

What's New for Oracle Outside In Technology

Here are the features listed for the particular release:

- [8.5.7 \(April 2024\)](#)
- [8.5.7 \(January 2024\)](#)
- [8.5.7 \(October 2023\)](#)
- [8.5.6 \(July 2023\)](#)
- [8.5.6 \(April 2023\)](#)
- [8.5.6 \(January 2023\)](#)
- [8.5.6 \(October 2022\)](#)
- [8.5.6 \(July 2022\)](#)
- [8.5.6 \(April 2022\)](#)
- [8.5.5 \(Lifecycle ended on 30-June-2022\)](#)
- [8.5.4 \(Lifecycle ended on 31-Dec-2020\)](#)
- [8.5.3 \(Lifecycle ended on 31-May-2019\)](#)

Note:

For the latest information on Certified Platforms and Supported Formats, see [Certified Platforms](#) and [Supported Formats](#) from the Get Started page.

Release 8.5.7 — April 2024

Newly Supported Platforms

- HP-UX Itanium (64 bits) – Versions: 11iv3(11.31) HP-UX 11i v3.
- Microsoft Windows x86 (32 bits).



Note:

Microsoft Windows x86 (32 Bits) will not be supported after OIT 8.5.7.

- [Certified Platforms](#)

Release 8.5.7 — January 2024

- The flags mailheaderflags=1 and mailheadervisible=sensitivity are enabled for .eml files.
- OIT enables DeviceN colorspace processing in PDF filter.
- OIT now supports exporting of MS Excel 2016 review comments similar to its native part.
 - Workbooks with more than a worksheet is supported.
 - Review comments with Author name and Cell reference are printed after each worksheet's content.
 - OIT provides an option that can be set during configuration before PDF export. This option allows to add an extra page for comment after each worksheet. The option is Printmsofficecomments (which can be set to false (default) or true).
- OIT has added support to retrieve “MAIL_SENDER_SMTP_ADDRESS & MAIL_SENT_REPRESENTING_SMTP_ADDRESS tag” through Content Access SDK.

Release 8.5.7 — October 2023

Here's an overview of new features and enhancements added to improve Outside In Technology. To obtain complete documentation for any other Outside In product, see [Middleware documentation](#) page and click the **Outside In Technology** link. Look for the data sheet with the latest supported formats.

See [Supported Formats for 8.5.7](#) for the list of newly supported file formats that are available for 8.5.7.

Newly Supported Platforms

- OEL/RHEL 9.x on Linux(Intel/AMD 64) and Linux(ARM 64)
- Windows Server 2022, Windows 11
- Core Net6 support on Windows and Linux X86-64.
- [Certified Platforms for 8.5.7](#)

New SDK Support

Enhancements related to Exports

PDF Export

- OIT has limited support of colorspace in PDF operation. Hence, some of the PDF colored samples are rendering/exporting with color differences. In this Colorspace:
 - Support provided for PDF colorspace - Separation, Lab, ICCBased, DeviceGrey, DeviceCMYK, and Indexed.
 - Separation is implemented with alternate color options such as Lab, ICCBased, DeviceGrey, and Device CMYK.
- OIT was not handling Luminosity in PDF sample. So, the child element of "Resources" was not handled and OIT started deviating from that point onwards. PDF export is rendering black stripes. Now, "Luminosity in PDF sample" is handled by PDF Export process.

SCOPT_PDF_FILTER_MAX_EMBEDDED_OBJECTS

Sometimes PDF files have a very large number of embedded objects. This option allows the user to limit the number of embedded objects that are produced in a PDF file. Setting this option to 0 produces an unlimited number of embedded objects.

Handle Type: VTHDOC

Scope: local

Data Type: VTDWORD

Data: The maximum number of embedded objects to produce in PDF output.

OIT Export Status for no fonts and an image found in a PDF file: There are few PDFs that do not have any fonts and images for constructing a PDF page. These PDFs are created through lines and curves properties. To view these PDFs using native viewer, user has to increase the resolution to 300DPI. OIT implemented an API which returns the status of these PDFs through a message "*This sample not having any image and font*" (as export status). It is implemented in JAVA and DOTNET also.

PDF Fonts Type1 with Custom Encoding support

OIT has implemented custom decoding for PDF Type1 fonts in PDF Filter. Hence, the PDF Font support table has changed to the following:

Fonts ->	Type 0 CID Fonts (Both embedded and non-embedded)	Type 2 CID/ TrueType-CID Font (Both embedded and non-embedded)	Type 1 Fonts	Type 3 Fonts	TrueType Fonts
Exports	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts
PDF Export	Partial Supported	Supported from 8.5.5 BP4	Supported	Not Supported	Supported
Web View Export	Partial Supported	Supported from 8.5.5 BP4	Supported	Not Supported	Supported
Image Export	Supported	Supported	Supported	Not Supported	Supported
Viewer	Supported	Supported	Supported	Not Supported	Supported
CA	Supported	Supported	Supported	Not Supported	Supported
Search Export	Supported	Supported	Supported	Not Supported	Supported

 **Note:**

- For all non-embedded fonts mentioned above as "supported", Outside In Technology uses the system fonts present on the machine for font's substitution. For best results, make sure that the same fonts as used in the file are present and accessible to Outside In Technology. A substituted font/document never looks like the original.
- **For all TYPE1 embedded fonts: Custom Encoding Support added.**
- **Semi Support provided for some of the Type0 fonts in PDF/WVX export.**
- The type of embedded font does not matter for text exports such as CA and SX. Text extraction for CA and SX depends on whether or not the font uses a standard built-in encoding like WIN_ANSI or whether or not the font contains a valid ToUnicode mapping table.

Content Access

- **SCCOPT_TIMEZONE_USEDST in OIX ACTIVE Viewer (oixctrl):** OIT has implemented SCCOPT_TIMEZONE_USEDST for DOTNET technology.

```
public OptionsCache SetDSTTimeZone(bool dstTimezone)
public bool GetDSTTimeZone()
```

- **JAVA API for CA to extract object is missing in Exporter and Document Level** - OIT supports extraction of objects from any archive file through C-API. Now similar API has been implemented for JAVA also. Exposed APIs are:
 1. getCAOpenContent -> Initialize the CA content handle to the document to be processed.
 2. getCACloseContent -> Close the CA content handle.
 3. getCARadFirst -> Read the first CA item. If successful, CARadFirst will return the file properties and initial character set of the source.
 4. getCARadNext -> Read the next CA item.
 5. saveInputObject -> Saves a copy of the object to a local file.

Image Export

- **SCCOPT_GRAPHIC_SCALEDPI**
This option allows you to calculate DPI based on the image.
TRUE/1: If input image doesn't have DPI information and SCCOPT_OUPUTDPI is not set then SCCOPT_GRAPHIC_SCALEDPI is set to true. OIT will calculate DPI based on the input image and export that image with calculated DPI.
FALSE/0: If SCCOPT_OUPUTDPI is set in config file then OIT is not going to calculate DPI. It will export the image with SCCOPT_OUPUTDPI.
Handle Type: VTHDOC, VTHEXPORT
Scope: local
Data Type: VTBOOL
Data: A Boolean value to control Graphic DPI.
Default Value: FALSE
- **Pages of TIFF exported to PDF/HTML are in a different orientation:** OIT provided support to render and export image orientation in all file formats. This feature rotates JPG images as per the orientation/EXIF data. OIT has implemented to parse the orientation field in the image filter by using Exif metadata.
- OIT has implemented to get Extensible Metadata Platform (XMP) image metadata using OIT DOTNET technology.

```
public OptionsCache
    SetExtractXMPMetadata(bool ExtractXMPMetadata)public
bool
    GetExtractXMPMetadata()
```

All Exports:

SCCOPT_GRAPHIC_SCALEDPI option

A minimum value for the graphics output device resolution can be specified. A value 'true' indicates that any graphic image exported should have a minimum DPI (dots per inch) value of 120. It enhances the output quality of the images with lower DPI (less than 120 DPI). A value 'false' (default value) indicates that any graphic image exported

should be at the same resolution (DPI) as the original graphic image and if the original graphic does not specify a DPI, value 72 is assumed. The default value is 'false'. This option will always override the SCCOPT_GRAPHIC_OUTPUTDPI option.

SCCOPT_FONTSCALINGFACTOR for .Net API/Java API

Sometimes, OIT-rendered fonts (which are allies or substitutes for other fonts) are bigger/smaller in size than the actual font. OIT provides an option through Viewer, where user can scale the font size up and down for better view. Same font scaling feature is enabled for the other exports. This option is enabled through JAVA and Dot.NET APIs. This option can be used to scale the fonts by a percentage when exporting a document. The normal size is 100%. This will not affect paragraph, page or table attributes (for example margins) for word processor documents. For spreadsheet and database documents, the font scaling will affect the row height and column widths. This option will not affect metafile or raster graphics views. For all other document types, only the fonts will be affected.

- For C/C++ API
fontscalingfactor 100
- For JAVA API
FontScalingFactor
Data Type: int
Default: 100
- For DOT.NET API
void SetFontScalingFactor(ulong fontscalingfactor);

4 byte Unicode characters support - for HTML, MSG file formats in CA, SX, SearchText.

OIT has added support for multibyte Unicode characters (including Emoji characters) for HTML and email file formats. Currently this support is added for text-based exports like CA, SX, and SearchText.

Exit Status Information Structure

```
typedef struct EXSTATUSINFORMATIONtag
{
    VTDWORD dwVersion; /* version of this
structure */
    VTBOOL bMissingMap; /* a PDF text run was
missing the toUnicode table */
    VTBOOL bVerticalText; /* a vertical text run was
present */
    VTBOOL bTextEffects; /* a run that had
unsupported text effects applied. One example is Word Art*/
    VTBOOL bUnsupportedCompression; /* a graphic had an
unsupported compression */
    VTBOOL bUnsupportedColorSpace; /* a graphic had an
unsupported color space */
    VTBOOL bForms; /* a sub documents had
forms */
    VTBOOL bRightToLeftTables; /* a table had right to
left columns */
}
```

```

        VTBOOL bEquations;                /* a file had equations*/
        VTBOOL bAliasedFont;             /* The desired font was
missing, but a font alias was used*/
        VTBOOL bMissingFont;            /* The desired font wasn't
present on the system */
        VTBOOL bSubDocFailed;           /* a sub document was not
converted */
        VTBOOL bTypeThreeFont;          /* a PDF Type 3 embedded
font was encountered */
        VTBOOL bUnsupportedShading;     /* a PDF input file had an
unsupported shading type */
        VTBOOL bInvalidHTML;           /* invalid HTML was
encountered */
        VTBOOL bVectorObjectLimit;     /* The vector object limit
was reached */
        VTBOOL bInvalidAnnotationNotApplied; /* Annotation/Redaction
wasn't displayed */
        VTBOOL bInlineImageFound;      /* An inline image was
found and may not have been rendered */
        VTBOOL bIncorrectPageSize;     /* a PDF file was larger
than 200 in x 200 in, as specified in the PDF reference guide */
        VTBOOL bIncorrectPageSize_lower; /* a PDF file was smaller
than 3 units x 3 units, as specified in the PDF reference guide */
        VTBOOL bPDFOneToMany;          /* A PDF input file
contained an embedded font with a ToUnicode table which maps one Unicode value
to multiple glyphs */
        VTBOOL bIsBidi;                 /* a PDF file contains Bi-
Directional Text*/
        VTBOOL bUnsupportedFont;        /* an unsupported font was
encountered */
        VTDWORD currPathSize, maxPathLimit; /*Current size of the paths
seen, Max number of Paths allowed*/
        VTDWORD currVectSize, maxVectLimit; /*Current size of the
Vectors seen, Max number of Vectors allowed*/
        VTDWORD currObjtSize, maxObjtLimit; /*Current size of the
Objects seen, Max number of Objects allowed*/
        VTBOOL bFontWidthUsed;         /* a PDF file is using
Width parameter to change widths of glyphs */
        VTBOOL bFontExistsinPdf;       /* a PDF file containing at
least one font */
        VTBOOL bImageExistsinPdf;      /* a PDF file containing at
least one image */
} EXSTATUSINFORMATION;

```

Release 8.5.6 — July 2023

- JPEG images are decoded and rendered correctly on Outside In Technology Viewer, as well as Image, PDF, HTML, and WebView Exporters.
- The Word wrap feature in MS Excel generates correct output on all Outside In Technology Viewers and Exporters.
- The container service for PDF export is now available on Linux-x86-64. For details, see the PDF export folder in sdk/samplefiles/container.

Release 8.5.6 — April 2023

- **SCCOPT_GRAPHIC_SCALED DPI**

```
#SCCOPT_GRAPHIC_SCALED DPI  
# A minimum value for the graphics output device resolution can be  
specified.  
# A value 'true' indicates that any graphic image exported should  
have a  
# minimum DPI(dots per inch) value of 120. It enhances the output  
quality  
# of the images with lower DPI(less than 120 DPI). A value 'false'  
indicates  
# that any graphic image exported should be at the same resolution  
DPI)  
# as the original graphic image and if the original graphic does  
not  
# specify a DPI, value 72 is assumed. The default value is 'false'.  
# This option will always override the SCCOPT_GRAPHIC_OUTPUT DPI  
option.  
graphicscaled dpi false
```

- Luminosity in PDF sample is now handled.
- **SCCOPT_FONTSCALINGFACTOR** for Java and .NET APIs: Through Viewer users can scale up and scale down font size for a better view. This font scaling feature is enabled for other exports as well. This can be enabled through JAVA and Dot.NET APIs.

Option: SCCOPT_FONTSCALINGFACTOR

Description: This option can be used to scale the fonts by a percentage during exporting a document. The normal size is 100%. The scaling will not affect paragraph, page, or table attributes (for example, margins) for word processor documents. For spreadsheet and database documents, the font scaling will affect the row height and column widths. This option will not affect metafile or raster graphics views. For all other document types, only the fonts will be affected.

Supported Options:

- **For C/C++ API:** fontscalingfactor 100
- **For JAVA API:** FontScalingFactor, Data Type: int, Default: 100
- **For DOT.NET API:** void SetFontScalingFactor(ulong fontscalingfactor);
- Newly added and supported platforms: Oracle EL/Redhat EL9 x64 – supported and certified with this release.
- Newly added and supported file format: Data interchange format (.dif) is a spreadsheet supported by a spreadsheet software such as Microsoft Excel, Microsoft Access, and Apache OpenOffice Calc.

Release 8.5.6 — January 2023

- File identification is now able to identify correctly file Id 1351 (0x0547) – Outlook Sticky
- SCCOPT_TIMEZONE_USEDST for DOTNET technology has been implemented

```
public OptionsCache
    SetDSTTimezone (bool dstTimezone) public bool
    GetDSTTimezone ()
```

- The DOTNET technology is implemented to get XMP Metadata

```
public OptionsCache
    SetExtractXMPMetadata (bool ExtractXMPMetadata) public bool
    GetExtractXMPMetadata ()
```

- Indexed ColorSpace in PDF Filter is implemented. It is a type of colorspace, which enhances exports and viewers.
- Some PDFs do not have any fonts and images for constructing a PDF page. These PDFs are created through lines and curves properties. To view these PDFs using native viewer, users need to increase the resolution to 300DPI. OutsideIn has implemented an API, which returns the status of these PDFs in a message as export status stating that **this sample doesn't have any image and font**. It is implemented in JAVA and DOTNET also.
- Custom decoding for PDF Type1 fonts in a PDF filter has been implemented. With this PDF font support, the table has changed as follows:

Fonts ->	Type 0 CID Fonts (Both embedded and non-embedded)	Type 2 CID/ TrueType-CID Font (Both embedded and non-embedded)	Type 1 Fonts	Type 3 Fonts	TrueType Fonts
Exports	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts
PDF Export	Not Supported	Supported from 8.5.5 BP4	Supported	Not Supported	Supported
Web View Export	Not Supported	Supported from 8.5.5 BP4	Supported	Not Supported	Supported
Image Export	Supported	Supported	Supported	Not Supported	Supported
Viewer	Supported	Supported	Supported	Not Supported	Supported
CA	Supported	Supported	Supported	Not Supported	Supported

Fonts ->	Type 0 CID Fonts (Both embedded and non-embedded)	Type 2 CID/ TrueType-CID Font (Both embedded and non-embedded)	Type 1 Fonts	Type 3 Fonts	TrueType Fonts
Search Export	Supported	Supported	Supported	Not Supported	Supported

 **Note:**

- For all non-embedded fonts mentioned above as "supported", Outside In Technology uses the system fonts available on the machine for font's substitution. For best results, make sure that the same fonts as used in the file are available and accessible to Outside In Technology. A substituted font/document never looks like the original.
- For all TYPE1 embedded fonts : **Custom Encoding Support added**
- The type of embedded font does not matter for text exports such as CA and SX. Text extraction for CA and SX depends on whether or not the font uses a standard built-in encoding like WIN_ANSI or whether or not the font contains a valid ToUnicode mapping table.

Release 8.5.6 — October 2022

- Export module now supports PDF colorspace- Separation, Lab, ICCBased, DeviceGrey, DeviceCMYK
- Outside In supports object extraction from any archive file through C-API. Now similar API is implement for JAVA also. Exposed APIs are as follows:
 - getCAOpenContent -> Initialize the CA content handle to the document to be processed.
 - getCACloseContent -> Close the CA content handle.
 - getCARReadFirst -> Read the first CA item. If successful, CARReadFirst will return the file properties and initial character set of the source.
 - getCARReadNext -> Read the next CA item.
 - saveInputObject -> Saves a copy of the object to a local file.
- Outside In provides support to render and export image orientation in all file formats. JPG images can be rotated as per the orientation/EXIF data. Orientation field can be parsed in the image filter by using Exif Metadata.

Newly Supported Platform: AIX PPC64 7.3

Release 8.5.6 — July 2022

- **SCCOPT_PDF_FILTER_MAX_EMBEDDED_OBJECTS**

Option: SCCOPT_PDF_FILTER_MAX_EMBEDDED_OBJECTS

Description: PDF files sometimes have a very large number of embedded objects. This option allows the user to limit the number of embedded objects that are produced in a PDF file. Setting this option to 0 produces an unlimited number of embedded objects.

Handle Type : VTHDOC

Scope : localData

Type : VTDWORD

Data : The maximum number of embedded objects to produce in PDF output.E

- **SCCOPT_GRAPHIC_SCALEDPI**

Option : SCCOPT_GRAPHIC_SCALEDPI

Description : This option allows you to calculate DPI based on an image.

TRUE/1 : If input image doesn't have DPI information and SCCOPT_OUPUTDPI is not set, then SCCOPT_GRAPHIC_SCALEDPI is set to true. Only then DPI is calculated based on the input image and the image is exported with the calculated DPI.

FALSE/0 : If SCCOPT_OUPUTDPI is set in the config file, then DPI is not calculated and the image is exported with SCCOPT_OUPUTDPI.

Handle Type : VTHDOC, VTHEXPORT

Scope : local

Data Type : VTBOOL

Data : A Boolean value to control Graphic DPI.

Default : FALSE

Release 8.5.6 — April 2022

Added CMYK ColorSpace for PDFs

Processing of CMYK Colorspace in PDF sample file is added. Now OutsideIn renders/ exports/produce significant similar colors like those in the input file.

New and Supported Platforms

- Windows X86 32 bits – Native and ActiveX available with this version
- Linux PPC 64 – Big Endian Binaries are replaced with Little Endian Binaries

Release 8.5.6 — January 2022

Here's an overview of new features and enhancements added to improve Outside In Technology. To obtain complete documentation for any other Outside In product, see

[Middleware documentation](#) page and click the **Outside In Technology** link. Look for the data sheet with the latest supported formats.

Newly supported file formats are:

- Advanced Function Presentation (AFP/PTOCA/MODCA/IM1)
- Apple Iwork, Ikey and Inotes 2020 (File ID, Content access)
- Apple High Efficiency Image Format HEIF (File ID support)
- AutoCAD Drawing ACAD – 2016 to 2021.
- Electronic Publication Epub (File ID support)
- JT (Open CAD file) Image file 8.0, 9.0, 10.0 (File ID support)
- Libra-office 5.x, 6.x
- Microsoft Word for Windows 365
- Microsoft Excel for Windows - 365
- Microsoft Power-point for Windows – 365
- Mobipocket eBook MOBI (File ID support)
- Portable Arbitrary Map (PAM)
- RAR version 5.X, 6.X
- WebM Video format (File ID Support)

Newly supported platforms are Linux ARM Platforms - OEL/RHEL 8.x, SLES 15.x

Newly supported SDKs for various platforms are:

- File Identification (FI) sdk now supported on HPUX-IA64, IBM AIX-PPC-64, IBM Linux on System z S390-64, IBM Linux on Power PPC64, Linux ARM 64, Oracle Solaris Sparc 64, Oracle Solaris Intel X64
- Content Access (CA) sdk now supported on IBM Linux on System z S390-64, IBM Linux on Power PPC64, Linux ARM 64, Oracle Solaris Intel X64
- HTML Export (HX) sdk now supported on IBM Linux on System z S390-64
- Image Export (IX) sdk now supported on IBM Linux on System z S390-64, Oracle Solaris Intel X64
- PDF Export (PX) sdk now supported on IBM AIX-PPC-64, IBM Linux on System z S390-64, Oracle Solaris Sparc 64, Oracle Solaris Intel X64
- Search Export (SX) sdk now supported on IBM Linux on System z S390-64, Linux ARM 64, Oracle Solaris Intel X64
- XML Export (XX) sdk now supported on IBM AIX-PPC-64, IBM Linux on System z S390-64, Oracle Solaris Sparc 64, Oracle Solaris Intel X64

The new options are:

- #SCCOPT_FLAG_BACKGROUND_COLOR - Controls the background color, highlight, and the text color of MSG File Format.
0 - Picks the default color of the Input File.

1 - Sets all background and highlighting white, and all text black to ensure the readability of the content.

```
backgroundcolor 0
```

- #SCCOPT_DEFAULTPAGESIZE – Increases the page-dimensions for print of MS-Outlook message. This change is not activated unless

SCCOPT_USEDOCPAGESETTINGS is set to false.

in the CFG file, change the following

SCCOPT_USEDOCPAGESETTINGS: Specifies if the document page setting should be used

```
usedocpagesettings false
```

SCCOPT_DEFAULTPAGESIZE: Specifies the default page size if

SCCOPT_USEDOCPAGESETTINGS is set to false

– # 1 Pica is 1\6 of an inch

– # 1 Points is 1\72 of an inch

– # 1 centimeter is approximately 2\5 of an inch

– defaultheight 11

– defaultwidth 22 units inches

- SCCOPT_SYSTEMFLAGS is set to SCCVW_SYSTEM_UNICODE for the UNICODE file name in an archive file.

```
SCCOPT_SYSTEMFLAGS= SCCVW_SYSTEM_UNICODE
```

```
daErr = DASetOption(hDoc, SCCOPT_SYSTEMFLAGS,  
(VTLPVOID)&dwSystemFlags, sizeof(dwSystemFlags));
```

- SCCOPT_PDF_FILTER_NEW_SPACING_ALGORITHM - Spacing in PDF documents is not explicitly mentioned. To handle spacing efficiently, a new PDF spacing algorithm is used. This option, a boolean value, allows users to switch between OLD-algorithm and New-algorithm (default being the New-algorithm).

```
pdfnewspacing false
```

– Handle Types VTHDOC, VTHEXPORT

– Data Type VTBOOL

– Default Value TRUE (By default, it will use the New-algorithm)

The following support is provided for general accuracy and fidelity features:

- **PDF fonts**

Fonts ->	Type 0 CID Fonts (Both embedded and non-embedded)	Type 2 CID/ TrueType-CID Font (Both embedded and non-embedded)	Type 1 Fonts	Type 3 Fonts	TrueType Fonts
Exports	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts	Both, embedded and non-embedded fonts
PDF Export	Not Supported	Supported from 8.5.5 BP4	Supported	Not Supported	Supported
Web View Export	Not Supported	Supported from 8.5.5 BP4	Supported	Not Supported	Supported
Image Export	Supported	Supported	Supported	Not Supported	Supported
Viewer	Supported	Supported	Supported	Not Supported	Supported
CA	Supported	Supported	Supported	Not Supported	Supported
Search Export	Supported	Supported	Supported	Not Supported	Supported

 **Note:**

- For all **non-embedded** fonts mentioned above as "**supported**", Outside In Technology uses the system fonts present on the machine for font's substitution. For best results, make sure that the same fonts as used in the file are present and accessible to Outside In Technology. A substituted font/document never looks like the original.
- For all TYPE1 **embedded** fonts : Custom Encoding is Partially Supported
- The type of embedded font does not matter for text exports such as CA and SX. Text extraction for CA and SX depends on whether or not the font uses a standard built-in encoding like WIN_ANSI or whether or not the font contains a valid ToUnicode mapping table.

- Handling of "Encoding" Cmap for CID Type2 font: Encoding CMap is used for char code to CID (Character Identifier) mapping. It is used in Outside In Technology PDF Filters. (ref Enh 33284689)
 - Encoding Type:name or stream (Required)
 - Type:name: The name of a predefined CMap
 - Type:stream
 - CMap Mapping

- Predefined CMaps: Identity-H, Identity-V
- `SCC_TIMEZONE_USENATIVE` support on Unix OS: Short date format was not recognized and the default format (M/D/Y) was used as default. (ref Enh 32474737). Outside In Technology picked up the locale settings and applied it to the date format. The root cause of the problem was diagnosed as that the locale identification implementation was missing in Outside In Technology.
- A new MSG MAPI property added: `SCCID_MAIL_CALENDAR_EXCEPTION`, `SCCCA_MAIL_CALENDAR_EXCEPTION` (Content Access (CA) tag)
- `ExportStatus` object returns ISBIDI status for BIDI PDF file (ref Bug 27746695)

Function to set the Detection Mode

```
exporter.SetPDFDetectBidiBit
```

Arguments: (JAVA)

`Options.PDFBiDiDetectValue.STANDARD = false` Setting this option to `FALSE` performs internal scanning for the BIDI information in the file.

`Options.PDFBiDiDetectValue.DETECT= true` Setting this option to `TRUE` signifies that the customer wants to perform BIDI file scanning. Hence, setting this flag to `TRUE` turns the pre-existing flag `SCCOPT_PDF_FILTER_REORDER_BIDI` to `TRUE`. In this case, the PDF filter performs BIDI scan using the existing code-flow.

Arguments: (.NET)

`Options.PDFBiDiLifebitDetectValue.Standard = false` Setting this option to `FALSE` performs an internal scanning for the BIDI information in the file.

`Options.PDFBiDiLifebitDetectValue.Detect = true` Setting this option to `TRUE` signifies that the customer wants to perform BIDI file scanning. Hence, setting this flag to `TRUE` turns the pre-existing flag `SCCOPT_PDF_FILTER_REORDER_BIDI` to `TRUE`. In this case, PDF filter performs BIDI scan using the existing code-flow.

Fetch the BIDI Info

To fetch bidi info: `bool isbidi = exporter.GetExportStatus().StatusFlags.HasFlag(ExportStatusFlags.IsBidi);`

Note:

Note: The BIDI information is fetched after the export is called.

- Outside In Technology PDF Export SDK supports JBIG2 compression for embedded JPEG files (ref Enh 27746695)

Outside In Technology provides the following JBIG2 decoding options:

- Symbol dictionary
- Intermediate text region
- Immediate text region

- Intermediate generic region
- Immediate generic region
- SCCOPT_GRAPHIC_OUTPUTDPI modified for those images that do not have any DPI information. In such cases, Outside In Technology assumes a default DPI of 120 in both horizontal and vertical dimensions.
- **SDK/Common/<header files>: EXSTATUSINFORMATION** structures are updated as follows:

```
typedef struct EXSTATUSINFORMATIONtag
{
    VTDWORD dwVersion;           /* version of this structure */
    VTBOOL bMissingMap;         /* a PDF text run was missing the
toUnicode table */
    VTBOOL bVerticalText;       /* a vertical text run was present */
    VTBOOL bTextEffects;        /* a run that had unsupported text
effects applied. One example is Word Art */
    VTBOOL bUnsupportedCompression; /* a graphic had an unsupported
compression */
    VTBOOL bUnsupportedColorSpace; /* a graphic had an unsupported color
space */
    VTBOOL bForms;              /* a sub documents had forms */
    VTBOOL bRightToLeftTables; /* a table had right to left columns
*/
    VTBOOL bEquations;          /* a file had equations */
    VTBOOL bAliasedFont;        /* The desired font was missing, but a
font alias was used*/
    VTBOOL bMissingFont;        /* The desired font wasn't present on the
system */
    VTBOOL bSubDocFailed;       /* a sub document was not converted */
    VTBOOL bTypeThreeFont;      /* a PDF Type 3 embedded font was
encountered */
    VTBOOL bUnsupportedShading; /* a PDF input file had an unsupported
shading type */
    VTBOOL bInvalidHTML;        /* invalid HTML was encountered */
    VTBOOL bVectorObjectLimit; /* The vector object limit was reached
*/
    VTBOOL bInvalidAnnotationNotApplied; /* Annotation/Redaction wasn't
displayed */
    VTBOOL bInlineImageFound;   /* An inline image was found and may not
have been rendered */
    VTBOOL bIncorrectPageSize; /* a PDF file was larger than 200 in x
200 in, as specified in the PDF reference guide */
    VTBOOL bIncorrectPageSize_lower; /* a PDF file was smaller than 3 units x
3 units, as specified in the PDF reference guide */
    VTBOOL bPDFOneToMany;       /* A PDF input file contained an embedded
font with a ToUnicode table which maps one Unicode value to multiple glyphs
*/
    VTBOOL bIsBidi;             /* a PDF file contains Bi-Directional
Text*/
    VTBOOL bUnsupportedFont;     /* an unsupported font was encountered
*/
    VTDWORD currPathSize, maxPathLimit; // Current size of the paths seen,
Max number of Paths allowed
    VTDWORD currVectSize, maxVectLimit; // Current size of the Vectors seen,
Max number of Vectors allowed
    VTDWORD currObjtSize, maxObjtLimit; // Current size of the Objects seen,
```



```

Max number of Objects allowed
    VTB00L bFontWidthUsed;          /* a PDF file is using Width parameter to
change widths of glyphs */
} EXSTATUSINFORMATION;

typedef struct EXANNOHILITETEXTtag
{
    VTDWORD          dwSize;
    VTDWORD          dwStartACC;
    VTDWORD          dwEndACC; /* Last char to highlight +1 */
    VTLPBYTE         pBookmark;
    VTLPBYTE         pHyperlink;
    VTDWORD          dwOptions;
    SCCVWCOLORREF    sForeground;
    SCCVWCOLORREF    sBackground;
    VTWORD           wCharAttr;
    VTWORD           wCharAttrMask;
} EXANNOHILITETEXT, *PEXANNOHILITETEXT;

typedef struct EXANNOINSERTTEXTtag
{
    VTDWORD          dwSize;
    VTDWORD          dwTextACC;
    VTLPWORD         pText;
    VTLPBYTE         pBookmark;
    VTLPBYTE         pHyperlink;
    VTDWORD          dwOptions;
    SCCVWCOLORREF    sForeground;
    SCCVWCOLORREF    sBackground;
    VTWORD           wCharAttr;
    VTWORD           wCharAttrMask;
} EXANNOINSERTTEXT, *PEXANNOINSERTTEXT;

```

Release 8.5.5 — May 2020 (Lifecycle ended on 30-June-2022)

Here's an overview of new features and enhancements added to improve Outside In Technology. To obtain complete documentation for any other Outside In product, see [Middleware documentation](#) page and click Outside In Technology link below. Look for the data sheet with the latest supported formats.

- The new supported formats are:
 - Microsoft Access (text only) Windows 2019
 - Microsoft Office Theme files (File ID only) Windows 2019
 - Microsoft Outlook (MSG), Express (EML), Forms Template (OFT), OST, and PST of Windows 2019
 - Microsoft Outlook OST 2019
 - Microsoft Outlook PST 2019
 - Microsoft Word for Windows 2019
 - Microsoft Excel for Windows (.xlsb) 2019

- Microsoft Excel for Windows 2019
- Microsoft Powerpoint for Windows 2019
- Hanword HWP - Hangul Specification 5.0.4.x and 5.0.5.x
- The new supported platforms are:
 - Linux Platforms - OEL/RHEL 8.x, SLES 15.x
 - Windows Platforms - Windows Server 2019
- The new options are:
 - `SCCOPT_TIMEZONE_USEDST`: This option allows users to enable Day Saving Time (DST) that will be applied during date formatting, allowing date values to be displayed in a selectable time zone. This option affects the formatting of numbers that have been defined as date values. This option will not affect dates that are stored as text. When
 - * HANDLE TYPE: Null, VTHDOC
 - * Scope: Global
 - * DATA Type: VTBOOL
 - * To enable DST Timezone, Data: TRUE
To disable DST Timezone, Data: FALSE
 - * Default: FALSE

 **Note:**

The DST Set option is disabled for non-windows platforms. An error message with invalid set option will be reported when user tries to set it in non-windows platforms.

- * To enable DST Timezone, VTBOOL bValue = TRUE
- * `DASetOption((VTHDOC) NULL, SCCOPT_TIMEZONE_USEDST, (VTLPVOID) &bValue, sizeof(VTBOOL));`
- `SCCOPT_TIMEZONETEX`: This option allows users to enable the display of the user-provided Timezone text appended with date/time in the email header and spreadsheets.
 - * **C++ API:** This option is introduced in the `DASetOption` API. It can be set as shown below:

```
VTWORD szTimeZoneText[SCCUT_FILENAMEEMAX - 1] = {'U', 'T', 'C', 0};
DASetOption(hDoc, SCCOPT_TIMEZONETEX, (VTLPVOID) szTimeZoneText, SCCUT_FILENAMEEMAX)
```

- * **JAVA API before ExportTest:**

```
private static String m_TimeZoneText = "UTC";
exporter.setTimeZoneText(m_TimeZoneText);
exporter.export();
```

- **SCCOPT_HIDDENTEXTFLAG:** This option allows the user to hide the OCR text layer and enable the HiddenText flag.

- * **In C++ application, set the flag SCCOPT_HIDDENTEXTFLAG to TRUE using DASETOption.**

- * **In java before the export:**

```
exporter.setHiddenTextFlag(true);
exporter.export();
```

- **SCCOPT_TRACK_ANNOTATIONS:** This option allows the user to create a JSON output file with an appended extension. For example, exporting the native file abcd.xxx to PDF would result in the files abcd.pdf and abcd.xxx.anno.json. **User needs to set SCCOPT_TRACK_ANNOTATIONS option using DASEToption() API.**

```
#define SCCOPT_TRACK_REDACTIONS 0x0001 // only to track
redaction
    #define SCCOPT_TRACK_HIGHLIGHTS 0x0002 //only to
track annotation
    #define SCCOPT_TRACK_ALL 0x0003
//SCCOPT_TRACK_REDACTIONS|SCCOPT_TRACK_HIGHLIGHTS - to
track both annotation and redaction
)
```

- **SCCOPT_FLAG_PAGEREDACTIONS_ENABLE:** This option allows the user to enable PAGE REDACTION during IX/PX export. If the call back is registered, user will get the callback-id "EX_CALLBACK_ID_PAGEHASREDACTION" for every page which has redaction applied on it.

- * **C/C++ API:** User needs to set SCCOPT_FLAG_PAGEREDACTIONS_ENABLE option using DASEToption() API.

The values can be either true (to flag pages with redaction) or false (default).

- * **JAVA API: Part 1**

Call below Exporter API Interface for setting flag page redaction export option:

```
public OptionsCache setFlagPageRedactionsEnabled(boolean
FlagPageRedactionsEnabled);
```

For example, `exporter.setFlagPageRedactionsEnabled(true);`

 **Note:**

Calling the above JAVA Interface will enable the `SCCOPT_FLAG_PAGEREDACTIONS_ENABLE` option or disable it in C layer which will handle the core functionality.

Call the Exporter API Interface for getting flag page redaction export option:

```
public boolean getFlagPageRedactionsEnabled();
```

* **JAVA API: Part2**

Call the Exporter API Interface for setting track annotation export option:

```
public OptionsCache  
setTrackAnnotations(EnumSet<Options.TrackAnnotationsValues>  
    TrackAnnotations);
```

`TrackAnnotationsValues` is defined as an enum and with the following values:

- * `TrackAnnotationsValues.REDACTIONS`
- * `TrackAnnotationsValues.HIGHLIGHTS`
- * `TrackAnnotationsValues.ALL`: This option will enable both **REDACTIONS** and **HIGHLIGHTS**.
- * `TrackAnnotationsValues.NONE`: This is the default behavior.

 **Note:**

Calling the above JAVA Interface, the `SCCOPT_TRACK_ANNOTATIONS` option will be set in C layer which will handle the core functionality. For example:

```
EnumSet<TrackAnnotationsValues> flags =  
EnumSet.of(TrackAnnotationsValues.ALL);  
exporter.setTrackAnnotations(flags);
```

Call the Exporter API Interface to get track annotation export option:

```
public EnumSet<Options.TrackAnnotationsValues>  
getTrackAnnotations();
```

- `bextObjMHT`: To enable extracting objects from the MHT file, the variable `bextObjMHT` should be set to `true`. The default value is `false`. This should be done in the sample code of `extract_object.c` file as shown below:

```
VTBOOL bextObjMHT = FALSE; //This flag should be TRUE when
extracting objects from MHT file
```

- `SCCOPT_READ_RECIPIENT_DELIVERY_INFO`: This option allows the user to enable the additional properties from `winmail.dat` of the message file through which OutsideIn Technology can extract the Recipient Delivery information.

```
SCCOPT_READ_RECIPIENT_DELIVERY_INFO //toggle for Extracting
recipient or Delivery notification information.
# 0-default, 1-Recipient Information, 2-Delivery
Notification
recipientdeliveryinformation 0
```

- Note the following for general accuracy and fidelity features:

- `ACC` and `ACCEND` information on files (WVX and ActiveX Viewer): Corrected calculation of `ACC` and `ACCEND` value in the JSON file to improve Redactions on text files.

- `BIDI` Status Information handling in .NET and Java Application. Set `SCCOPT_PDF_FILTER_REORDER_BIDI` to `TRUE`. In this case, the PDF filter performs `BIDI` scan using existing code-flow.
Function to set the Detection Mode "exporter.SetPDFDetectBidiBit"

- * Application: JAVA

```
Options.PDFBiDiDetectValue.STANDARD = false //Setting the option to
FALSE will perform Internal scanning for BIDI information in the file
Options.PDFBiDiDetectValue.DETECT= true //Setting the option to TRUE
will ensure that the Customer wants to perform BIDI file scanning. Hence,
setting this flag to TRUE will evidently turn the pre-existing flag
```

- * Application: NET

```
Options.PDFBiDiLifebitDetectValue.Standard = false //Setting the
option to FALSE will perform Internal scanning for BIDI information in the
file Options.PDFBiDiLifebitDetectValue.Detect = true //Setting the
option to TRUE will ensure that the Customer wants to perform BIDI file
scanning. Hence, setting this flag to TRUE will evidently turn the pre-
existing flag
```

- * Fetch the `BIDI` Info

```
bool isbidi =
exporter.GetExportStatus().StatusFlags.HasFlag(ExportStatusFl
ags.IsBidi);
```

 **Note:**

The BIDI information shall be fetched after the export is called.

- Transport Neutral Encapsulation Format or TNEF is a proprietary email attachment format. Update and provided TNEF Down-level Attributes/ Properties to access attachment "winmail.dat" from Outlook mails.
- Improved handling of CJK, CID and other Embedded fonts in PDF documents processing. Added more options for JBIG2 decoder, Signature PDF. Vector Graphic DWG formats in PDF files also improved. Characters and line spacing improved. Adobe Signing 64bits processing functionality added.
- Improved processing of spreadsheets with more than 100 rows. Highlight Navigation on Excel sheet, corrected ACC and ACCEND information through WXX VIEWER.
- The Word file with the Jokerman LET file, letters in Webview are more block style than the Italic style seen in Word. In such cases, FontAlias Should be "key=Jokerman, value=Jokerman LET", as given below.
Added this code in the exportDocument method to add the alias.

```
HashMap<String,String> aliaslist = new HashMap<String,String>();
    aliaslist.put("Jokerman", "Jokerman LET");
    FontAliases fontAliases = new FontAliases(true,
aliaslist);
    exporter.setFontAliasList(fontAliases);
```

This should be added before the line

```
exporter.setCallbackHandler(callback);
```

- Redactions appear to be shifted up or left relative to expected location (highlight is placed without accounting for header row or leading column). Text is correctly removed in redacted cells in such a case by changing configuration parameter. Set config parameter SCCOPT_PRINT_TITLE_DISABLE to 'true'.
- While converting few PDF files to TIFF using OutsideIn Technology java-api, the conversion is failing with the exception "com.oracle.outsidein.OutsideInException". Before conversion of such files, by increasing Timeout setting, conversion can be achieved. Set exportTimeout to 1000000.
- When PDF Page-Size is beyond specified limits, OutsideIn Technology should throw relevant error message. To get the logged information, user should set the following flag in the CFG file.
exportstatustype information: This will flag the customer for any out-of-boundary page size with message "The execution might not complete as PDF page size was larger than 200 in x 200 in, a constraint specified in the PDF Reference Guide."
- The garbled text caused by the lack of the mapping information associated with a font used in the file. For the input files which has missing toUnicode

map table, OutsideIn Technology doesn't treat the lack of a `toUnicode` map as an error in every case, because there are times when such text is nevertheless encoded correctly in Unicode and can be read/displayed without problem.

But when such a file is encountered, the `ExportStatus` object returned from `exporter.getExportStatus()` can return a set of flags from the method `getStatusFlags()`, one of which is named `MISSINGMAP`.

The presence of this flag indicates the situation described in this issue. The calling code can choose to treat that as an error. The following code block can be added in export code to figure out the `MISSINGMAP` flag is set after export or not. Below code used to verify that `MISSINGMAP` flag is reaching the JAVA export.

```
import java.util.EnumSet;
import com.oracle.outsidein.ExportStatus;
import com.oracle.outsidein.ExportStatus.ExportStatusFlags;

exporter.export();
ExportStatus status = exporter.getExportStatus();
EnumSet<ExportStatusFlags> statusFlags =
status.getStatusFlags();
if(statusFlags.size() > 0){
    System.out.println(" Missing Map encountered : " +
statusFlags);
}
```

Images present in the input PDF file have color depth between 8 to 24, 12bits per pixel image. This color depth is not part of standard bitmap specification and we do not support that in any filter or export.

Below are the standard depth of bitmap images:

- * 1 bit (black and white)
- * 8 bit grays
- * 24 bit RGB
- * 8 bit indexed color
- * 4 bit indexed color
- * 32 bit RGB
- * 16 bit RGB

 **Note:**

Bitmap images of 12-bit color depth in PDF or any other file will not be processed and image will not appear in the final output.

Release 8.5.4 — May 2018 (Lifecycle ended on 31-Dec-2020)

Here's an overview of new features and enhancements added to improve Outside In Technology. To obtain complete documentation for any other Outside In product, see [Middleware documentation](#) page and click Outside In Technology link below. Look for the data sheet with the latest supported formats.

- The new supported formats are:
 - Microsoft Access (text only) Windows 2016
 - Microsoft Office Theme files (File ID only) Windows 2016
 - Microsoft Outlook (MSG), Express (EML), Forms Template (OFT), OST, and PST of Windows 2016
- The new options are:
 - SCCOPT_EMAIL_FIXEDWIDTH - (WVX only): When the value set to TRUE, the body of email files converted by Web View Export gets wrapped to a fixed width during conversion. When the value set to FALSE (the default), the Web View output gets wrapped by the browser to fit within the display.
 - SCCOPT_HTML_FIXEDWIDTH - (WVX only):
SCCOPT_HTML_FIXEDWIDTH - (WVX only) : When the value set to TRUE, HTML files converted by Web View Export gets wrapped to a fixed width during conversion. When set to FALSE (the default), the Web View output gets wrapped by the browser to fit within the display.
 - SCCOPT_PLAINTEXT_PAGINATION - (WVX only): When the value set to TRUE (the default), causes Web View Export to format plain text files as paginated content. Thereby, wrapping the text to a fixed size page width which gets broken into multiple pages. When set to FALSE, the Web View output wraps by the browser to fit within the display area.
- The following support are given for general accuracy and fidelity features:
 - The WOFF (Web Open Font Format) fonts supported. WOFF fonts can be passed to Outside In Technology in the same manner as other system fonts via SCCOPT_FONTDIRECTORY or the GDFONTPATH environment variable.
 - PDF special print color spaces (Separation, DeviceN) are now partially supported for PDF input files. If a PDF print color space includes a fallback color space for electronic display, Outside In Technology will use the fallback color space when rendering the input file. Prior versions of Outside In Technology would always render PDF print color spaces as grayscale.
 - PDF Tiling Patterns are now partially supported for PDF input files. For PDF input files containing an area filled with a PDF Tiling Pattern, Outside In Technology renders a single tile (but the tile pattern does not get repeated). Prior versions of Outside In Technology would omit the tiling pattern completely and fills the area with a default diagonal hatched pattern instead.
 - General rendering fidelity for PDF input files containing embedded fonts is improved relative to prior Outside In Technology releases, especially for

embedded fonts containing multiple potential glyphs for a single Unicode text character. Support for embedded fonts in PDF input files is still limited based on the embedded font type.

- Web View Export now supports selecting and highlighting text for PDF input files containing scanned or OCR text.

Release 8.5.3 — April 2016 (Lifecycle ended on 31-May-2019)

- The updated list of supported formats is linked from the page. For a list of the currently supported platforms, see [Outside In Technology](#) and click links under Certified Platforms and Supported Formats from the Get Started page.
- The new supported formats are :
 - Microsoft Word 2016
 - Microsoft Excel 2016
 - Microsoft PowerPoint 2016
 - MS Outlook 2011 for Mac (OLM and EML)
 - Corel WordPerfect X7
 - Corel Quattro Pro X7
 - Corel Presentations X7
 - Corel Draw X7
 - iWork KeyNote (text only)
 - AutoCAD 2015
- The following new options are:
 - A new option, `SCCOPT_PDF_FILTER_MAX_EMBEDDED_OBJECTS`, is added that allows you to limit the number of embedded objects produced in PDF files.
 - A new option, `SCCOPT_PDF_FILTER_MAX_VECTOR_PATHS`, is added that allows you to limit the number of vector paths produced in PDF files.
 - A new option, `SCCOPT_PDF_FILTER_WORD_DELIM_FRACTION`, is added. This allows you to control the spacing threshold in PDF input documents.
 - Extraction of MS Excel track change information. For more information see, `SCCOPT_GENERATEEXCELREVISIONS` in the Developer's guide.
 - The way that some spreadsheets are parsed is changed, which results in some minor additions to the schema. The following new attributes are added:
 - * `DEFAULT_ROW_HEIGHT`, on `SS.WORKSHEET`, that gives the default row height
 - * `USE_COL_STYLE`, on `SS.CELL`, that indicates that the column style should be used
 - * `STYLE`, on `SS.COL`, that should be used when the prior flag is set

- Support for the following general accuracy and fidelity features is provided:
 - MS Word table styles supported
 - MS Office Chart data label styles extended
 - Font selection algorithm improvements implemented
 - Outlook MSG “best body” algorithm implemented
 - PPTX Master slide Transparency provided
 - Four Color (CMYK) progressive JPEG supported
 - Processing of very large spreadsheets containing large areas of white space are optimized for improved performance supported
 - Soft line special character has been added
- The following Operating System support is provided:
 - Windows 10
 - SLES 12
- The following .NET API changes are implemented:
 - A new configuration object — OutsideInConfig
 - Get method for options
 - Redirected IO for temp files
- The following Java API changes are implemented:
 - Get method for options
 - Redirected IO for temp files

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Oracle Fusion Middleware What's New for Oracle Outside In Technology, Release 8.5
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