Conversion from user space to device space.

Method GetAperture

Syntax: IDispatch* GetAperture();

Parameters: None

Return value: The method returns the IDispatch interface of a Rect object.

Remarks: The Rect object specifies the visible area of the page in user space.

iHiliteList

The HiliteList object is designed to specify parts of the text within a PDF document to be selected. The elements of the list may refer to individual characters or words depending on the usage of the object.

Method Add

Syntax:	VARIANT_BOOL Add(short nOffset, short nLength);
Parameters:	short nOffset: Specifies the index of the first object (character or word) to be highlighted. short nLength: Specifies the number of objects to be highlighted.
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	The specified selections refer to characters if the HiliteList object is used by method CreatePageHilite of the DDPAGE object. They refer to words in the case of the method CreateWordHilite.

iDDTextSelect

The interface provides some read-only properties for the text selection on a given PDF page.

Method Destroy

Syntax:	VARIANT_BOOL Destroy();
Parameters:	None
Return value:	VARIANT_TRUE if the operation succeeded.
Remarks:	Deletes the current text selection.

Method GetBoundingRect

Syntax:	IDispatch* GetBoundingRect();
Parameters:	None
Return value:	The method returns a Rect object.
Remarks:	Provides the bounding rectangle of the current text selection.

Method GetNumText

Syntax:	long GetNumText();
Parameters:	None
Return value:	Returns the number of selected text objects.

Method GetPage

Syntax:	long GetPage();
Parameters:	None
Return value:	Returns the index of the page where the selection is being placed.

Method GetText

Syntax:	BSTR GetText(long nTextIndex);
Parameters:	long nTextIndex: Specifies the index of the selected text.
Return value:	Returns the selected text.
Remarks:	Retrieves the text specified with the given index in the highlighted content.

Helper interfaces

The following interfaces are designed for retrieving special properties of different objects.

iRect interface

This interface is designed to get coordinates of a rectangular object. The interface provides four properties for the left, right, top, and bottom coordinates. The type of these properties is long. You have full access (read/write) to all four properties. See [Example 4](#).

ITime interface

This interface defines a Time object with seven properties: year, month, day, hour, minute, second, and millisecond. You have full access (read/write) to all four properties.

IPoint interface

This interface defines a point with two properties: the X and Y coordinates. You have full access (read/write) to these properties. This interface is also used for referring to the size of an object. In this case, the property X refers to the width and Y to the height of the object.

ActiveXIEHelper

The ActiveXIEHelper object comprises a set of methods that provide access to PDF browser options. This is a creatable interface, and it facilitates the movement to various pages within a document, and specifies various display and print choices.

Method GoBackwardStack

Syntax:	GoBackwardStack();
Parameters:	None
Remarks:	Checks the previous view on the view stack if a previous view exists. This view can be part of a different document.

Method GoForwardStack

Syntax:	GoForwardStack();
Parameters:	None
Remarks:	Checks the next view on the view stack if the next view exists. This view can be part of a different document.

Method GotoFirstPage

Syntax:	gotoFirstPage();
Parameters:	None
Remarks:	Shifts to the first page of the document, keeping the present location within the page and the present zoom level.

Method GotoLastPage

Syntax:	gotoLastPage();
Parameters:	None
Remarks:	Shifts to the last page of the document, keeping the existing location within the page and the existing zoom level.

Method GotoNextPage

Syntax:	gotoNextPage();
Parameters:	None
Remarks:	Moves to the next page in the document if the next page exists. Sustains the existing location within the page and the existing zoom level.

Method GotoPreviousPage

Syntax:	gotoPreviousPage();
Parameters:	None
Remarks:	Moves to the previous page in the document if the previous page exists. Sustains the existing location within the page and the existing zoom level.

Method Print

Syntax:	Print();
Parameters:	None
Remarks:	Prints the document as per the selected option in the user dialog box. Printing options comprise embedded printing (printing within a bounding rectangle on a given page) and interactive printing to a defined printer. The method returns instantly, even if printing is still in process.
Note: If the security settings restrict printing, the document is not printed. In this case the method is ignored.	

Method PrintAll

Syntax:	printAll();
Parameters:	None
Remarks:	Prints the complete document without displaying the user dialog box. The present printer, page settings, and job settings are used while printing. The method returns instantly, even if printing is still in process.
Note: If the security settings restrict printing, the document is not printed. In this case the method is ignored.	

Method PrintAllFit

Syntax:	printAllFit(VARIANT_BOOL bOn);
Parameters:	bOn: Determines whether to scale the printable area while printing the document. Zero value of the parameter indicates that scaling is not required, and if the parameter has a positive value, it indicates that pages are scaled, if required, to fit into the printable area of the page of the printer.
Remarks:	Prints the complete document without displaying the user dialog box, and the pages are scaled, if required, to fit into the printable area of the page of the printer. The present printer, page settings, and job settings are used while printing. The method returns instantly, even if printing is still in process.
Note: If the security settings restrict printing, the document is not	

printed. In this case the method is ignored.

Method PrintPages

Syntax:	printPages(Long nFrom, Long nTo);
Parameters:	<p>nFrom: Specifies the page number of the first page to be printed. Zero is the first page of the document.</p> <p>nTo: Specifies the page number of the last page to be printed.</p>
Remarks:	<p>Prints the defined pages without displaying the user dialog box. The present printer, page settings, and job settings are used while printing. The method returns instantly, even if printing is still in process.</p> <p>Note: If the security settings restrict printing, the document is not printed. In this case the method is ignored.</p>

Method PrintPagesFit

Syntax:	printPagesFit(Long nFrom, Long nTo, VARIANT_BOOL bShrinkToFit);
Parameters:	<p>nFrom: Specifies the page number of the first page to be printed. Zero is the first page of the document.</p> <p>nTo: Specifies the page number of the last page to be printed.</p> <p>bShrinkToFit: Defines whether the pages will be scaled, if required, to fit into the printable area of a page of the printer.</p>
Remarks:	<p>Prints the required pages without displaying the user dialog box. The present printer, page settings, and job settings are used while printing. A parameter defines whether to scale pages, if required. The method returns instantly, even if printing is still in process.</p> <p>Note: If the security settings restrict printing, the document is not printed. In this case the method is ignored.</p>

Method PrintWithDialog

Syntax:	printWithDialog();
Parameters:	None
Remarks:	<p>Prints the document as per the selected options in the user dialog box. Printing options comprise of embedded printing (that printing within a bounding rectangle on a given page) and interactive printing to a defined printer. The method returns instantly, even if printing is still in process.</p> <p>Note: If the security settings restrict printing, the document is not printed. In this case the method is ignored.</p>

Method SetCurrentPage

Syntax:	setCurrentPage(Long nPage);
Parameters:	nPage: Specifies the page number of the target page. Zero page is the first page of the document.
Remarks:	Moves to the defined page in the document. Keep the existing location within the page and the existing zoom level.

Method SetLayoutMode

Syntax:	setLayoutMode(BSTR szLayoutMode);
Parameters:	szLayoutMode - Possible values: Don't Care: Displays the present user preference. Single Page: Displays single page mode. OneColumn: Displays one-column continuous mode. TwoColumnLeft: Displays the two-column continuous mode with the first page on the left. TwoColumnRight: Displays the two-column mode with the first page on the right.
Remarks:	Displays the layout mode for the page view as per the string defined.

Method SetNamedDest

Syntax:	setNamedDest(BSTR szNamedDest);
Parameters:	szNamedDest: The defined destination where the user goes.
Remarks:	Modifies the page view to the defined destination in the specified string.

Method SetPageMode

Syntax:	setPageMode(BSTR szPageMode);
Parameters:	szPageMode - Possible values: None: Shows the document but by default; the bookmarks and the thumbnails are not displayed. Bookmarks: Shows the documents along with the bookmarks. Thumbs: Shows the document along with the thumbnails.
Remarks:	Defines the page mode as per the specified string.

Method SetShowToolbar

Syntax:	setShowToolbar(VARIANT_BOOL bOn);
Parameters:	bOn: The positive value of the parameter signifies that the toolbar is displayed, and zero value indicates that it is not displayed.
Remarks:	Defines whether the toolbar will be displayed in the viewer.

Method SetView

Syntax:	setView(BSTR szViewMode);
Parameters:	<p>szViewMode - Possible values:</p> <ul style="list-style-type: none"> Fit: Fits the complete page within the frame both vertically and horizontally. FitH: Fits the complete width of the page within the frame. FitV: Fits the complete height of the page within the frame. FitB: Fits the bounding box within the frame both vertically and horizontally. FitBH: Fits the complete width of the bounding box within the frame. FitB: Fits the complete height of the bounding box within the frame.
Return value:	None
Remarks:	Defines the view of the page as per the specified string.

Method SetViewRect

Syntax:	setViewRect(FLOAT left, FLOAT top, FLOAT width, FLOAT height);
Parameters:	<ul style="list-style-type: none"> left: The horizontal coordinate in the upper left. Top: The vertical coordinate in the upper left corner. Width: The horizontal width of the rectangle. Height: The vertical height of the rectangle.
Remarks:	Specifies the rectangle view as per the defined coordinates.

Method SetViewScroll

Syntax:	setViewRect(BSTR szViewMode, FLOAT offset);
Parameters:	<p>szViewMode – Possible values:</p> <ul style="list-style-type: none"> Fit: Fits the complete page within the frame both vertically and horizontally. FitH: Fits the complete width of the page within the frame FitV: Fits the complete height of the page within the frame.

	<p>FitB: Fits the bounding box within the frame both vertically and horizontally.</p> <p>FitBH: Fits the complete width of the bounding box within the frame.</p> <p>FitBV: Fits the complete height of the bounding box within the frame.</p> <p>Offset: The vertical or the horizontal coordinate placed either at the left or the top edge.</p>
Remarks:	Defines the page view as per the defined string. Depending on the view of the page, the page is scrolled to the right or down as per the value specified for offset.

Method SetZoom

Syntax:	setZoom(FLOAT percent);
Parameters:	percent: The required zoom factor, defined in percentage. For example, 0.7 represents a magnification of 70%.
Remarks:	Defines the magnification as per the specified value.

Method SetZoomScroll

Syntax:	setZoomScroll(FLOAT percent, FLOAT left, FLOAT top);
Parameters:	percent: The required zoom factor, defined in percentage. For example, 0.7 represents a magnification of 70%. left: the horizontal coordinate placed at the left edge. Top: the vertical coordinate placed at the top edge.
Remarks:	Defines the magnification as per the specified value, and scrolls the page view both vertically and horizontally as per the defined values.

Property Src

Syntax:	[get/set] src
Return value:	The property returns the URL of the document formatted as a string.
Remarks:	Receives or sets the URL for the document.

Chapter 3

Code examples

These examples are based on Visual C++ and Visual Basic code. The examples are easily applicable to other programming languages that support OLE automation.

Example 1 – Inserting pages into a document

The following example demonstrates how pages can be inserted from one PDF document into another. The sample can also be applied to the methods ReplacePages and Move Pages of the IDDDoc interface.

Referenced methods

Creating Application interface

Creating DDDoc interface

[IDDDoc::Open](#)

[IDDDoc:: InsertPages](#)

[IDDDoc::Save](#)

[IDDDoc::Close](#)

[IApp::Exit](#)

C++

```
HRESULT Example1(LPWSTR sourceFile, LPWSTR targetFile, LPWSTR resultFile)
{
    PowerPDF::IDDDocPtr ddDocTarget;
    ddDocTarget.CreateInstance(__uuidof(PowerPDF::DDDoc));

    if (ddDocTarget->Open(targetFile) != VARIANT_TRUE)
    {
        pApp->Exit();
    }
}
```

```
        return E_FAIL;

    }

/*-----
Other file types e.g. Office formats can be opened as PDF
if( 0 == ddDocTarget->Open(L"myworddoc.docx") )
{
    pApp->Exit();
    return E_FAIL;
}
-----*/



PowerPDF::IDDDocPtr ddDocSource;
ddDocSource.CreateInstance(__uuidof(PowerPDF::DDDoc));

if (ddDocSource->Open(sourceFile) != VARIANT_TRUE)
{
    ddDocTarget->Close();
    pApp->Exit();
    return E_FAIL;
}

// Insert the first two pages of the source document into the 3rd position
// of the target document
if (ddDocTarget->InsertPages(1, ddDocSource, 0, 2, FALSE) != VARIANT_TRUE)
{
    ddDocTarget->Close();
    ddDocSource->Close();
    pApp->Exit();
    return E_FAIL;
}
```

```
// Save the modifications using DDDoc object
if (ddDocTarget->Save(PowerPDF::DDSaveFull, resultFile) != VARIANT_TRUE)
{
    //Saving the file failed
    return ERROR_SAVE;
}
ddDocTarget->Close();
ddDocSource->Close();
pApp->Exit();
return S_OK;
}
```

VB

```
Sub Example1(inFile, outFile, resFile)

Set PDFApp = CreateObject("PowerPDF.App")
Set ddDocTarget = CreateObject("PowerPDF.DDDoc")

If ddDocTarget.Open(outFile) = False Then
    PDFApp.Exit
    Exit Sub
End If

Set ddDocSource = CreateObject("PowerPDF.DDDoc")
If ddDocSource.Open(inFile) = False Then
    ddDocTarget.Close
    PDFApp.Exit
    Exit Sub
End If

If ddDocTarget.InsertPages(1, ddDocSource, 0, 2, False) = False Then
    ddDocSource.Close
    ddDocTarget.Close

```

```
PDFApp.Exit  
Exit Sub  
End If  
  
If ddDocTarget.Save(1, resFile) = False Then '1 = DDSaveFull  
    'Saving the file failed  
    InputBox("Saving the file failed")  
End If  
  
ddDocSource.Close  
ddDocTarget.Close  
PDFApp.Exit  
End Sub
```

Example 2 – Highlighting words in a PDF document

This sample demonstrates how words can be selected within a page of a PDF document.

Referenced methods

Creating Application interface

Creating DVDoc interface

Creating HiliteList interface

[IDVDoc::Open](#)

[IDDDoc::GetDDDoc](#)

[DDDoc::AcquirePage](#)

[iHiliteList::Add](#)

[DDPage::CreateWordHilite](#)

[DVDoc::SetTextSelection](#)

[DVDoc::ShowTextSelection](#)

C++

HRESULT Example2(**LPWSTR** file)

```
{  
    //Open the PDF document  
    PowerPDF::IDVDocPtr dvOpenDoc;  
    dvOpenDoc.CreateInstance(__uuidof(PowerPDF::DVDoc));  
    if (dvOpenDoc->Open(file) != VARIANT_TRUE)  
    {  
        //ERROR: can't open test file\n"  
        pApp->Exit();  
        return E_FAIL;  
    }  
  
    //Get the associated DDDoc object  
    PowerPDF::IDDDocPtr ddDoc = dvOpenDoc->GetDDDoc();  
  
    //Acquire the page to be highlighted  
    PowerPDF::IDDPagePtr ddPage = ddDoc->AcquirePage(0);  
  
    //Create the list of highlights  
    PowerPDF::iHiliteListPtr hl;  
    hl.CreateInstance(__uuidof(PowerPDF::HiliteList));  
    hl->Add(0, 1);      // 1st word should be highlighted  
    hl->Add(2, 2);      // and 2 additional words from the 3rd position  
    hl->Add(5, 3);      // and 3 additional words from the 6th position  
    hl->Add(9, 4);      // and 4 additional words from the 10th position  
  
    //Create the word highlights and display them  
    PowerPDF::iDDTextSelectPtr ts = ddPage->CreateWordHilite(hl);  
    dvOpenDoc->SetTextSelection(ts);  
    dvOpenDoc->ShowTextSelect();  
    // The highlight list may refer to series of characters as well.  
    // Use method ddPage->CreatePageHilite to select series of  
    // characters
```

```
    return S_OK;  
}
```

VB

```
dim Offset  
dim Length  
Offset = array(0,2,5,9)  
Length = array(1,2,3,4)  
hNum = 4  
  
.....  
Call Example2("C:\Test\MyDoc.pdf", 0, Offset, Length, hNum)  
.....
```

```
Sub Example2(file, pg, offs, len, num)  
  
Set PDFApp = CreateObject("PowerPDF.App")  
Set dvOpenDoc = CreateObject("PowerPDF.DVDoc")  
  
If dvOpenDoc.Open(file) = False Then  
    PDFApp.Exit  
    Exit Sub  
End If  
  
Set ddDoc = dvOpenDoc.GetDDDoc()  
Set ddPage = ddDoc.AcquirePage(pg)  
Set hl = CreateObject("PowerPDF.HiliteList")  
  
for i = 0 to num -1  
    hr = hl.Add(offs(i), len(i))  
next
```

```
Set ts = ddPage.CreateWordHilite(hl)
hr = dvOpenDoc.SetTextSelection(ts)
dvOpenDoc.ShowTextSelect
End Sub
```

Example 3 – Adding annotations

This sample provides a code for adding a new annotation to a given page of the document and setting its properties.

Referenced methods

Creating Application interface

Creating DVDoc interface

[DDPage::AcquirePage](#)

[Rect properties](#)

[DDPage::GetNumAnnots](#)

[DDPage::AddNewAnnot](#)

[DDAnnot::SetContents](#)

[DDAnnot::SetColor](#)

C++

```
HRESULT AppendTextAnnotation(PowerPDF::IDDDocPtr ddDocOpen, long pageindex, RECT rc,  
LPCTSTR strComment)
```

```
{
```

```
    // Acquiring the page of the document
```

```
    PowerPDF::IDDPagePtr ddPage = ddDocOpen->AcquirePage(pageindex);
```

```
    if (NULL == ddPage)
```

```
    {
```

```
        return ERROR_INVALID_PAGEINDEX;
```

```
    }
```

```
    PowerPDF::iRectPtr rcAnnot;
```

```
    if (S_OK != rcAnnot.CreateInstance(__uuidof(PowerPDF::Rect)))
```

```
    {
```

```
        ddPage.Release();
```

```
        return ERROR_INTERNAL;
```

```
    }
```

```
    rcAnnot->Putleft(rc.left);
```

```
rcAnnot->Puttop(rc.top);
rcAnnot->PutRight(rc.right);
rcAnnot->PutBottom(rc.bottom);
long index = ddPage->GetNumAnnots() - 1;

PowerPDF::iDDAnnotPtr ddAnnot = ddPage->AddNewAnnot(index, _T("Text"), rcAnnot);
if (NULL == ddAnnot)
{
    ddPage.Release();
    return ERROR_ADD_ANNOT_FAILED;
}

if (ddAnnot->SetContents(strComment) != VARIANT_TRUE)
{
    ddPage.Release();
    ddAnnot.Release();
    return ERROR_SETCONTENT;
}

ddAnnot->SetColor(128);
return S_OK;
}
```

VB

```
dim rect
' (Left,Top,Right,Bottom)
rect=array(176,0,418,550)

#####
Call AppendTextAnnotation("C:\Test\MyDoc.pdf",0,rect,"This is an annotation")
#####

Sub AppendTextAnnotation(file,pg,rc,str)
```

```
Set PDFApp = CreateObject("PowerPDF.App")
Set dvOpenDoc = CreateObject("PowerPDF.DVDoc")

If dvOpenDoc.Open(file) = False Then
    PDFApp.Exit
    Exit Sub
End If

Set ddDoc = dvOpenDoc.GetDDDoc()
Set ddPage = ddDoc.AcquirePage(pg)
Set rcAnnot = CreateObject("PowerPDF.Rect")

rcAnnot.Bottom = rc(3)
rcAnnot.Left = rc(0)
rcAnnot.Right = rc(2)
rcAnnot.Top = rc(1)

index = ddPage.GetNumAnnots - 1
Set ddAnnot = ddPage.AddNewAnnot(index, "Text", rcAnnot)
ddAnnot.SetContents (str)
ddAnnot.SetColor (128)

End Sub
```

Example 4 – Opening PDF in browser with OLE automation

This example contains both the style (CSS) and JavaScript blocks to define a PDFObject container and embed the content of a sample document.

Prerequisites

Internet Explorer 11

C++

HRESULT Example4(**LPWSTR** htmlFile)

```
{  
    // Open the PDF document  
    PowerPDF::IDVDocPtr dvOpenDoc;  
    dvOpenDoc.CreateInstance(__uuidof(PowerPDF::DVDoc));  
    if (dvOpenDoc->Open(htmlFile) != VARIANT_TRUE)  
    {  
        pApp->Exit();  
        return E_FAIL;  
    }  
    return(S_OK);  
}
```

VB

Sub Example4(htmlFile)

```
Set PDFApp = CreateObject("PowerPDF.App")  
Set dvOpenDoc = CreateObject("PowerPDF.DVDoc")  
If dvOpenDoc.Open(htmlFile) = False Then  
    PDFApp.Exit  
End If  
End Sub
```

Example 5 – Form field access via JavaScript object

This sample shows how to get access to the JavaScript object to run JavaScript code.

It opens two documents and shows how to access the opened documents and how to get/set form field values in the documents.

VB

```
Set PDFApp = CreateObject("PowerPDF.App")
Set dvOpenDoc = CreateObject("PowerPDF.DVDoc")
dvOpenDoc.Open("C:\Test\Empty.pdf")
If dvOpenDoc.Open("C:\Test\Form_sample_with_Text1_textfield.pdf") = False Then
    PDFApp.exit()
End If
Set ddDoc = dvOpenDoc.GetDDDoc()
Set jso = ddDoc.GetJSObject
docs = jso.app.activeDocs

jso.app.alert ("First opened document: " & docs(0).title & ", Last opened document: " & docs(1).title & "")

sField = docs(0).getField("Text1")
If Not IsNull(sField) Then
    jso.app.alert ("Found 'Text1' field in "& docs(0).title & " document")
Else
    jso.app.alert ("There is no 'Text1' field in "& docs(0).title & " document")
End If

sField = docs(1).getField("Text1")
If Not IsNull(sField) Then
    jso.app.alert ("The old value for 'Text1' field in "& docs(1).title & " is: " &
    docs(1).getField("Text1").value)
    docs(1).getField("Text1").value = "New Value for 'Text1' form field"
    jso.app.alert ("The new value for 'Text1' field in "& docs(1).title & " is: " &
    docs(1).getField("Text1").value)
Else
```

```
jso.app.alert ("There is no 'Text1' field in "& docs(1).title & " document")  
End If  
  
sField = docs(1).getField("Updated")  
If Not IsNull(sField) Then  
    docs(1).getField("Updated").value = "yes"  
Else  
    jso.app.alert ("There is no 'Updated' field in "& docs(1).title & " document")  
End If  
  
ddDoc.Save 1, "C:\Test\Form_sample_with_Text1_textfield_newValue.pdf" '1 = DDSaveFull  
dvOpenDoc.Close (1)  
PDFApp.exit()
```

Example 6 – Unattended file comparison

Calling the Compare command on the Advanced Processing tab requires user interaction when saving the resulting document. For an unattended file comparison, use the hidden AutoCompare control instead.

Open the documents and specify the path and file name for the resulting output file, then call `jso.app.execMenuItem("AutoCompare")` to perform the comparison.

Call the `dvOpenDoc.Open` method to load files. For example:

```
dvOpenDoc.Open("c:\temp\DocToCompare1.pdf")
dvOpenDoc.Open("c:\temp\DocToCompare2.pdf")
```

Call the `ddNewDoc.Save` method to save the resulting document. For example:

```
ddNewDoc.Save 1,"c:\temp\ComparisonResult.pdf"
```

VB

```
Set PDFApp = CreateObject("PowerPDF.App")

Set dvOpenDoc = CreateObject("PowerPDF.DVDoc")
dvOpenDoc.Open("c:\temp\DocToCompare1.pdf")
Set dvOpenDoc2 = CreateObject("PowerPDF.DVDoc")
dvOpenDoc2.Open("c:\temp\DocToCompare2.pdf ")

Set ddDoc = dvOpenDoc.GetDDDoc()
Set jso = ddDoc.GetJSObject
jso.app.execMenuItem("AutoCompare")

Set dvNewDoc = PDFApp.GetActiveDoc()
Set ddNewDoc = dvNewDoc.GetDDDoc()
ddNewDoc.Save 1,"c:\temp\ComparisonResult.pdf"
PDFApp.exit()
```

Appendix

Action and menu names

You can use these names as input parameters for the methods [MenuItemExecute](#) and [MenuItemIsEnabled](#) of the IApp interface.

File menu

Action	Menu name
Info / Description / Properties	DocumentProperties
Open / Browse	Open
New / Blank PDF	CreateDocumentFromBlankPage
New / Form file / Create a PDF from a single file	CreateFromFile
New / Form file / Create PDFs from multiple files	CreateMultipleFiles
New / Form file / Combine multiple files into a single PDF	CombineMultipleFiles
New / Form file / Overlay multiple files into a single PDF	OverlayMultipleFiles
New / From clipboard	CreateDocumentFromClipboard
New / Create PDF Portfolio	CreatePortfolio
New / From Scanner / Create new PDF from scanner	ScanNew
New / From Scanner / Append new scan to current file	ScanExist
New / From Scanner / Scanner Setup	ScanSetting
New / From Web Page	NewFromWeb
Close	Close
Save	Save
Save As	SaveAs
Share / E-mail	Email
Share / Fax via e-mail	FaxViaEmail
Print	Print
Options	Preferences
Exit	Exit

Home tab

Action	Menu name
Pages / Insert	InsertPage
Pages / Extract	ExtractPage
Pages / Delete	DeletePage
*No applicable button	ReplacePage
*No applicable button	AddPage
Pages / Document Assembly	DocumentAssembly
Create / From File	CreateFromFile
Create / Combine Files	CombineMultipleFiles
Create / Combine All	CombinAllOpenFile
Create / From Scanner / Scan New	ScanNew
Create / From Scanner / Scan To Existing	ScanExist
Create / From Scanner / Scan And Markup	ScanMarkup
Create / From Scanner / Scan Settings	ScanSetting
Page Rotate / Right	RotatePageRight
Page Rotate / Left	RotatePageLeft
Page Rotate / Advanced	RotatePage
Convert / MS Word	SaveAsWord
Convert / Excel	SaveAsExcel
Convert / PowerPoint	SaveAsPPT
Convert / Other / XPS Document	SaveAsXPS
Convert / Other / Word Form	SaveAsForm
Convert / Other / WordPerfect Document	SaveAsWPD
Convert / Other / MRC PDF	SaveAsMRC
Convert / Other / Searchable PDF	SaveAsSearchable
Convert / Make PDF Searchable / Make PDF Searchable	MakeSearchable
Convert / Make PDF Searchable / Proofreader	ProofReader
Tools / Edit Text	EditText
Tools / Typewriter	Typewriter
Tools / Reduce / Optimize	Optimize
Tools / Reduce / Reduce current file	ReduceCurrentFile
Tools / Reduce / Reduce multiple files	ReduceMultipleFiles
Tools / Split	Split

Action	Menu name
Tools / Sign & Mark	FillSign
Search / Search / Search Current	Find
Search / Search / Search Multiple	Search

Edit tab

Action	Menu name
Convert / Convert to editable	ConvertToEditable
Basic / Undo	Undo
Basic / Redo	Redo
Basic / Delete	Delete
Basic / Select Area	SelectArea
Basic / Select All	SelectAll
Basic / Deselect All	DeselectAll
Clipboard / Cut	Cut
Clipboard / Copy	Copy
Clipboard / Paste	Paste
Modify / Crop	Crop
Modify / Edit Text	EditText
Modify / Edit Object	EditObject
Modify / Typewriter	Typewriter
Insert / Headers and Footers / Add...	AddHeadersAndFooters
Insert / Headers and Footers / Update...	UpdateHeadersAndFooters
Insert / Headers and Footers / Remove...	RemoveHeadersAndFooters
Insert / Bates Numbering / Add...	AddBatesNumbers
Insert / Bates Numbering / Remove...	RemoveBatesNumbers
Insert / Link	Link
Insert / Movie	Movie
Insert / Sound	Sound
Insert / 3D	3D
Tools / Alignment / View Grid	ViewGrid
Tools / Alignment / Snap to Grid	SnapToGrid
Tools / Alignment / View Rulers	ViewRulers
Tools / Alignment / View Guides	ViewGuides

Action	Menu name
Tools / Measure / Distance Tool	MeasureDistance
Tools / Measure / Perimeter Tool	MeasurePerimeter
Tools / Measure / Area Tool	MeasureArea
Tools / JavaScript / JavaScript Console	JavaScriptConsole
Tools / JavaScript / Set Document Actions	SetDocumentActions
Tools / JavaScript / Document JavaScript	DocumentJavaScript

View tab

Action	Menu name
Zoom / Zoom In	ZoomIn
Zoom / Zoom Out	ZoomOut
Zoom / Loupe View	LoupeView
Zoom / Dynamic Zoom	DynamicZoom
*Zoom / Zoom To	ZoomTo
Page View / Scroll Options / Single Page	SinglePage
Page View / Scroll Options / Continuous	Continuous
Page View / Scroll Options / Facing	Facing
Page View / Scroll Options / Continuous Facing	ContinuousFacing
Page View / Page Fit Options / Actual Size	ActualSize
Page View / Page Fit Options / Fit Page	FitPage
Page View / Page Fit Options / Fit Width	FitWidth
Page View / Page Fit Options / Fit Visible	FitVisible
Page View / Page Fit Options / Fit Height	FitHeight
Page View / Full Screen	FullScreen
Page View / Rotate View / Clockwise	ClockwiseRotateView
Page View / Rotate View / Counterclockwise	CounterclockwiseRotateView
Page View / Previous View	PreviousView
Page View / Next View	NextView
New / New Window	NewWindow
Display Theme / Change Skin / Purple	ChangeSkinPurple
Display Theme / Change Skin / Dark Gray	ChangeSkinGrayDark
Display Theme / Change Skin / Light Gray	ChangeSkinGrayLight
Display Theme / Change Skin / Blue	ChangeSkinBlue

Action	Menu name
Current Window / Horizontal Split	HorizontalSplit
Current Window / Vertical Split	VerticalSplit
Current Window / Quad Split	QuadSplit
All Windows / Cascade	Cascade
All Windows / Tile / Horizontally	TileHorizontally
All Windows / Tile / Vertically	TileVertically
All Windows / Close All	CloseAll

Comments tab

Action	Menu name
Annotate / Note	Note
Annotate / Text Box	TextBox
Annotate / Callout	CallOut
Annotate / Check Spelling / Check Spelling	CheckSpelling
Annotate / Check Spelling / Edit Dictionary	EditDictionary
Markup / Highlight / Highlight	Highlight
Markup / Highlight / Highlight Area	HighlightArea
Markup / Cross-out	Crossout
Markup / Underline	Underline
Markup / Draw Tools / Line	Line
Markup / Draw Tools / Arrow	Arrow
Markup / Draw Tools / Rectangle	Rectangle
Markup / Draw Tools / Pencil	Pencil
Markup / Draw Tools / Oval	Oval
Markup / Draw Tools / Polygon	Polygon
Markup / Draw Tools / Polygon Line	PolygonLine
Markup / Draw Tools / Cloud	Cloud
Markup / Draw Tools / Eraser	Eraser
Markup / Draw Tools / Hammer	Hammer
Markup / Search and Markup	SearchAndMarkup
Comment Processing / Import Comments	ImportComments
Comment Processing / Export Comments	ExportComments
Comment Processing / Migrate Comments	MigrateComments

Action	Menu name
Comment Processing / Create Comment Summary	CommentSummary
Comment Processing / Search Comments	SearchComments
Attachments / File	AttachFile
Attachments / Audio	AttachSound

Advanced Processing tab

Action	Menu name
Process / Flatten File	Flatten
Process / Index / Create Full Text Indexes	CreateFullTextIndexes
Process / Index / Embedded Index	EmbeddedIndex
Process / Reduce / Optimize	Optimize
Process / Reduce / Reduce Current File	ReduceCurrentFile
Process / Reduce / Reduce Multiple Files	ReduceMultipleFiles
Tools / Split	Split
Process / Compare	Compare Note: There is a hidden AutoCompare control available for automation purposes. See Example 6 for details.
File / Previous	PreviousFile
File / Next	NextFile
File / Scan Inbox	ScanInbox
Batch / Convert Assistant	Converter
Batch / Sequencer	Workflow
Batch / Batch Converter	BatchConvert
Batch / Watched Folder	WatchedFolder
Read Aloud / Current Page	ReadPage
Read Aloud / To End	ReadDoc
Read Aloud / To File	ReadToFile
Export / Export Area	ExportArea

Security tab

Action	Menu name
Redaction / Mark Redaction	MarkRedaction
Redaction / Apply Redaction	ApplyReadaction

Action	Menu name
Redaction / Search and Redact	SearchAndRedact
Redaction / Redaction Properties	RedactionToolProperties
Sign and Certify / Sign & Mark	FillSign
Sign and Certify / Sign / Sign Document	SignDocument
Sign and Certify / Time Stamp	TimeStamp
Sign and Certify / Certify / Certify Document	CertifyDocument
Sign and Certify / Certify / Certify Document Invisibly	CertifyDocumentInvisibly
Sign and Certify / Document Signatures / Verify All Signatures	VerifyAllSignatures
Sign and Certify / Document Signatures / Clear All Signature Fields	ClearAllSignatureFields
Sign and Certify / Document Signatures / View Signed Version	ViewSignedVersion
Sign and Certify / Document Signatures / Compare Signed Version to Current Version	CompareSignedVersion
Sign and Certify / DocuSign / Send via DocuSign	DocuSignSend
Sign and Certify / DocuSign / Sign with DocuSign	DocuSignSign
Sign and Certify / DocuSign / Forget User	DocuSignForgetUser
Sign and Certify / SignDoc / Send via Kofax SignDoc	SignDocSend
Sign and Certify / SignDoc / Sign with Kofax SignDoc - Signature	SignDocSign
Sign and Certify / SignDoc / Sign with Kofax SignDoc - Image	SignDocImage
Security / Clean Document	CleanDocument
Security / Remove Elements	RemoveElements
Security / Secure Delivery	SecureDelivery
Security / Manage Security / Modify	ModifySettings
Security / Manage Security / Remove	RemoveSettings
IDs and Certificates / Manage Digital Identities	ManageDigitalIDs
IDs and Certificates / Trusted Identities	TrustedIDs
DRM / RMS Security	RMSSecurity

Forms tab

Action	Menu name
Fillable Form / FormTyper	FormTyper
Form Elements / Button	Button
Form Elements / Radio Button	RadioButton
Form Elements / Check Box	CheckBox

Action	Menu name
Form Elements / Text Field	TextField
Form Elements / List Box	ListBox
Form Elements / Combo Box	ComboBox
Form Elements / Signature Field	DigitalSignature
Fields / Set Field Calculation Order	SetFieldCalculationOrder
Fields / Highlight Form Fields	HighlightFormFields
Fields / Reset Form Fields	ResetFormFields
Fields / Set Tab Order	SetTabOrder
Data / Import Form Data	ImportFormData
Data / Export Form Data	ExportFormData
Data / Export Data From Multiple Forms	ExportDataFromMultipleForms

Help tab

Action	Menu name
Help / Power PDF Help / Help Online	Help
Help / Web Resources / Product Information	ProductInfo
Help / Web Resources / Online Shop	OnlineStore
Help / Web Resources / Product Support	ProductSupport
Help / Product Update	ProductUpdate
Help / Automatic Updates	AutomaticUpdates
Help / About	About

Panels

Action	Menu name
Bookmarks	Bookmarks
Pages	PageThumbnails
Destinations	Destinations
Comments	Comment
Attachments	Attachments
Stamps	Stamps
Watermarks	Watermarks
Clip Art	ClipArt
Tag	Tag

Action	Menu name
Compliance	Compliance
Form Controls	FormControls
Layers	Layers
Model Tree	ModelTree
Envelope	Envelope
Signatures	Signatures
Security	Security
Sign / Certify	SignAndCertify
Send via SignDoc	SignDocSend
Collaboration	Collaboration
Auto Recovery	AutoRecovery
Autostore	AutoStore
Reading Order	ReadingOrder