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PL/PDF Toolkit

User's Guide

v1.3.0

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Introduction

PL/PDF Toolkit is a java library with PL/SQL interface for manipulating existing PDF documents.

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Certification

GetCertKey

Type: Function

Description: Generates preliminary certification key. This function should be run once when the PL/PDF package is installed. The function generates a string that should be sent to <mailto:info@plpdf.com>. Our representatives will send a certificate key back that should be used as the return value in the `pl_pdf_cert.SetCertKey` function. Parameters: -

Return: varchar2: Preliminary certificate key

Types And Constants

t14font

Type: Subtype, VARHCAR2(30 CHAR)

Description: Standard Type 1 Fonts

The PostScript names of 14 Type 1 fonts, known as the standard fonts. These fonts, or their font metrics and suitable substitution fonts, are required to be available to the viewer application.

t_color

Type: Record

Description: Represents the RGB color triplet.

Fields:

- r number: Value of the red component
- g number: Value of the green component
- b number: Value of the blue component

times-roman

Type: Constant

Value: t_14font: Times-Roman

times_bold

Type: Constant

Value: t_14font: Times-Bold

times_italic

Type: Constant

Value: t_14font: Times-Italic

times_bold_italic

Type: Constant

Value: t_14font: Times-BoldItalic

helvetica

Type: Constant

Value: t_14font: Helvetica

helvetica_bold

Type: Constant

Value: t_14font: Helvetica-Bold

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helvetica_oblique

Type: Constant

Value: t_14font: Helvetica-Oblique

helvetica_bold_oblique

Type: Constant

Value: t_14font: Helvetica-BoldOblique

courier

Type: Constant

Value: t_14font: Courier

courier_bold

Type: Constant

Value: t_14font: Courier-Bold

courier_oblique

Type: Constant

Value: t_14font: Courier-Oblique

courier_bold_oblique

Type: Constant

Value: t_14font: Courier-BoldOblique

symbol

Type: Constant

Value: t_14font: Symbol

zapf_dingbats

Type: Constant

Value: t_14font: ZapfDingbats

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Metadata

Type: Record

Description: A PDF document may include general information such as the document's title, author, and creation and modification dates. Such global information about the document itself (as opposed to its content or structure) is called metadata, and is intended to assist in cataloguing and searching for documents in external databases.

Fields:

- Title: The document's title
- Author: The name of the person who created the document
- Subject: The subject of the document
- Creator: If the document was converted to PDF from another format, the name of the application (for example, Adobe FrameMaker®) that created the original document from which it was converted.
- Keywords: Keywords associated with the document
- Producer: If the document was converted to PDF from another format, the name of the application (for example, Acrobat Distiller) that converted it to PDF.
- CreationDate: The date and time the document was created, in human-readable form
- ModDate: The date and time the document was most recently modified, in human-readable form

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Functions

Encryption

A PDF document can be encrypted to protect its contents from unauthorized access. Encryption applies to all strings and streams in the document's PDF file, but not to other object types such as integers and boolean values, which are used primarily to convey information about the document's structure rather than its content. Leaving these values unencrypted allows random access to the objects within a document, while encrypting the strings and streams protects the document's substantive contents.

Encrypt40

Type: Function

Description: Encrypt any PDF document using standard PDF 40 RC4 bit encryption.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_opassword varchar2: the owner password to the PDF file
- p_upassword varchar2 default null: the user password to the PDF file
- p_canextractcontent boolean default false: The user is allowed to copy or otherwise extract text and graphics from the document, including extracting text and graphics (in support of accessibility to disabled users or for other purposes).
- p_canmodify boolean default false: The user is allowed to modify the contents of the document.
- p_canmodifyannotations boolean default false: The user is allowed to add or modify text annotations, fill in interactive form fields, and, if "modify" is also set, create or modify interactive form fields (including signature fields).
- p_canprint boolean default false: The user is allowed to print the document.

Return: blob: result PDF document

Encrypt128

Type: Function

Description: Encrypt any PDF document using standard PDF 128 RC4 bit encryption.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_opassword varchar2: the owner password to the PDF file
- p_upassword varchar2 default null: the user password to the PDF file
- p_canassemble boolean default false: The user is allowed to assemble the document (insert, rotate, or delete pages and create bookmarks or thumbnail images).
- p_canextractcontent boolean default false: The user is allowed to copy or otherwise extract text and graphics from the document.

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- `p_canextractforaccessibility` boolean default false: The user is allowed to extract text and graphics(in support of accessibility to disabled users or for other purposes).
- `p_canfillinform` boolean default false: The user is allowed to fill in existing interactive form fields(including signature fields)
- `p_canmodify` boolean default false: The user is allowed to modify the contents of the document
- `p_canmodifyannotations` boolean default false: Add or modify text annotations, fill in interactive form fields.
- `p_canprint` boolean default false: Print the document to a representation from which a faithful digital copyof the PDF content could be generated.
- `p_canprintdegraded` boolean default false: The user is not allowed to print in highest quality.

Return: blob: result PDF document

AESEncrypt128

Type: Function

Description: Encrypt any PDF document using standard PDF 128 AES bit encryption.

Version: v1.0.0

Parameters:

- `p_inputfile` blob: source PDF file
- `p_opassword` varchar2: the owner password to the PDF file
- `p_upassword` varchar2 default null: the user password to the PDF file
- `p_canassemble` boolean default false: The user is allowed to assemble the document(insert, rotate, or delete pages and create bookmarks or thumbnail images).
- `p_canextractcontent` boolean default false: The user is allowed to copy or otherwiseextract text and graphics from the document.
- `p_canextractforaccessibility` boolean default false: The user is allowed to extract text and graphics(in support of accessibility to disabled users or for other purposes).
- `p_canfillinform` boolean default false: The user is allowed to fill in existing interactive form fields(including signature fields)
- `p_canmodify` boolean default false: The user is allowed to modify the contents of the document
- `p_canmodifyannotations` boolean default false: Add or modify text annotations, fill in interactive form fields.
- `p_canprint` boolean default false: Print the document to a representation from which a faithful digital copyof the PDF content could be generated.
- `p_canprintdegraded` boolean default false: The user is not allowed to print in highest quality.

Return: blob: result PDF document

PublicKeyEncrypt40

Type: Function

Description: Encrypt any PDF document using standard PDF 40 RC4 bit encryption and public key certificate.

Version: v1.1.0

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Parameters:

- p_inputfile blob: source PDF file
- p_certfile blob: the certificate file
- p_canextractcontent boolean default false: The user is allowed to copy or otherwise extract text and graphics from the document, including extracting text and graphics(in support of accessibility to disabled users or for other purposes).
- p_canmodify boolean default false: The user is allowed to modify the contents of the document.
- p_canmodifyannotations boolean default false: The user is allowed to add or modify text annotations, fill in interactive form fields, and, if "modify" is also set, create or modify interactive form fields(including signature fields).
- p_canprint boolean default false: The user is allowed to print the document.

Return: blob: result PDF document

PublicKeyEncrypt128

Type: Function

Description: Encrypt any PDF document using standard PDF 128 RC4 bit encryption and public key certificate.

Version: v1.1.0

Parameters:

- p_inputfile blob: source PDF file
- p_certfile blob: the certificate file
- p_canassemble boolean default false: The user is allowed to assemble the document(insert, rotate, or delete pages and create bookmarks or thumbnail images).
- p_canextractcontent boolean default false: The user is allowed to copy or otherwise extract text and graphics from the document.
- p_canextractforaccessibility boolean default false: The user is allowed to extract text and graphics(in support of accessibility to disabled users or for other purposes).
- p_canfillinform boolean default false: The user is allowed to fill in existing interactive form fields(including signature fields)
- p_canmodify boolean default false: The user is allowed to modify the contents of the document
- p_canmodifyannotations boolean default false: Add or modify text annotations, fill in interactive form fields.
- p_canprint boolean default false: Print the document to a representation from which a faithful digital copy of the PDF content could be generated.
- p_canprintdegraded boolean default false: The user is not allowed to print in highest quality.

Return: blob: result PDF document

Decrypt

Type: Function

Description: Decrypt an encrypted (40 or 128 bits) PDF document.

Version: v1.0.0

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Parameters:

- p_inputfile blob: source PDF file
- p_password varchar2: the owner password to the PDF file

Return: blob: result PDF document

PublicKeyDecrypt

Type: Function

Description: Decrypt an encrypted (40 or 128 bits with certificate) PDF document.

Version: v1.1.0

Parameters:

- p_inputfile blob: source PDF file
- p_certfile blob: the certificate file
- p_password varchar2: the owner password to the PDF file

Return: blob: result PDF document

conv

Type: Function

Description: Util function for convert a measure to point (pt).

Version: v1.0.0

Parameters:

- p_mes number: original measure
 - o pt: point
 - o mm: millimeter
 - o cm: centimeter
 - o in: inch
- p_unit varchar2: original unit of measure

Return: number: measure in point

ExtractText

Type: Function

Description: Extract text content of any PDF document.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_encoding varchar2 default null: encoding of result text file (case-sensitive) see <http://java.sun.com/j2se/1.4.2/docs/guide/intl/encoding.doc.html>
- p_startPage number default null: the start page to extract.
- p_endPage number default null: the end page to extract.
- p_password varchar2: the owner password of the PDF file (if encrypted).

Return: blob: result TEXT document

Merge

Type: Function

Description: Merge two PDF documents to a new file.

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Version: v1.0.0

Parameters:

- p_inputfile1 blob: source PDF file
- p_inputfile2 blob: source PDF file
- p_password1 varchar2 default null: the owner password of the PDF file (if encrypted).
- p_password2 varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

ReplaceUrl

Type: Function

Description: Replace an URL in a PDF document.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_oldURI varchar2: original URL
- p_newURI varchar2: new URL
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

JPGStamp

Type: Function

Description: Stamp content into a PDF document with a JPG image.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_imagefile blob: JPG image
- p_x number: X coordinate (lower left) for the image, -1: center, -2: right(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_y number: Y coordinate (lower left) for the image, -1: center, -2: top(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_width number default -1: Image width, if -1 then the image is displayed in its actual width(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_height number default -1: Image height, if -1 then the image is displayed in its actual height(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

JPGWaterMark

Type: Function

Description: Watermark content into a PDF document with a JPG image.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file

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- p_imagefile blob: JPG image
- p_x number: X coordinate (lower left) for the image, -1:center, -2:right(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_y number: Y coordinate (lower left) for the image, -1:center, -2:top(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_width number default -1: Image width, if -1 then the image is displayed in its actual width(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_height number default -1: Image height, if -1 then the image is displayed in its actual height(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

MetadataFromXML

Type: Function

Description: Set PDF metadata from an XML file.

an example XML file:

```
<?xml version="1.0" encoding="UTF-8"?>
<pdf-metadata>
<title>PL/PDF Toolkit - User's Guide</title>
<author>PLPDF</author>
<subject>plpdf toolkit</subject>
<creator>PL/PDF v2.1.0</creator>
<keywords>Oracle PDF</keywords>
<producer>www.plpdf.com</producer>
<createtime>20080903183019</createtime>
<modificationdate>20080904114023</modificationdate>
</pdf-metadata>
```

createtime and modificationdate format are YYYYMMDDHH24MISS

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_xmlfile blob: metadata XML file
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

MetadataFromPars

Type: Function

Description: -

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_title varchar2 default null: The document's title.
- p_author varchar2 default null: The name of the person who created the document.
- p_subject varchar2 default null: The subject of the document.
- p_creator varchar2 default null: If the document was converted to PDF from

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another format, thename of the application (for example, Adobe FrameMaker®) that created theoriginal document from which it was converted.

- p_keywords varchar2 default null: Keywords associated with the document.
- p_producer varchar2 default null: If the document was converted to PDF from another format, thename of the application (for example, Acrobat Distiller) that converted it to PDF.
- p_createtime date default null: The date and time the document was created, in human-readable form.
- p_modificationdate date default null: The date and time the document was most recently modified, in human-readable form.
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

MetadataToXML

Type: Function

Description: Extract PDF metadata into an XML file.

An example XML file:

```
<?xml version="1.0" encoding="UTF-8"?>
<pdf-metadata>
<title>PL/PDF Toolkit - User's Guide</title>
<author>PLPDF</author>
<subject>plpdf toolkit</subject>
<creator>PL/PDF v2.1.0</creator>
<keywords>Oracle PDF</keywords>
<producer>www.plpdf.com</producer>
<createtime>20080903183019</createtime>
<modificationdate>20080904114023</modificationdate>
</pdf-metadata>
```

createtime and modificationdate format are YYYYMMDDHH24MISS

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result XML document

MetadataToRecord

Type: Function

Description: Extract PDF metadata into the t_metadata record.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: t_metadata: PDF metadata

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TextStamp

Type: Function

Description: Stamp content into a PDF document with a text.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_message: stamp text (encoding: plpdf_toolkit_par.GetDefaultEncoding)
- p_x number: X coordinate (lower left) for the image, -1:center, -2:right(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_y number: Y coordinate (lower left) for the image, -1:center, -2:top(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_font t_14font: Standard Base 14 Font
- p_fontSize number: font size in point
- p_color t_color default null: color of textsee http://www.forret.com/tools/color_palette.asp
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

TextWaterMark

Type: Function

Description: Watermark content into a PDF document with a text.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_message: watermark text (encoding: plpdf_toolkit_par.GetDefaultEncoding)
- p_x number: X coordinate (lower left) for the image, -1:center, -2:right(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_y number: Y coordinate (lower left) for the image, -1:center, -2:top(unit in plpdf_toolkit_par.GetDefaultUOM function)
- p_font t_14font: Standard Base 14 Font
- p_fontSize number: font size in point
- p_color plpdf_type.t_color default null: color of text see http://www.forret.com/tools/color_palette.asp
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

PDFWatermark

Type: Function

Description: Overlay on PDF document with another one PDF.

Version: v1.0.0

Parameters:

- p_inputfile blob: source PDF file
- p_overlayinputfile blob: overlay PDF file
- p_overlaypassword varchar2 default null: the owner password of the PDF file (if encrypted).

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- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

ExportFDF

Type: Function

Description: Export PDF Form data as an FDF file.

Version: v1.0.3

Parameters:

- p_inputfile blob: source PDF file
- p_password varchar2: the owner password to the PDF file

Return: blob: FDF document

ExportXFDF

Type: Function

Description: Export PDF Form data as an XFDF file.

Version: v1.0.3

Parameters:

- p_inputfile blob: source PDF file
- p_password varchar2: the owner password to the PDF file

Return: blob: XFDF document

ImportFDF

Type: Function

Description: Import an FDF file into the PDF Form's fields.

Version: v1.0.3

Parameters:

- p_inputfile blob: source PDF file
- p_fdffile blob: FDF file
- p_password varchar2: the owner password to the PDF file

Return: blob: FDF document

ImportXFDF

Type: Function

Description: Import an XFDF file into the PDF Form's fields.

Version: v1.0.3

Parameters:

- p_inputfile blob: source PDF file
- p_fdffile blob: FDF file
- p_password varchar2: the owner password to the PDF file

Return: blob: FDF document

ExtractPages

Type: Function

Description: Extract pages of any PDF document into a new PDF.

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Version: v1.2.0

Parameters:

- p_inputfile blob: source PDF file
- p_startPage number default null: the start page to extract.
- p_endPage number default null: the end page to extract.
- p_password varchar2: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

GetNumberOfPages

Type: Function

Description: Get number of pages of any PDF document.

Version: v1.2.1

Parameters:

- p_inputfile blob: source PDF file
- p_password varchar2: the owner password of the PDF file (if encrypted).

Return: number: number of pages

JPGCompress

Type: Function

Description: Sets the compression quality to a value between 0 and 1 of the JPG images in a PDF document.

Version: v1.2.1

Parameters:

- p_inputfile blob: source PDF file
- p_compress number: compression quality to a value between 0 and 1
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document

DigSign

Type: Function

Description: Digital sign a PDF document.

Version: v1.3.0

Parameters:

- p_inputfile blob: source PDF file
- p_keystore blob: keystore file
- p_certAlias varchar2 default null: certificate alias in keystore file, null means first the first alias
- p_keystorePassword varchar2 default null: password of keystore
- p_privkeyPassword varchar2 default null: password of private key
- p_Name varchar2 default null: The name of the person or authority signing the document.
- p_Location varchar2 default null: The CPU host name or physical location of the signing.
- p_Reason varchar2 default null: The reason for the signing, such as (I agree...).
- p_ContactInfo varchar2 default null: Information provided by the signer to

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allow a recipient to contact the signer to verify the signature; for example, a phone number.

- p_page number default 1: page number of digital signature's position
- p_x number default 0: X coordinate for the top left corner of the rectangle
- p_y number default 0: Y coordinate for the top left corner of the rectangle
- p_w number default 0: The width of the rectangle
- p_h number default 0: The height of the rectangle
- p_access_perms: The access permissions granted for this document. Defined values are:
 - o 1: No changes to the document are permitted; any change to the document invalidates the signature.
 - o 2: Permitted changes are filling in forms, instantiating page templates, and signing; other changes invalidate the signature.
 - o 3: Permitted changes are those allowed by 2, as well as annotation creation, deletion, and modification; other changes invalidate the signature.
- p_password varchar2 default null: the owner password of the PDF file (if encrypted).

Return: blob: result PDF document