

# Foxit PDF SDK for .NET 11.1 Upgrade Warnings

This document contains a list of items that developers looking to upgrade to Foxit PDF SDK for .NET 11.1 from previous version should pay attention to. Changes to code may be required in order for your projects to compile using the new version.

## Upgrading to version 11.1 from version 11.0

If you are upgrading from version 11.0 to version 11.1, please take note of the changes that occurred between version 11.0 and version 11.1.

- In foxit.pdf.actions.**ActionCallback** class, add some new callback functions as below:

```
virtual void NotifyBeginDoJob(PDFDoc document,
JavaScriptModifyItemInfo.JavascriptEventType event_type)

virtual void NotifyAfterDataChange(PDFDoc document, JavaScriptModifyItemInfo
modify_item_info)

virtual void NotifyEndDoJob(PDFDoc document, JavaScriptModifyItemInfo.JavascriptEventType
event_type)

virtual bool InitModifyItem(PDFDoc document, ActionCallback.ModifyItemType item_type, int
page_index, string dict_name)

virtual void ResetModifyItem(PDFDoc document)

virtual int GetVisiblePageCount(PDFDoc document)

virtual int GetVisiblePage(PDFDoc document, int index)
```

- In foxit.addon.xfa.**DocProviderCallback** class, add a new callback function as below:

```
virtual void NotifyWidgetChangeInfo(XFADoc doc, XFAWidgetModifyInfo change_info)
```

- In foxit.addon.ocr.**OCRCallback**, add a new callback function as below:

```
virtual bool IsImageIgnored (ImageObject image_object)
```

- Some APIs have been changed in version 11.1. The following table lists the APIs mapping between version 11.0 and 11.1.

Class	SDK 11.0	SDK 11.1
foxit.pdf.actions. <b>ActionCallback</b>	virtual RectF GetPageWindowRect()	virtual RectF GetPageWindowRect( <b>PDFDoc document, int page_index</b> )

Class	SDK 11.0	SDK 11.1
foxit.pdf.annots. <b>Icon ProviderCallback</b>	virtual PDFPage GetIcon(Annot.Type annot_type, string icon_name, uint color)	virtual PDFPage GetIcon(Annot.Type annot_type, string icon_name, uint color, <b>PDFDictionary annot_dict</b> )
foxit.addon.conversion.pdf2office. <b>PDF2WordSettingData</b>	PDF2WordSettingData(bool enable_retain_page_layout, bool enable_generate_headers_and_footers, bool enable_generate_footnotes_and_endnotes, bool enable_generate_page_rendered_break)	PDF2WordSettingData(bool enable_retain_page_layout, bool enable_generate_headers_and_footers, bool enable_generate_footnotes_and_endnotes, bool enable_generate_page_rendered_break, <b>int max_blank_paragraphs_per_page_bottom</b> )
	void Set(bool enable_retain_page_layout, bool enable_generate_headers_and_footers, bool enable_generate_footnotes_and_endnotes, bool enable_generate_page_rendered_break)	void Set(bool enable_retain_page_layout, bool enable_generate_headers_and_footers, bool enable_generate_footnotes_and_endnotes, bool enable_generate_page_rendered_break, <b>int max_blank_paragraphs_per_page_bottom</b> )
foxit.addon.conversion.pdf2office. <b>PDF2ExcelSettingData</b>	PDF2ExcelSettingData(string decimal_symbol, string thousands_separator, PDF2ExcelSettingData.WorkbookSettings workbook_settings)	PDF2ExcelSettingData(string decimal_symbol, string thousands_separator, PDF2ExcelSettingData.WorkbookSettings workbook_settings, <b>bool enable_aggressive_table_repair, bool include_watermarks</b> )
	void Set(string decimal_symbol, string thousands_separator, PDF2ExcelSettingData.WorkbookSettings workbook_settings)	void Set(string decimal_symbol, string thousands_separator, PDF2ExcelSettingData.WorkbookSettings workbook_settings, <b>bool enable_aggressive_table_repair, bool include_watermarks</b> )
foxit.addon.conversion.pdf2office. <b>PDF2PowerPointSettingData</b>	PDF2PowerPointSettingData(bool enable_aggressively_split_sections)	PDF2PowerPointSettingData(bool enable_aggressively_split_sections, <b>bool enable_adapt_to_largest_page</b> )
	void Set(bool enable_aggressively_split_sections)	void Set(bool enable_aggressively_split_sections, <b>bool enable_adapt_to_largest_page</b> )
foxit.addon.conversion.pdf2office. <b>PDF2OfficeSettingData</b>	PDF2OfficeSettingData (string metrics_data_folder_path, bool enable_ml_recognition, Range page_range, bool include_pdf_comments, PDF2WordSettingData word_setting_data, PDF2PowerPointSettingData power_point_setting_data, PDF2ExcelSettingData excel_setting_data, bool enable_trailing_space, bool include_images, int timeout)	PDF2OfficeSettingData (string metrics_data_folder_path, bool enable_ml_recognition, Range page_range, bool include_pdf_comments, PDF2WordSettingData word_setting_data, PDF2PowerPointSettingData power_point_setting_data, PDF2ExcelSettingData excel_setting_data, bool enable_trailing_space, bool include_images, int timeout, <b>bool enable_matching_system_fonts</b> )
	void Set(string metrics_data_folder_path, bool enable_ml_recognition, Range page_range, bool include_pdf_comments, PDF2WordSettingData word_setting_data, PDF2PowerPointSettingData power_point_setting_data, PDF2ExcelSettingData excel_setting_data, bool enable_trailing_space, bool include_images, int timeout)	void Set(string metrics_data_folder_path, bool enable_ml_recognition, Range page_range, bool include_pdf_comments, PDF2WordSettingData word_setting_data, PDF2PowerPointSettingData power_point_setting_data, PDF2ExcelSettingData excel_setting_data, bool enable_trailing_space, bool include_images, int timeout)

Class	SDK 11.0	SDK 11.1
		timeout, <b>bool enable_matching_system_fonts</b> )
foxit.addon.conversion. <b>Convert</b>	static void FromWord(string src_word_file_path, string src_file_password, string saved_pdf_path, Word2PDFSettingData setting_data)	static void FromWord(string src_word_file_path, string src_file_password, string saved_pdf_path, Word2PDFSettingData setting_data, <b>Convert.Office2PdfEngine engine</b> )
	static void FromExcel(string src_excel_file_path, string src_file_password, string saved_pdf_path, Excel2PDFSettingData setting_data)	static void FromExcel(string src_excel_file_path, string src_file_password, string saved_pdf_path, Excel2PDFSettingData setting_data, <b>Convert.Office2PdfEngine engine</b> )
	static void FromPowerPoint(string src_ppt_file_path, string src_file_password, string saved_pdf_path, PowerPoint2PDFSettingData setting_data)	static void FromPowerPoint(string src_ppt_file_path, string src_file_password, string saved_pdf_path, PowerPoint2PDFSettingData setting_data, <b>Convert.Office2PdfEngine engine</b> )
foxit.addon.ocr. <b>OCR Config</b>	OCRConfig(bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode, bool is_sequentially_process)	OCRConfig(bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode, bool is_sequentially_process, <b>bool is_auto_overwrite_resolution, int resolution_to_overwrite, int confidence</b> )
	void Set(bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode, bool is_sequentially_process)	void Set(bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode, bool is_sequentially_process, <b>bool is_auto_overwrite_resolution, int resolution_to_overwrite, int confidence</b> )
foxit.addon.ocr. <b>OCR</b>	void OCRPDFPage(PDFPage pdf_page, bool is_editable)	void OCRPDFPage(PDFPage pdf_page, bool is_editable, <b>OCRProgressCallback callback</b> )
	void OCRPDFPage(PDFPage pdf_page, bool is_editable, OCRConfig config)	void OCRPDFPage(PDFPage pdf_page, bool is_editable, OCRConfig config, <b>OCRProgressCallback callback</b> )
	void OCRPDFDocument(PDFDoc pdf_doc, bool is_editable)	void OCRPDFDocument(PDFDoc pdf_doc, bool is_editable, <b>OCRProgressCallback callback</b> )
	void OCRPDFDocument(PDFDoc pdf_doc, bool is_editable, OCRConfig config)	void OCRPDFDocument(PDFDoc pdf_doc, bool is_editable, OCRConfig config, <b>OCRProgressCallback callback</b> )
	void OCRPDFDocuments(OCRSettingDataArray settingdata_array)	void OCRPDFDocuments(OCRSettingDataArray settingdata_array, <b>OCRProgressCallback callback</b> )
	void OCRConvertTo(OCR.OCRConvertFormat format, string src_pdf_path, string password, string saved_file_path, Range page_range, bool is_retain_flow_text)	void OCRConvertTo(OCR.OCRConvertFormat format, string src_pdf_path, string password, string saved_file_path, Range page_range, bool is_retain_flow_text, <b>OCRProgressCallback callback</b> )
	void OCRConvertTo(OCR.OCRConvertFormat format, string src_pdf_path, string password, string saved_file_path, Range page_range, bool is_retain_flow_text, OCRConfig config)	void OCRConvertTo(OCR.OCRConvertFormat format, string src_pdf_path, string password, string saved_file_path, Range page_range, bool is_retain_flow_text, OCRConfig config, <b>OCRProgressCallback callback</b> )

## Upgrading to version 11.0 from version 10.1

If you are upgrading from version 10.1 to version 11.0, please take note of the changes that occurred between version 10.1 and version 11.0.

- The multi-thread-safe API `static void foxit.common.Library.EnableThreadSafety(bool is_enable_thread_safety)` is being gradually deprecated. Foxit PDF SDK will further enhance support for document-level thread safety. This requires users to ensure that each document runs on only one thread.

Furthermore, given the particularities of XFA and JavaScript, Foxit PDF SDK has introduced the parameter `enable_js_xfa_threadsafety` in `static ErrorCode foxit.common.Library.Initialize(string sn, string key, bool is_optimize_memory, bool enable_js_xfa_threadsafety)`, allowing users to enable document-level thread safety for XFA and JavaScript.

- In `foxit.addon.tablegenerator.TableGeneratorCallback` class, add a new callback function as below:

```
virtual PageBasicInfo GetNewPageBasicInfo (int page_index, float rest_table_height, float table_width)
```

- Some APIs have been changed in version 11.0. The following table lists the APIs mapping between version 10.1 and 11.0.

Class	SDK 10.1	SDK 11.0
foxit.pdf. <b>PDFDoc</b>	PagingSealSignature AddPagingSealSignature (Range page_range, float width, float height)	PagingSealSignature AddPagingSealSignature (Range page_range, float width, float height, <b>bool to_check_permission</b> )
foxit.addon.ocr. <b>OCRConfig</b>	OCRConfig (bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode)	OCRConfig (bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode, <b>bool is_sequentially_process</b> )
	void Set (bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode)	void Set (bool is_detect_pictures, bool is_remove_noise, bool is_correct_skew, bool is_enable_text_extraction_mode, <b>bool is_sequentially_process</b> )
foxit.addon.xfa. <b>DocProviderCallback</b>	virtual void SetFocus (XFAWidget xfa_widget)	virtual void SetFocus (XFAWidget xfa_widget, <b>bool is_relayout</b> )

Class	SDK 10.1	SDK 11.0
foxit.common. <b>Library</b>	static ErrorCode Initialize (string sn, string key, bool is_optimize_memory)	static ErrorCode Initialize (string sn, string key, bool is_optimize_memory, <b>bool enable_js_xfa_threadsafty</b> )
foxit.addon.conversion. <b>HTML2PDFSettingData</b>	HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag, HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks, HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode, HTML2PDFSettingData.HTML2PDFEncodingFormat encoding_format, bool to_render_images, bool to_remove_underline_for_link, bool to_set_headerfooter, string headerfooter_title, string headerfooter_url, string bookmark_root_name, bool to_resize_objects, bool to_print_background, bool to_optimize_tag_tree, HTML2PDFSettingData.HTML2PDFMediaStyle media_style, bool to_load_active_content, bool to_disable_sandbox, bool to_use_blacklist)	HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag, HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks, HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode, HTML2PDFSettingData.HTML2PDFEncodingFormat encoding_format, bool to_render_images, bool to_remove_underline_for_link, bool to_set_headerfooter, string headerfooter_title, string headerfooter_url, string bookmark_root_name, bool to_resize_objects, bool to_print_background, bool to_optimize_tag_tree, HTML2PDFSettingData.HTML2PDFMediaStyle media_style, bool to_load_active_content, bool to_disable_sandbox, bool to_use_blacklist, <b>bool to_hide_header, bool to_hide_footer, bool to_deny_local_file_access</b> )
	void Set (float page_width, float page_height, bool is_to_page_scale, RectF page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag, HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks, HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode, HTML2PDFSettingData.HTML2PDFEncodingFormat encoding_format, bool to_render_images, bool to_remove_underline_for_link, bool to_set_headerfooter, string headerfooter_title, string headerfooter_url, string bookmark_root_name, bool to_resize_objects, bool to_print_background, bool to_optimize_tag_tree,	void Set (float page_width, float page_height, bool is_to_page_scale, RectF page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag, HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks, HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode, HTML2PDFSettingData.HTML2PDFEncodingFormat encoding_format, bool to_render_images, bool to_remove_underline_for_link, bool to_set_headerfooter, string headerfooter_title, string headerfooter_url, string bookmark_root_name, bool to_resize_objects, bool to_print_background, bool to_optimize_tag_tree,

Class	SDK 10.1	SDK 11.0
	HTML2PDFSettingData.HTML2PDFMediaStyle media_style, bool to_load_active_content, bool to_disable_sandbox, bool to_use_blacklist)	HTML2PDFSettingData.HTML2PDFMediaStyle media_style, bool to_load_active_content, bool to_disable_sandbox, bool to_use_blacklist, <b>bool to_hide_header, bool to_hide_footer, bool to_deny_local_file_access)</b>

## Upgrading to version 10.1 from version 10.0

If you are upgrading from version 10.0 to version 10.1, please take note of the changes that occurred between version 10.0 and version 10.1.

- In foxit.pdf.**TiledWatermarkSettings** class:
  - add a new property called **flags**. By default, the tiled watermark is no longer positioned at the top. To retain the original behavior, where the watermark appears at the top, you need to set the property **flags** to **foxit.pdf.TiledWatermarkSettings.Flags.e\_FlagOnTop**.
  - the constructor function of **TiledWatermarkSettings** has added a new parameter as below:

SDK 10.0:

```
TiledWatermarkSettings (float row_space, float col_space, float rotation, int opacity, int scale)
```

SDK 10.1:

```
TiledWatermarkSettings (float row_space, float col_space, float rotation, int opacity, int scale, int flags)
```

- the function **Set** has added a new parameter as below:

SDK 10.0:

```
void Set (float row_space, float col_space, float rotation, int opacity, int scale)
```

SDK 10.1:

```
void Set (float row_space, float col_space, float rotation, int opacity, int scale, int flags)
```

- In foxit.pdf.graphics.ImageObject class, the **CloneBitmap(GraphicsObjects graphics\_objects)** function has been deprecated and replaced with **CloneBitmap(PDFPage page, GraphicsObjects graphics\_objects)**.

- In foxit.addon.conversion.pdf2office.**PDF2OfficeSettingData** class:
  1. the property "[metrics\\_data\\_folder\\_path](#)" has been deprecated. Instead, metrics data will be included in the dynamic library of Foxit PDF Conversion SDK.
  2. the parameter "[metrics\\_data\\_folder\\_path](#)" in the constructor function of **PDF2OfficeSettingData** has been deprecated.
  3. the parameter "[metrics\\_data\\_folder\\_path](#)" in the function of **Set** has been deprecated.

## Upgrading to version 10.0 from version 9.2

If you are upgrading from version 9.2 to version 10.0, please take note of the changes that occurred between version 9.2 and version 10.0.

- For Compliance module, the compliance resource files have been updated, please contact Foxit support team or sales team to get the latest resource files package.

Only the latest engine can be used with version 10.0, using the older engine will cause errors. Version 9.2 is not compatible with the latest engine, it will throw errors in multi-threading situations.

- If you are using an older version of Windows (for example, Windows 7 and Windows Server 2008), you may need to visit this link <https://support.microsoft.com/en-us/help/4019990/update-for-the-d3dcompiler-47-dll-component-on-windows> to download and install the "D3DCOMPILER\_47.dll". If you do not do this, you may encounter errors.
- In foxit.addon.conversion.pdf2office.**PDF2WordSettingData** class:

1. add two new properties as below:

```
bool enable_generate_headers_and_footers;
bool enable_generate_footnotes_and_endnotes;
```

2. the constructor function of **PDF2WordSettingData** has added two new parameters as below:

SDK 9.2:

```
PDF2WordSettingData(bool enable_retain_page_layout)
```

SDK 10.0:

```
PDF2WordSettingData(bool enable_retain_page_layout, bool  
enable_generate_headers_and_footers, bool  
enable_generate_footnotes_and_endnotes)
```

3. the function **Set** has added two new parameters as below:

SDK 9.2:

```
void Set(bool enable_retain_page_layout)
```

SDK 10.0:

```
void Set(bool enable_retain_page_layout, bool enable_generate_headers_and_footers,  
bool enable_generate_footnotes_and_endnotes)
```

- In foxit.addon.conversion.pdf2office.**PDF2OfficeSettingData** class:

1. add two new properties as below:

```
PDF2PowerPointSettingData power_point_setting_data;  
PDF2ExcelSettingData excel_setting_data;
```

2. the constructor function of **PDF2OfficeSettingData** has added two new parameters as below:

SDK 9.2:

```
PDF2OfficeSettingData(string metrics_data_folder_path, bool enable_ml_recognition,  
Range page_range, bool include_pdf_comments, PDF2WordSettingData  
word_setting_data)
```

SDK 10.0:

```
PDF2OfficeSettingData(string metrics_data_folder_path, bool enable_ml_recognition,  
Range page_range, bool include_pdf_comments, PDF2WordSettingData  
word_setting_data, PDF2PowerPointSettingData power_point_setting_data,  
PDF2ExcelSettingData excel_setting_data)
```

3. the function **Set** has added two new parameters as below:

SDK 9.2:

```
void Set(string metrics_data_folder_path, bool enable_ml_recognition, Range page_range,  
bool include_pdf_comments, PDF2WordSettingData word_setting_data)
```

SDK 10.0:



```
void Set(string metrics_data_folder_path, bool enable_ml_recognition, Range page_range,
bool include_pdf_comments, PDF2WordSettingData word_setting_data,
PDF2PowerPointSettingData power_point_setting_data, PDF2ExcelSettingData
excel_setting_data)
```

## Upgrading to version 9.2 from version 9.1

If you are upgrading from version 9.1 to version 9.2, please take note of the changes that occurred between version 9.1 and version 9.2.

- For PDF to Office module, the version of the PDF to Office resource files package naming Foxit PDF Conversion SDK (C++) should be 1.5 or higher.
- In foxit.addon.conversion.pdf2office.**PDF2OfficeSettingData** class:

- add three new properties as below:

```
Range page_range;
bool include_pdf_comments;
PDF2WordSettingData word_setting_data;
```

- the constructor function of **PDF2OfficeSettingData** has added three new parameters as below:

SDK 9.1:

```
PDF2OfficeSettingData (string metrics_data_folder_path, bool enable_ml_recognition)
```

SDK 9.2:

```
PDF2OfficeSettingData (string metrics_data_folder_path, bool enable_ml_recognition,
Range page_range, bool include_pdf_comments, PDF2WordSettingData
word_setting_data)
```

- the function **Set** has added three new parameters as below:

SDK 9.1:

```
void Set (string metrics_data_folder_path, bool enable_ml_recognition)
```

SDK 9.2:

```
void Set (string metrics_data_folder_path, bool enable_ml_recognition, Range
page_range, bool include_pdf_comments, PDF2WordSettingData word_setting_data)
```

- In foxit.pdf.actions.**ActionCallback** class, add five new callback functions as below:

```
virtual void EnablePageLoop(bool is_loop)
virtual bool IsPageLoop()
virtual void SetDefaultPageTransitionMode(string trans_type, string trans_di)
virtual bool IsCurrentDocOpenedInBrowser()
virtual void PostMessageToHtml(WStringArray message)
```

## Upgrading to version 9.1 from version 9.0

If you are upgrading from version 9.0 to version 9.1, please take note of the changes that occurred between version 9.0 and version 9.1.

- Remove the reference to **System.Drawing.Common**.
- For Compliance module, the compliance resource files have been updated, please contact Foxit support team or sales team to get the latest resource files package.
- In foxit.pdf.actions.**ActionCallback** class:
  1. add a new callback function as below:

```
virtual SOAPResponseInfo SoapRequest (SOAPRequestProperties request_params)
```

2. the function **OpenDoc** has been changed as below:

SDK 9.0:

```
virtual bool OpenDoc (string file_path, string password)
```

SDK 9.1:

```
virtual PDFDoc OpenDoc (string file_path, string password)
```

## Upgrading to version 9.0 from version 8.4.2

If you are upgrading from version 8.4.2 to version 9.0, please take note of the changes that occurred between version 8.4.2 and version 9.0.

- For HTML to PDF module, the HTML to PDF engine has been upgraded, please contact Foxit support team or sales team to get the latest engine files package.
- For OCR module, the OCR engine for Windows has been upgraded, please contact Foxit support team or sales team to get the latest engine files package.
- In foxit.pdf.actions.**ActionCallback** class:
  1. add four new callback functions as below:

```
virtual void Query (string keywords, ActionCallback.SearchScope search_scope,
SearchOption search_option, string di_path)

virtual SearchIndexConfig AddSearchIndex (string di_path, bool is_selected)

virtual bool RemoveSearchIndex (SearchIndexConfig search_index_config)

virtual WStringArray GetSignatureAPStyleNameList ()
```

- the function **SelectPageNthWord** has been changed as below:

SDK 8.4.2:

```
virtual void SelectPageNthWord (int page_index, int word_index, bool is_show_selection)
```

SDK 9.0:

```
virtual void SelectPageNthWord (int page_index, int start_offset, int end_offset, bool
is_show_selection)
```

## Upgrading to version 8.4.2 from version 8.4.1

There is only one minor upgrade warning in this release when moving from version 8.4.1 to version 8.4.2:

- For OCR module, the OCR engine has been upgraded, please contact Foxit support team or sales team to get the latest engine files package.

## Upgrading to version 8.4.1 from version 8.4

There are two minor upgrade warnings in this release when moving from version 8.4 to version 8.4.1:

- For HTML to PDF module, the HTML to PDF engine has been upgraded, please contact Foxit support team or sales team to get the latest engine files package.
- The namespace of table generator related classes has been changed from **foxit.addon** to **foxit.addon.tablegenerator**. The classes are listed as follows:
  - TableBorderInfo
  - TableCellData
  - TableCellDataArray
  - TableCellDataColArray
  - TableCellIndexArray
  - TableData
  - TableGenerator

## Upgrading to version 8.4 from version 8.3

If you are upgrading from version 8.3 to version 8.4, please take note of the changes that occurred between version 8.3 and version 8.4.

- For OCR module, the OCR engine has been upgraded, please contact Foxit support team or sales team to get the latest engine files package.
- In foxit.pdf.actions.**ActionCallback** class:
  1. Add thirty-one new callback functions as below:

```
virtual void SetCurrentPage(PDFDoc document, Destination destination)
virtual void CloseDoc(PDFDoc document, bool is_prompt_to_save)
virtual bool IsLocalFile(PDFDoc document)
virtual string GetAttachmentsFilePath(PDFDoc pdf_doc, string name)
virtual string GetExtractedEmbeddedFilePath(PDFDoc pdf_doc, string name)
virtual bool Print(PDFDoc document, PrintParams print_params)
virtual string GetUntitledBookmarkName()
virtual WStringArray GetPrinterNameList()
virtual bool AddToolButton(ButtonItem button_item)
virtual bool RemoveToolButton(string button_name)
virtual MenuListArray GetMenuItemNameList()
virtual bool AddMenuItem(MenuitemConfig menu_item_config, bool is_prepend)
virtual bool AddSubMenu(MenuitemConfig menu_item_config)
virtual bool ShowDialog(DialogDescriptionConfig dlg_config)
virtual bool GetFullScreen()
virtual void SetFullScreen(bool is_full_screen)
virtual void OnFieldValueChanged(string field_name,
ActionCallback.JSFieldValueChangeType type, WStringArray value_before_changed,
WStringArray value_after_changed)
virtual void UpdateLogicalLabel()
virtual ActionCallback.JsMailResult MailDoc(PDFDoc document, string to_address, string
cc_address, string bcc_address, string subject, string message, bool is_ui)
virtual string GetTemporaryFileName(PDFDoc document, string file_suffix_name)
virtual MediaPlayerCallback OpenMediaPlayer(PlayerArgs player_args)
virtual string GetTemporaryDirectory()
virtual void Scroll(PointF point)
virtual void SelectPageNthWord(int page_index, int word_index, bool is_show_selection)
virtual PointF GetMousePosition()
virtual RectF GetPageWindowRect()
virtual ActionCallback.LayoutMode GetLayoutMode()
virtual void SetLayoutMode(ActionCallback.LayoutMode layout_mode, bool
is_cover_mode)
```

```
virtual float GetPageScale()
virtual void SetPageScale(Destination.ZoomMode zoom_mode, Destination dest)
virtual Destination.ZoomMode GetPageZoomMode()
```

- In foxit.pdf.**PDFPage** class:
  1. the function **Transform** has added a new parameter as below:

SDK 8.3:

```
bool Transform(Matrix2D matrix, bool need_transform_clip_path )
```

SDK 8.4:

```
bool Transform(Matrix2D matrix, bool need_transform_clip_path, bool
need_transform_annotations)
```

- In foxit.pdf.**annots** namespace:
  1. Remove PagingSeal class.

## Upgrading to version 8.3 from version 8.2

If you are upgrading from version 8.2 to version 8.3, please take note of the changes that occurred between version 8.2 and version 8.3.

- For HTML to PDF module, the HTML to PDF engine has been upgraded, please contact Foxit support team or sales team to get the latest engine files package.
- In foxit.pdf.annots.**FreeText** class, the following two functions have been deprecated:

```
Alignment GetAlignment ()
void SetAlignment (Alignment alignment)
```

- In foxit.pdf.actions.**ActionCallback** class:
  1. the function **PopupMenu** has added a new parameter as below:

SDK 8.2:

```
virtual string PopupMenu (MenuListArray menus)
```

SDK 8.3:

```
virtual string PopupMenu (MenuListArray menus, ref bool is_selected_item)
```

2. the function **SubmitForm** has added a new parameter as below:

SDK 8.2:

```
virtual bool SubmitForm (PDFDoc document, global::System.IntPtr form_data, int length,
string url)
```

SDK 8.3:

```
virtual bool SubmitForm (PDFDoc document, global::System.IntPtr form_data, int length,
string url, FileFormatType file_format_type)
```

3. add a new callback function as below:

```
virtual MenuItemEx PopupMenuEx (MenuItemExArray menus, ref bool is_selected_item)
```

- In foxit.addon.conversion.**HTML2PDFSettingData** class,
  1. the constructor function of **HTML2PDFSettingData** has added new parameters as below:

SDK 8.2:

```
HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF
page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks,
HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode)
```

SDK 8.3:

```
HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF
page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks,
HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode,
HTML2PDFSettingData.HTML2PDFEncodingFormat encoding_format, bool
to_render_images, bool to_remove_underline_for_link, bool to_set_headerfooter,
string headerfooter_title, string headerfooter_url, string bookmark_root_name, bool
to_resize_objects, bool to_print_background, bool to_optimize_tag_tree,
HTML2PDFSettingData.HTML2PDFMediaStyle media_style)
```

2. the function **Set** has added new parameters as below:

SDK 8.2:

```
void Set (float page_width, float page_height, bool is_to_page_scale, RectF page_margin,
bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks,
HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode)
```

SDK 8.3:

```
void Set (float page_width, float page_height, bool is_to_page_scale, RectF page_margin,
bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks,
HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode,
HTML2PDFSettingData.HTML2PDFEncodingFormat encoding_format, bool
to_render_images, bool to_remove_underline_for_link, bool to_set_headerfooter,
string headerfooter_title, string headerfooter_url, string bookmark_root_name, bool
to_resize_objects, bool to_print_background, bool to_optimize_tag_tree,
HTML2PDFSettingData.HTML2PDFMediaStyle media_style)
```

## Upgrading to version 8.2 from version 8.1

If you are upgrading from version 8.1 to version 8.2, please take note of the changes that occurred between version 8.1 and version 8.2.

- For Compliance module, the compliance resource files have been updated, please contact Foxit support team or sales team to get the latest resource files package.
- For HTML to PDF module, the HTML to PDF engine has been upgraded, please contact Foxit support team or sales team to get the latest engine files package.
- In foxit.pdf.interform.**FillerAssistCallback** class, add a new callback function as below:

```
virtual void ReportInvalidValue (string form_field_name, string invalid_value)
```

- In foxit.addon.conversion.**HTML2PDFSettingData** class,
  1. the constructor function of **HTML2PDFSettingData** has added a new parameter as below:

SDK 8.1:

```
HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF
page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks)
```

SDK 8.2:

```
HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF
page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks,
HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode)
```

2. the function **Set** has added a new parameter as below:

SDK 8.1:

```
void Set (float page_width, float page_height, bool is_to_page_scale, RectF page_margin,  
bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,  
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks)
```

SDK 8.2:

```
void Set (float page_width, float page_height, bool is_to_page_scale, RectF page_margin,  
bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag,  
HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks,  
HTML2PDFSettingData.HTML2PDFScalingMode scaling_mode)
```

## Upgrading to version 8.1 from version 8.0

If you are upgrading from version 8.0 to version 8.1, please take note of the changes that occurred between version 8.0 and version 8.1.

- In foxit.pdf.interform.**FillerAssistCallback** class, add seven callback functions as below:

```
virtual global::System.IntPtr CreatePopupMenu ()  
virtual bool AppendPopupMenuitem (global::System.IntPtr h_popup_menu,  
FillerAssistCallback.PopupMenuitem popup_menu_item, string default_string)  
virtual bool EnablePopupMenuitem (global::System.IntPtr h_popup_menu,  
FillerAssistCallback.PopupMenuitem popup_menu_item, bool is_enabled)  
virtual bool ShowPopupMenu (global::System.IntPtr h_popup_menu, PointF point)  
virtual void DestroyPopupMenu (global::System.IntPtr h_popup_menu)  
virtual void SetClipboardText (string text)  
virtual string GetClipboardText ()
```

- In foxit.pdf.actions.**IdentityProperties** class:

1. add four properties as below:

```
string department[get, set]  
string first_name[get, set]  
string last_name[get, set]  
string title[get, set]
```

2. the constructor function of **IdentityProperties** has added four new parameters as below:



SDK 8.0:

```
IdentityProperties (string corporation, string email, string login_name, string name)
```

SDK 8.1:

```
IdentityProperties (string corporation, string email, string login_name, string name, string first_name, string last_name, string title, string department)
```

- the function **Set** has added four new parameters as below:

SDK 8.0:

```
void Set (string corporation, string email, string login_name, string name)
```

SDK 8.1:

```
void Set (string corporation, string email, string login_name, string name, string first_name, string last_name, string title, string department)
```

- In `foxit.pdf.actions.ActionCallback` class, add a new callback function as below:

```
virtual bool SetIdentityProperties (IdentityProperties identity_properties)
```

## Upgrading to version 8.0 from version 7.6

There are two minor upgrade warnings in this release when moving from version 7.6 to version 8.0:

- In `foxit.addon.conversion.HTML2PDFSettingData` class, the constructor function of `HTML2PDFSettingData` has added a new parameter as below:

SDK 7.6:

```
HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag, HTML2PDFSettingData.HTML2PDFPageMode page_mode)
```

SDK 8.0:

```
HTML2PDFSettingData (float page_width, float page_height, bool is_to_page_scale, RectF page_margin, bool is_convert_link, Rotation rotate_degrees, bool is_generate_tag, HTML2PDFSettingData.HTML2PDFPageMode page_mode, bool to_generate_bookmarks)
```

- In `foxit.pdf.PDFPage` class, the function `AddSignature` has added a new parameter as below:

SDK 7.6:

```
Signature AddSignature (RectF rect, string field_name, Signature.SignatureType
signature_type)
```

SDK 8.0:

```
Signature AddSignature (RectF rect, string field_name, Signature.SignatureType signature_type,
bool to_check_permission)
```

## Upgrading to version 7.6 from version 7.5

There are two minor upgrade warnings in this release when moving from version 7.5 to version 7.6:

- In **foxit.pdf.actions.ActionCallback** class, add a new callback interface as below:

```
public virtual string BrowseFile(bool is_open_dialog, string file_format, string file_filter)
```

- In **foxit.pdf.LTVVerifier** class, remove the value (**e\_VerifyModeETSI**) of the enumeration **LTVVerifier.VerifyMode**.

## Upgrading to version 7.5 from version 7.4

There are two minor upgrade warnings in this release when moving from version 7.4 to version 7.5. In **foxit.pdf.HeaderFooter** class:

- The parameters of constructor function of **HeaderFooter** have been changed:

SDK 7.4:

```
HeaderFooter(Font font, float text_size, int text_color, PageNumberRange page_range, RectF
page_margin, bool has_text_shrunked,
bool has_fixedsize_for_print, int start_page_number, HeaderFooterContent content)
```

SDK 7.5:

```
HeaderFooter(Font font, float text_size, int text_color, PageNumberRange page_range, RectF
page_margin, bool has_text_shrunked,
bool has_fixedsize_for_print, int start_page_number, HeaderFooterContent content, bool
is_to_embed_font, bool is_underline)
```

- The parameters of **Set** function have been changed:

SDK 7.4:

```
void Set(Font font, float text_size, int text_color, PageNumberRange page_range, RectF
page_margin, bool has_text_shrunked, bool has_fixedsize_for_print, int start_page_number,
HeaderFooterContent content)
```

SDK 7.5:

```
void Set(Font font, float text_size, int text_color, PageNumberRange page_range, RectF  
page_margin, bool has_text_shrunked, bool has_fixedsize_for_print, int start_page_number,  
HeaderFooterContent content, bool is_to_embed_font, bool is_underline)
```

## Upgrading to version 7.4 from version 7.3

If you are upgrading from version 7.3 to version 7.4, please take note of the changes that occurred between version 7.3 and version 7.4.

- The value (**e\_ImageCompressjpeg2**) of the enumeration class foxit.addon.optimization.MonolImageSettings.**MonolImageCompressMode** has been renamed to **e\_ImageCompressjbig2**.

- In foxit.pdf.annots.**Markup** class:

The functions below have been removed from version 7.4:

```
public int GetStateAnnotCount(Markup.StateModel model)  
public Note GetStateAnnot(Markup.StateModel model, int index)
```

And then add a new function as below:

```
public NoteArray GetStateAnnots(Markup.StateModel model)
```

- In foxit.pdf.actions.**ActionCallback** class, add three callback functions as below:

```
public virtual PDFDoc GetCurrentDoc()  
public virtual PDFDoc CreateBlankDoc()  
public virtual bool OpenDoc(string file_path, string password)
```

- Some APIs have been changed in version 7.4. The following table lists the APIs mapping between version 7.3 and 7.4.

Class	SDK 7.3	SDK 7.4
foxit.addon.conversion. <b>Word2PDFSettingData</b>	public Word2PDFSettingData(bool include_doc_props, <b>bool convert_to_pdfa</b> , Word2PDFSettingData.ConvertOptimizeOption optimize_option, Word2PDFSettingData.ConvertContentOption content_option, Word2PDFSettingData.ConvertBookmarkOption bookmark_option)	public Word2PDFSettingData(bool include_doc_props, Word2PDFSettingData.ConvertOptimizeOption optimize_option, Word2PDFSettingData.ConvertContentOption content_option, Word2PDFSettingData.ConvertBookmarkOption bookmark_option, <b>bool convert_to_pdfa</b> )
	public void Set(bool include_doc_props, <b>bool convert_to_pdfa</b> , Word2PDFSettingData.ConvertOptimizeOption optimize_option,	public void Set(bool include_doc_props, Word2PDFSettingData.ConvertOptimizeOption optimize_option, Word2PDFSettingData.ConvertCont

Class	SDK 7.3	SDK 7.4
	Word2PDFSettingData.ConvertContentOption content_option, Word2PDFSettingData.ConvertBookmarkOption bookmark_option)	entOption content_option, Word2PDFSettingData.ConvertBookmarkOption bookmark_option, <b>bool convert_to_pdfa</b> )
foxit.addon.conversion. <b>Excel2PDFSettingData</b>	public Excel2PDFSettingData(bool include_doc_props, <b>bool convert_to_pdfa</b> , Excel2PDFSettingData.ConvertQuality quality, bool ignore_print_area, Excel2PDFSettingData.ScaleType scale_type)	public Excel2PDFSettingData(bool include_doc_props, Excel2PDFSettingData.ConvertQuality quality, bool ignore_print_area, Excel2PDFSettingData.ScaleType scale_type, <b>bool convert_to_pdfa</b> )
	public void Set(bool include_doc_props, <b>bool convert_to_pdfa</b> , Excel2PDFSettingData.ConvertQuality quality, bool ignore_print_area, Excel2PDFSettingData.ScaleType scale_type)	public void Set(bool include_doc_props, Excel2PDFSettingData.ConvertQuality quality, bool ignore_print_area, Excel2PDFSettingData.ScaleType scale_type, <b>bool convert_to_pdfa</b> )
foxit.pdf.annots. <b>Markup</b>	public Note AddStateAnnot(Markup.StateModel model, Markup.State state)	public Note AddStateAnnot( <b>string title</b> , Markup.StateModel model, Markup.State state)
foxit.pdf. <b>TextSearch</b>	public TextSearch(foxit.pdf.PDFDoc document, SearchCancelCallback cancel)	public TextSearch(foxit.pdf.PDFDoc document, SearchCancelCallback cancel, <b>int flags</b> )
foxit.common. <b>Font</b>	public <b>string</b> GetFamilyName()	public <b>byte[]</b> GetFamilyName()
	public <b>string</b> GetBaseFontName(PDFDoc document)	public <b>byte[]</b> GetBaseFontName(PDFDoc document)
foxit.pdf.annots. <b>FreeText</b>	void SetTextMatrix(Matrix2D text_matrix)	deprecated
	Matrix2D GetTextMatrix()	deprecated

## Upgrading to version 7.3 from version 7.2

There are some minor upgrade warnings in this release when moving from version 7.2 to version 7.3:

- The enumeration **foxit.pdf.graphics.ImageObject.ColorSpace** has been changed to **foxit.common.ColorSpaceType**.
- The enumeration foxit.pdf.interform.Field.Flags.**e\_FlagChoiseMultiSelect** has been changed to foxit.pdf.interform.Field.Flags.**e\_FlagChoiceMultiSelect**.
- The TrustedCertStoreCallback class adds a new callback function (**virtual bool IsCertTrustedRoot (byte[] cert)**).

## Upgrading to version 7.2 from version 7.1

There is only one minor upgrade warning in this release when moving from version 7.1 to version 7.2. In this release we worked hard to ensure that no modifications to existing code bases would be required when upgrading.

The parameter type of the function **foxit.addon.optimization.ImageSettings.SetQuality** has been changed as below:

#### SDK 7.1:

```
void foxit.addon.optimization.ImageSettings.SetQuality (int quality)
```

#### SDK 7.2:

```
void foxit.addon.optimization.ImageSettings.SetQuality (ImageSettings.ImageCompressQuality quality)
```

## Upgrading to version 7.1 from version 7.0

If you are upgrading from version 7.0 to version 7.1, please take note of the changes that occurred between version 7.0 and version 7.1.

- From 7.1 version, the whole **foxit.addon.ConnectedPDF** class has been removed.
- Some APIs have been changed in version 7.1. Note that the APIs related to ConnectedPDF in the PDFDoc class have also been removed. The following table lists the APIs mapping between version 7.0 and 7.1.

SDK 7.0	SDK 7.1
<b>Charset</b> foxit.common.Font. <b>GetCharset</b> (PDFDoc document )	<b>CIDCharset</b> foxit.common.Font. <b>GetCIDCharset</b> (PDFDoc document)
void foxit.pdf.annots.Line.SetMeasureUnit( <b>int</b> measure_type, string unit)	void foxit.pdf.annots.Line.SetMeasureUnit( <b>MeasureType</b> measure_type, string unit)
string foxit.pdf.annots.Line.GetMeasureUnit( <b>int</b> measure_type)	string foxit.pdf.annots.Line.GetMeasureUnit( <b>MeasureType</b> measure_type)
void foxit.pdf.annots.Line.SetMeasureConversionFactor( <b>int</b> measure_type, float factor)	void foxit.pdf.annots.Line.SetMeasureConversionFactor( <b>MeasureType</b> measure_type, float factor)
float foxit.pdf.annots.Line.GetMeasureConversionFactor( <b>int</b> measure_type)	float foxit.pdf.annots.Line.GetMeasureConversionFactor( <b>MeasureType</b> measure_type)
bool foxit.pdf.PDFDoc.IsCPDF()	Removed
bool foxit.pdf.PDFDoc.IsCDRM()	Removed
string foxit.pdf.PDFDoc.GetDocURI()	Removed
string foxit.pdf.PDFDoc.GetEndpoint()	Removed

## Upgrading to version 7.0 from version 6.4

There are two minor upgrade warnings in this release when moving from version 6.4 to version 7.0:

- The value of enumeration **foxit.pdf.Signature.States.e\_StateUnknown** has been changed from 0 to 0x80000000.
- The functions **foxit.pdf.Signature.StartVerify** and **foxit.pdf.SignatureCallback.VerifySigState** are only used to verify the integrity of a signature instead of the validity of a signature, so that the return value of **VerifySigState** in the default signature callback has been changed from "VALID/INVALID" to "NOCHANGE/CHANGE".

## Upgrading to version 6.4 from version 6.3

There are two minor upgrade warnings in this release when moving from version 6.3 to version 6.4.

- The function **foxit.common.Renderer.SetTransformAnnotIcon** has been deprecated.
- The parameter "**is\_transform\_icon**" of the function **foxit.pdf.annots.Annot.GetDeviceRect** has been deprecated.

## Upgrading to version 6.3 from version 6.2.1

There is only one minor upgrade warning in this release when moving from version 6.2.1 to version 6.3. In this release we worked hard to ensure that no modifications to existing code bases would be required when upgrading.

The function name of **foxit.pdf.interform.Field.SetDefaultValue** has been changed to **foxit.pdf.interform.Field.SetDefaultValue**.

## Upgrading to version 6.2.1 from version 6.2

There is only one upgrade warning in this release when moving from version 6.2 to version 6.2.1. In this release we worked hard to ensure that no modifications to existing code bases would be required when upgrading.

Add a callback interface **WidgetEvent** in **foxit.addon.xfa.DocProviderCallback** class to execute xfa widget event when you create or destroy xfa widget.

## Upgrading to version 6.2 from version 6.1.1

There is only one upgrade warning in this release when moving from version 6.1.1 to version 6.2. In this release we worked hard to ensure that no modifications to existing code bases would be required when upgrading.

The return type of `foxit.addon.xfa.XFADoc.ExportData` has been changed from **void** to **bool**.

## Upgrading to version 6.1.1 from version 6.1

If you are upgrading from version 6.1 to version 6.1.1, please take note of the changes that occurred between version 6.1 and version 6.1.1.

For the version 6.1.1 release of Foxit PDF SDK for .NET, there are a few minor changes:

- Add a new class "foxit.common.fxcr.StreamCallback", and change the parameter in the `foxit.common.Image.SaveAs` function from  
"public bool foxit.common.Image.SaveAs(**WriteCallback** file, string file\_extension)"  
to  
"public bool foxit.common.Image.SaveAs(**StreamCallback** file, string file\_extension)".
- Change the enum definitions of watermark position from  
"**foxit.pdf.WatermarkSettings.Position**" to "**foxit.common.Position**".
- The return type for some API functions were changed:

```
string foxit.pdf.objects.PDFObject.GetString    -->  
byte[] foxit.pdf.objects.PDFObject.GetString  
  
string foxit.pdf.SignatureCallback.GetDigest   -->  
byte[] foxit.pdf.SignatureCallback.GetDigest  
  
string foxit.pdf.SignatureCallback.Sign        -->  
byte[] foxit.pdf.SignatureCallback.Sign
```

If you use any of these functions in your code then you may need to update your code to reflect the change when moving to version 6.1.1.

## Upgrading to version 6.1 from version 6.0

If you are upgrading from version 6.0 to version 6.1, please take note of the changes that occurred between version 6.0 and version 6.1.

For the version 6.1 release of Foxit PDF SDK for .NET, some namespaces were changed. The following table lists the namespaces mapping between versions 6.0 and 6.1.

SDK 6.0	SDK 6.1
foxit.pdf.filespec.	<b>foxit.pdf</b>
foxit.pdf.watermark	<b>foxit.pdf</b>
foxit.pdf.signature	<b>foxit.pdf</b>
foxit.pdf.security	<b>foxit.pdf</b>
foxit.pdf.psi	<b>foxit.pdf</b>
foxit.pdf.layer	<b>foxit.pdf</b>