Foxit PDF SDK for C API 8.4.2 Upgrade Warnings

This document contains a list of items that developers looking to upgrade to Foxit PDF SDK for C API 8.4.2 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 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 is only one minor upgrade warning 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.

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 **FSActionCallback** struct:

    1. Add thirty-one new callback functions as below:

```
void (*SetCurrentPage0)(void* user_data, const FS_PDFDOC_HANDLE& document,
const FS_DESTINATION_HANDLE& destination);
void (*CloseDoc)(void* user_data, const FS_PDFDOC_HANDLE& document, FS_BOOL
is_prompt_to_save);
FS_BOOL (*IsLocalFile)(void* user_data, const FS_PDFDOC_HANDLE& document);
FS_WSTR (*GetAttachmentsFilePath)(void* user_data, const FS_PDFDOC_HANDLE&
pdf_doc, const wchar_t* name);
FS_WSTR (*GetExtractedEmbeddedFilePath)(void* user_data, const FS_PDFDOC_HANDLE&
pdf_doc, const wchar_t* name);
```

```
FS_BOOL (*Print0)(void* user_data, const FS_PDFDOC_HANDLE& document, const
FSPrintParams& print_params);
FS_WSTR (*GetUntitledBookmarkName)(void* user_data);
void (*GetPrinterNameList)(void* user_data, FS_WSTR*& return_stringarray, FS_UINT32&
return_stringarray_length);
FS_BOOL (*AddToolButton)(void* user_data, const FSButtonItem& button_item);
FS_BOOL (*RemoveToolButtom)(void* user_data, const wchar_t* button_name);
void (*GetMenuItemNameList)(void* user_data, FSMenuList*& return_menulistarray,
FS_UINT32& return_menulistarray_length);
FS_BOOL (*AddMenuItem)(void* user_data, const FSMenuItemConfig& menu_item_config,
FS_BOOL is_prepend);
FS_BOOL (*AddSubMenu)(void* user_data, const FSMenuItemConfig& menu_item_config);
FS_BOOL (*ShowDialog)(void* user_data, const FSDialogDescriptionConfig& dlg_config);
FS_BOOL (*GetFullScreen)(void* user_data);
void (*SetFullScreen)(void* user_data, FS_BOOL is_full_screen);
void (*OnFieldValueChanged)(void* user_data, const wchar_t* field_name,
FSJSFieldValueChangeType type, const FS_WSTR *value_before_changed, FS_UINT32
value_before_changed_array_length_, const FS_WSTR *value_after_changed, FS_UINT32
value_after_changed_array_length_);
void (*UpdateLogicalLabel)(void* user_data);
FSJsMailResult (*MailDoc)(void* user_data, const FS_PDFDOC_HANDLE& document,
const wchar_t* to_address, const wchar_t* cc_address, const wchar_t* bcc_address, const
wchar_t* subject, const wchar_t* message, FS_BOOL is_ui);
FS_WSTR (*GetTemporaryFileName)(void* user_data, const FS_PDFDOC_HANDLE&
document, const wchar_t* file_suffix_name);
FSMediaPlayerCallback* (*OpenMediaPlayer)(void* user_data, const FSPlayerArgs&
player_args);
FS_WSTR (*GetTemporaryDirectory)(void* user_data);
void (*Scroll)(void* user_data, const FSPointF& point);
void (*SelectPageNthWord)(void* user_data, int page_index, int word_index, FS_BOOL
is_show_selection);
FSPointF (*GetMousePosition)(void* user_data);
FSRectF (*GetPageWindowRect)(void* user_data);
FSLayoutMode (*GetLayoutMode)(void* user_data);
void (*SetLayoutMode)(void* user_data, FSLayoutMode layout_mode, FS_BOOL
is_cover_mode);
float (*GetPageScale)(void* user_data);
void (*SetPageScale)(void* user_data,  FSZoomMode zoom_mode, const
FS_DESTINATION_HANDLE& dest);
FSZoomMode (*GetPageZoomMode)(void* user_data);
```

- In **fs_pdfpage_c.h** header file:

    1. The function **FSDK_PDFPage_Transform** has added a new parameter as below:

        SDK 8.3:

        ```
        FSErrorCode FSDK_PDFPage_Transform(FS_PDFPAGE_HANDLE& pdfpage_handle,
        const FSMatrix& matrix, FS_BOOL need_transform_clip_path, FS_BOOL& return_value);
        ```

        SDK 8.4:

        ```
        FSErrorCode FSDK_PDFPage_Transform(FS_PDFPAGE_HANDLE& pdfpage_handle,
        const FSMatrix& matrix, FS_BOOL need_transform_clip_path, FS_BOOL
        need_transform_annotations, FS_BOOL& return_value);
        ```

- In **fs_annot_c.h** header file:

    1. Remove FSDK_PagingSeal_* functions from fs_annot_c.h.

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 **fs_annot.c.h** header file, the following two functions have been deprecated:

    ```
    FSErrorCode FSDK_FreeText_GetAlignment(FS_FREETEXTANNOT_HANDLE& freetext_handle,
    FSAlignment& return_value);
    FSErrorCode FSDK_FreeText_SetAlignment(FS_FREETEXTANNOT_HANDLE& freetext_handle,
    FSAlignment alignment);
    ```

- In **FSActionCallback** struct:

    1. the function **PopupMenu** has added a new parameter as below:

        SDK 8.2:

        ```
        FS_WSTR (*PopupMenu)(void* user_data, FSMenuList* menulist_array, FS_UINT32
        array_length_menus);
        ```

        SDK 8.3:

```
FS_WSTR (*PopupMenu)(void* user_data, FSMenuList* menulist_array, FS_UINT32 array_length_menus, FS_BOOL& is_selected_item);
```

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

   SDK 8.2:

```
FS_BOOL (*SubmitForm)(void* user_data, const FS_PDFDOC_HANDLE& document, void* form_data, FS_UINT32 length, const char* url);
```

   SDK 8.3:

```
FS_BOOL (*SubmitForm)(void* user_data, const FS_PDFDOC_HANDLE& document, void* form_data, FS_UINT32 length, const char* url, FSFileFormatType file_format_type);
```

3. add a new function as below:

```
FSMenuItemEx (*PopupMenuEx)(void* user_data, FSMenuItemEx* menuitem_array, FS_UINT32 array_length_menus, FS_BOOL& is_selected_item);
```

- The struct of **FSHTML2PDFSettingData** has been changed:

  SDK 8.2:

```
struct FSHTML2PDFSettingData {
  float page_width;
  float page_height;
  FS_BOOL is_to_page_scale;
  FSRectF page_margin;
  FSRotation rotate_degrees;
  FS_BOOL is_convert_link;
  FS_BOOL is_generate_tag;
  FSHTML2PDFPageMode page_mode;
  FS_BOOL to_generate_bookmarks;
  FSHTML2PDFScalingMode scaling_mode;
};
```

  SDK 8.3:

```
struct FSHTML2PDFSettingData {
  float page_width;
  float page_height;
  FS_BOOL is_to_page_scale;
  FSRectF page_margin;
  FSRotation rotate_degrees;
  FS_BOOL is_convert_link;
  FS_BOOL is_generate_tag;
  FSHTML2PDFPageMode page_mode;
  FS_BOOL to_generate_bookmarks;
  FSHTML2PDFScalingMode scaling_mode;
  FSHTML2PDFEncodingFormat encoding_format;
  FS_BOOL to_render_images;
```

```
  FS_BOOL to_remove_underline_for_link;
  FS_BOOL to_set_headerfooter;
  FS_WSTR headerfooter_title;
  FS_WSTR headerfooter_url;
  FS_WSTR bookmark_root_name;
  FS_BOOL to_resize_objects;
  FS_BOOL to_print_background;
  FS_BOOL to_optimize_tag_tree;
  FSHTML2PDFMediaStyle 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 **FSFillerAssistCallback** struct, add a new callback function as below:

```
void (ReportInvalidValue)(void user_data, const wchar_t* form_field_name, const wchar_t* invalid_value);
```

- The struct of **FSHTML2PDFSettingData** has been changed:

  SDK 8.1:

```
struct FSHTML2PDFSettingData {
  float page_width;
  float page_height;
  FS_BOOL is_to_page_scale;
  FSRectF page_margin;
  FSRotation rotate_degrees;
  FS_BOOL is_convert_link;
  FS_BOOL is_generate_tag;
  FSHTML2PDFPageMode page_mode;
  FS_BOOL to_generate_bookmarks;
};
```

  SDK 8.2:

```
struct FSHTML2PDFSettingData {
  float page_width;
  float page_height;
  FS_BOOL is_to_page_scale;
  FSRectF page_margin;
  FSRotation rotate_degrees;
```

```
  FS_BOOL is_convert_link;
  FS_BOOL is_generate_tag;
  FSHTML2PDFPageMode page_mode;
  FS_BOOL to_generate_bookmarks;
  FSHTML2PDFScalingMode 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 **FSFillerAssistCallback** struct, add seven callback functions as below:

```
void* (CreatePopupMenu)(void* user_data);

FS_BOOL (AppendPopupMenuItem)(void* user_data, const void* h_popup_menu, FSPopupMenuItem popup_menu_item, const wchar_t* default_string);

FS_BOOL (EnablePopupMenuItem)(void* user_data, const void* h_popup_menu, FSPopupMenuItem popup_menu_item, FS_BOOL is_enabled);

FS_BOOL (ShowPopupMenu)(void* user_data, const void* h_popup_menu, const FSPointF& point);

void (DestroyPopupMenu)(void* user_data, const void* h_popup_menu);

void (SetClipboardText)(void* user_data, const wchar_t* text);

FS_WSTR (GetClipboardText)(void* user_data);
```

- In **FSIdentityProperties** struct, add four member variables as below:

```
FS_WSTR first_name;

FS_WSTR last_name;

FS_WSTR title;

FS_WSTR department;
```

- In **FSActionCallback** struct, add a new callback function as below:

```
FS_BOOL (SetIdentityProperties)(void* user_data, FSIdentityProperties 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:

- The struct of **FSHTML2PDFSettingData** has been changed:

  SDK 7.6:

```
struct FSHTML2PDFSettingData {
  float page_width;
  float page_height;
  FS_BOOL is_to_page_scale;
  FSRectF page_margin;
  FSRotation rotate_degrees;
  FS_BOOL is_convert_link;
  FS_BOOL is_generate_tag;
  FSHTML2PDFPageMode page_mode;
};
```

SDK 8.0:

```
struct FSHTML2PDFSettingData {
  float page_width;
  float page_height;
  FS_BOOL is_to_page_scale;
  FSRectF page_margin;
  FSRotation rotate_degrees;
  FS_BOOL is_convert_link;
  FS_BOOL is_generate_tag;
  FSHTML2PDFPageMode page_mode;
  FS_BOOL to_generate_bookmarks;
};
```

- The function **FSDK_PDFPage_AddSignature1** has added a new parameter as below:

  SDK 7.6:

  ```
  FSErrorCode FSDK_PDFPage_AddSignature1(FS_PDFPAGE_HANDLE& pdfpage_handle, const FSRectF& rect, const wchar_t* field_name, FSSignatureType signature_type, FS_SIGNATURE_HANDLE& return_value);
  ```

  SDK 8.0:

  ```
  FSErrorCode FSDK_PDFPage_AddSignature1(FS_PDFPAGE_HANDLE& pdfpage_handle, const FSRectF& rect, const wchar_t* field_name, FSSignatureType signature_type, FS_BOOL to_check_permission, FS_SIGNATURE_HANDLE& return_value);
  ```

Upgrading to version 7.6 from version 7.5

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

- In **FSActionCallback** struct, add a new callback function as below:

  ```
  FS_WSTR (* BrowseFile0)(void* user_data, FS_BOOL is_open_dialog, const wchar_t* file_format, const wchar_t* file_filter);
  ```

- Remove the enumeration member (**e_FSVerifyModeETSI**) from the enumeration **FSVerifyMode**.
- The names of some functions have been changed in version 7.6. The following table lists the functions mapping between version 7.5 and 7.6.

Struct	SDK 7.5	SDK 7.6
FSSignatureCallback	FS_BSTR (***Sign1**)(void* user_data, const void* digest, FS_UINT32 digest_length, const wchar_t* cert_path, const wchar_t* cert_password, FSDigestAlgorithm digest_algorithm, void* client_data);	FS_BSTR (***Sign**)(void* user_data, const void* digest, FS_UINT32 digest_length, const wchar_t* cert_path, const wchar_t* cert_password, FSDigestAlgorithm digest_algorithm, void* client_data);
	FS_BSTR (***Sign**)(void* user_data, const void* digest, FS_UINT32 digest_length, FSStreamCallback* cert_file_stream, const wchar_t*cert_password, FSDigestAlgorithm digest_algorithm, void* client_data);	FS_BSTR (***Sign1**)(void* user_data, const void* digest, FS_UINT32 digest_length, FSStreamCallback* cert_file_stream, const wchar_t*cert_password, FSDigestAlgorithm digest_algorithm, void* client_data);
FSIFX_FileStream	FS_BOOL (***ReadBlock1**)(void* user_data, void* buffer, FS_INT64 offset, size_t size);	FS_BOOL (***ReadBlock**)(void* user_data, void* buffer, FS_INT64 offset, size_t size);
	size_t (***ReadBlock**)(void* user_data, void* buffer, size_t size);	size_t (***ReadBlock0**)(void* user_data, void* buffer, size_t size);

Upgrading to version 7.5 from version 7.4

There is only one minor upgrade warning in this release when moving from version 7.4 to version 7.5:

- The struct of **FSHeaderFooter** has been changed:

  SDK 7.4:

```
struct FSHeaderFooter {
  FS_FONT_HANDLE font;
  float text_size;
  FS_RGB text_color;
  FSPageNumberRange page_range;
  FSRectF page_margin;
  FS_BOOL has_text_shrinked;
  FS_BOOL has_fixedsize_for_print;
  int start_page_number;
  FSHeaderFooterContent content;
  FS_BOOL is_replace_font;
};
```

  SDK 7.5:

```
struct FSHeaderFooter {
```

```
  FS_FONT_HANDLE font;
  float text_size;
  FS_RGB text_color;
  FSPageNumberRange page_range;
  FSRectF page_margin;
  FS_BOOL has_text_shrinked;
  FS_BOOL has_fixedsize_for_print;
  int start_page_number;
  FSHeaderFooterContent content;
  FS_BOOL is_to_embed_font;
  FS_BOOL is_underline;
  FS_BOOL is_replace_font;
};
```