

on of PDF/A and therefore shall not of two types: passive and active.

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|------------------|---|----------------------|------------|---------|-------|
| Benjamin Yousefi | OFI | +46 (0) 10 476 72 98 | 2017/06/04 | 0.x | 1 (5) |
| TESTFILE | Note | | | | |
| correct | Version: 5.2.7.2 Build ID: 5.2.7-1 CPU Threads: 8; OS Version: Linux 4.10; UI Render: default; VCL: gtk3; Locale: sv-SE (en_US.UTF-8); Cale: single | | | | |

1. Description

This file attempts to represent a correct implementation of a PDF/A document within the context of the TCs (Technical Class) defined in PREFORMA.

The following method is applied.

- 1. All correct PDF/A must not contain any .
- 2. All correct PDF/A can contain an inverted TC or cannot contain a specific TC.

3. All correct PDF/A must contain specific inverted TC

2. Fundamental error

A fundamental error is an error that is exist in any "correct" PDF/A. The qua

Passive qualifiers refer to those errors specifically applied, such as, annotation of conversion, for example, failure to create metadata, define color space, or embed font. Passive qualifiers can be avoided by simply not applying them, while active qualifiers must be checked to ensure that they have not occurred. The distinction is practical as, for example, a poor PDF/A creator could apply inappropriate functionality or use inappropriate settings.

| Passive qualifiers | | Active q | ualifiers |
|--------------------|-------------------|----------|---|
| TC003 | Annotation Sound | TC038 | File header - Has %PDF M.n in the beginning of the document file format. |
| TC004 | Annotation Movie | TC039 | File header - Has %PDF 1.0-1.7 in the beginning of the document file format. |
| TC005 | Annotation Screen | TC040 | Keyword spacings - Has spacings around keywords 'obj', 'endobj', 'stream', 'endstream', 'xref'. |
| TC006 | Annotation 3D | TC041 | Does not have: Color space |
| TC007 | Encoding LZW | TC042 | Device dependent - Does not have a Device dependent color space. |
| TC008 | Encoding Crypt | TC047 | Metadata (DocumentInfo) – not in sync with the XMP metadata. |
| TC009 | Encoding Crypt | TC048 | Metadata (XMP) - key is missing. |



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| Passive qualifiers | | Active of | qualifiers |
|--------------------|---|-----------|--|
| TC010 | Image Encoding Interpolation | TC049 | Undefined (in the schema) custom XMP properties |
| TC011 | Image Alternative/Proxy | TC050 | XMP PDF/A version identifier missing |
| TC013 | Transitions | TC051 | <pre><pdfaid:part><1-3> incorrect format</pdfaid:part></pre> |
| TC015 | Import/Link to External Resource | TC052 | <pre><pdfaid:conformance><bua> incorrect format</bua></pdfaid:conformance></pre> |
| TC018 | Executable PostScript | TC055 | Embed fonts - Does not have fonts embedded |
| TC019 | Form Action | TC056 | Embed fonts Text rendering mode 3 - Does not have fonts not rendered embedded. |
| TC020 | XFA Forms | TC058 | Character identification of font subsets - Does not have Keys CharSet and CIDSet. |
| TC021 | Action Launch | TC060 | Font metric missing |
| TC022 | Action Sound | TC062 | Data after EOF |
| TC023 | Action Movie | _ | |
| TC024 | Action Hide | | ji |
| TC025 | Action ResetForm | | |
| TC026 | Action ImportData | | |
| TC027 | Action Javascript | | il and the second secon |
| TC028 | Action Set-state | | |
| TC029 | Action No-op | _ | |
| TC030 | Action SetOCGState | | ji |
| TC031 | Action Rendition (play media) | | |
| TC032 | Action Trans(action) | | |
| TC033 | Action GoTo3DView | | |
| TC034 | Named Action - Has Named Action besides NextPage, PrevPage, FirstPage, LastPage. | | |
| TC035 | Encryption | | |
| TC036 | Permission | | |

2.1. Conclusion

Create 2 files(1 training, 1 evaluation): a PDF used as base for subsequent test files.



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| TESTFILE | Note | | | | |
| correct | | ild ID: 5.2.7-1 CPU Threads: Locale: sv-SE (en_US.UTF-8 Adobe | , | | UI Render: |

- Can be created in LibreOffice and MSO2003+AAXP.
- Confirm that active qualifiers are not applied.

3. Conformance version

Functionality that is allowed in a PDF/A *conformance version* is therefore correct for that and only that version of PDF/A.

| TC | Definition | P | PDF/A | |
|-------|---|---|-------|---|
| 10 | Denintion | 1 | 2 | 3 |
| TC001 | Annotation FileAttachment | | | |
| TC002 | Annotation FileAttachment non-PDF/A | | | |
| TC012 | Document Optional content | | | |
| TC014 | Transparency | | | |
| TC016 | Document Attachment | | | |
| TC017 | Document non-PDF/A Attachment | - | | |
| TC037 | .notdef | | | |
| TC053 | Embed composite fonts CMaps - defined mappings from Unicode encodings to character collections | | | |
| TC054 | Embed non-predefined CMaps - defined mappings from Unicode encodings to character collections | | | |
| TC061 | Character encoding symbolic TrueType fonts—Has an Encoding entry in the font dictionary for any Symbolic TrueType fonts, or the #cmap# table in the embedded font program neither contains exactly one encoding nor contains at least the Microsoft Symbol (3,0 # Platform ID=3, Encoding ID=0) encoding. | | | _ |

3.1. Summary

- 1. A correct PDF/A-1 may contain TC 37, 54, 61, while these TCs are errors in PDF/A-2 and -3.
- 2. A correct PDF/A-2 -3 may contain TC 2, 12, 14, 17, 53, while these TCs are errors in PDF/A-1.
- 3. A correct PDF/A-3 may contain TC 1, 2, 12, 14, 16, 17, 53, while these TCs are errors in PDF/A-1 2.



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| TESTFILE | Note | | | | |
| correct | | ild ID: 5.2.7-1 CPU Threads: Locale: sv-SE (en_US.UTF-8 | / | | UI Render: |

TC053 å ä ö ô õ ö

3.2. Conclusion

Create at least 4 files(2 training, 2 evaluation):

- 1. Create 1 with classes 37, 54 and 61 (PDF/A-1).
 - a. Can be created in LibreOffice and MSO2003+AAXP.
- 2. Create 1 with classes 2, 12, 14, 17, 53 (PDF/A-2).

- a. Can be created in AAXP.
- 3. If possible, create 1 with classes 1, 2, 12, 14, 16, 17, 53 (PDF/A-3).
 - a. Can be created in AAXP.

4. Conformance level

Functionality that is required in a PDF/A *conformance level* is therefore correct for that PDF/A conformance level.

4.1. u

| TC059 | Unicode Character map - [Does not have] characters mapped to Unicode table |
|-------|--|
|-------|--|

4.2. a

| TC043 | Logical structure - [Does not have] structured content |
|-------|--|
| TC044 | RoleMap - Has custom tags [but without mapping them to the] (mapped to) standard tags. |
| TC045 | Hierarchy - [Does not have the] logical structure of the document |
| TC046 | Structure type - [Does not have] (has) structure type for every structure element. |

4.3. Summary

1. A correct PDF/A-2u -3u contains 59.



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| correct | | ild ID: 5.2.7-1 CPU Threads: Locale: sv-SE (en_US.UTF-8 | | | UI Render: | |

2. A correct PDF/A-1a -2a -3a contains 43, 44, 45, 46, 59.

4.4. Conclusion

Create at least 6 files(3 training, 3 evaluation):

- 1. Create 1 with classes 59 (PDF/A -2u).
 - a. Can be created in AAXP.
- 2. Create 2 with classes 43, 44, 45, 46, 59 (PDFA -1a -2a).
 - a. Can be created in LibreOffice+AAXP and MSO2003+AAXP.

If possible, one of each for PDF/A-3 (PDF/A -3u and -3a).