

## **tcpdf 9.0.0**

component: interface, class

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## Content

### Content

XMP metadata manipulator.....	3
Statics.....	7

## 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 \$output:** 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 array in numeric indexed array

@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

key-value array

1. array of signatures
  1. array of one signature
    1. email
    2. level
    3. vices: array of vices
      1. array of one vice
        1. email

An example: array(array("email"=>"info@example.com", "level"=>1, "vices"=>array(array("email"=>"info@example.com"))))

@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

key-value array

1. array of signatures
  1. array of one signature
    1. email
    2. level
    3. vices: array of vices
      1. array of one vice
        1. email

An example: array(array("email"=>"info@example.com", "level"=>1, "vices"=>array(array("email"=>"info@example.com"))))

If vices array is empty, it is an empty array in result, like array().

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 pair array in numeric indexed array

1. array of signatures
  1. array of one signature
    1. email
    2. level
    3. vices: array of vices
      1. array of one vice
        1. email

An example: array(array("email"=>"info@example.com", "level"=>1, "vices"=>array(array("email"=>"info@example.com"))))

@return parameter

string

Working process