# tcpdf 7.1.2

component: interface, class

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# Content

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### XMP metadata manipulator

namespace: tcpdf\metadata

use \tcpdf\parser\Parser use \tcpdf\basic\Statics

#### final class XMP

private \$xref: array for xref information of pdf
private \$objects: array() for objects of pdf
private \$n: actual object number, starts with 0
private \$offsets: array for start offsets of objects

example: "obj id first section"=>"offset" like "21"=>"12450"

private Soutput: appended content, return value of manipulateMetadata method

#### public function construct(Parser \$obj)

Set the value of xref and objects.

@incoming parameter

A TCPDF Parser object.

@return parameter

Working process

Set the xref and objects with the return array of getParsedData of Parser object.

#### public function serializeObjBody()

Preprocesses a given object body for easier rewrite into a file.

@incoming parameter

array: one of \$this→objects value. Example \$this→objects['2 0'].

@return parameter

array

Working process

Change numeric keyword to a space; objref reference to ''.x x.''.R instead of x\_x;

#### public function getXrefArgument(\$argument)

Returns an attribute of trailer of \$this→xref.

- @incoming parameter
  - string: name of attribute
- @return parameter

single value

Working process

1. Condition: trailer of xref is not empty;

#### public function getRootId()

Returns the root/Catalog object ID

@incoming parameter

@return parameter

string: int int

Working process

Calls getXrefArgument method.

#### public function getMetadataObjId()

Returns the Catalog /Metadata object ID.

@incoming parameter

array: root/Catalog object by serializeObjBody method

@return parameter
 string: int\_int
Working process

#### public function getLastSize()

Returns the size value of \$this→xref.

@incoming parameter

@return parameter

int

Working process

Calls getXrefArgument method.

#### public function getLastStartxref()

Returns startxref value of \$this→xref.

@incoming parameter

@return parameter

int

Working process

#### public function getLength()

Returns start length of pdf. This is before all modification. Length of \$this→xref.

@incoming parameter

@return parameter

int

Working process

#### public function getActualLength()

Returns the amount of start length and length of \$this—output.

- @incoming parameter
- @return parameter

int

Working process

getLength()+length of \$this→output

#### public function getNewObjId()

Returns the next value of object ID.

- @incoming parameter
- @return parameter

int

Working process

getLastSize()+\$this→n

#### public function newMetadataObj(\$sign array)

Creates a metadata object with an RDF signatures block and append it to \$this→output.

@incoming parameter

array: key=>value pair for signatures block: email=>level format

@return parameter

Working process

- 1. Creates an RDF signatures block with Statics::getXMPSignature method.
- 2. Builds up RDF XMP structure with previous signatures block with xmpSignatureValidate.
- 3. Validates previous XMP against signatures namespace.
- 4. Creates a new metadata object with previous RDF XMP.
- 5. Sets \$this→offsets, \$this→n, \$this→output.

#### public function createXref()

Creates an xref table for new objects and append it to \$this—output.

- @incoming parameter
- @return parameter

Working process

#### public function xmpSignatureValidate(\DOMDocument \$dom)

Validates the signatures block of given document object.

@incoming parameter

\DOMDocument object

@return parameter

bool

Working process

Validates the signatures block against Statics::signNS() XSD.

#### public function manipulateMetadata(\$sign array)

Adds signatures block to new or existing metadata object and returns the appendable string.

@incoming parameter

array: key=>value pair for signatures block: email=>level format

@return parameter

string

Working process

- 1. Condition: incoming parameter and Catalog body are not empty.
- 2. If metadata object exists then redefine it, add signatures block to existing RDF structure.
  - 1. Condition: metadata body is not empty; RDF block exists; incoming XMP is valid by xmpSignatureValidate;
- 3. If not then create a new metadata object with signatures block with newMetadataObj and add this object reference to Catalog object.
  - 1. Condition: size of xref is not empty; newMetadataObj XMP is valid by xmpSignatureValidate.
- 4. Calls createXref method.
- 5. return \$this→output

#### public function readMetadataSignature()

Returns email=>level key-value pairs of a pdf XMP.

@incoming parameter

@return parameter

array: email=>level format

Working process

- 1. Conditions: Catalog object exists; metadata object reference exists; metadata body exists;
- 2. Validates signatures block with xmpSignatureValidate method.
- 3. Returns the content of signatures block.

#### **Statics**

namespace: tcpdf\basic

use \tcpdf\webbasedcolor\Colors

#### class Statics

## public static function signNS()

Returns the signatures XSD url.

- @incoming parameter
- @return parameter

Working process

## public static function getXMPSignature(\$sign\_array)

Returns an RDF signatures block which contains given data.

- @incoming parameter
  - array: key=>value: email=>level format
- @return parameter

string

Working process