PDF/A Competence Center

www.pdfa.org

PDF/A in the Product Lifecycle

Requirements of the Engineering to PDF/A

Johannes Hesel, VP Business Development
Torsten Pfeiffer, Sales Manager

SEAL Systems AG, Röttenbach

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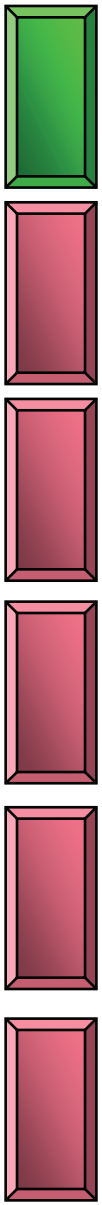

What is PDF/A?

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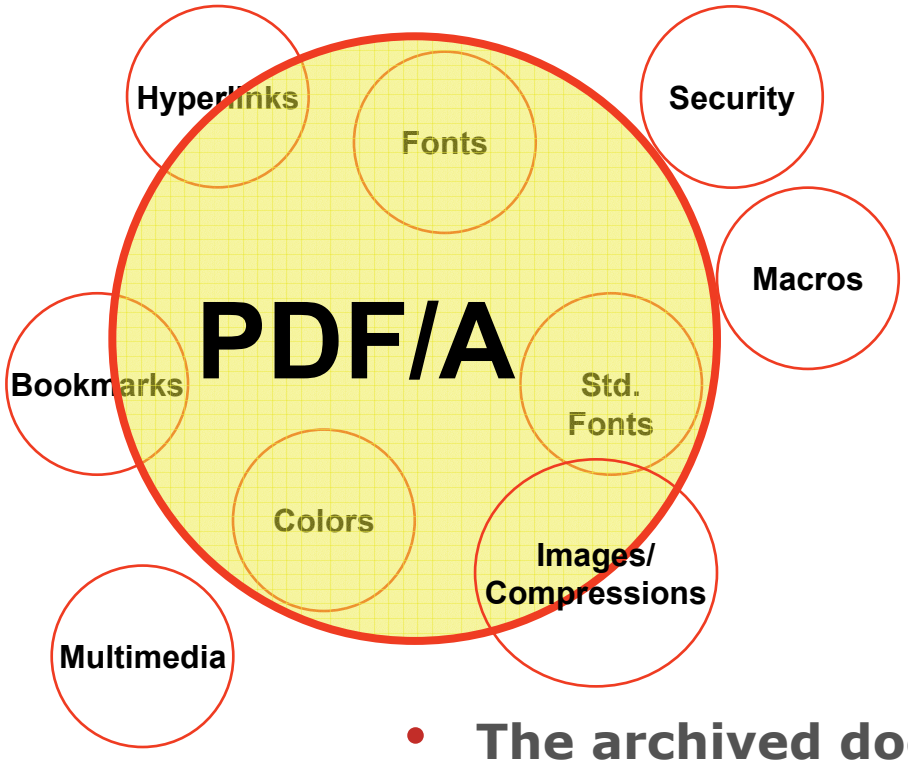
ISO Standard PDF/A

- ISO 19005-1 (September 2005)
  - Based on PDF 1.4
  - Distributed by www.iso.org or www.aiim.org
- Level of the standard
  - PDF/A – 1b: sufficient for secure reproduction
  - PDF/A – 1a: full conformity
    additional methods for access to parts of the content e.g. text) and structural information for export, reuse, search und accessibility
- ISO 32000 (July 2008)
  - Based on PDF reference 1.7
- ISO 19005-2 (2010)
  - Will be based on ISO 32000

PDF/A Standard



- The archived document shall
  - be device independend
  - include all necessary contents
  - describe itself
  - free to use

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PDF/A – The most important Agreements and Restrictions

- Limited to PDF-Version 1.4 (=Acrobat 1.5)
- Selected compression methods
- Font types, embedding, metrics
- Character coding, Unicode
- Reduced colour spaces

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PDF/A
Agreements and Restrictions

- Transparencies are not allowed
- Limited hyperlinks and actions
- Embedded objects
- Metadata / XML usage mandatory
- Contents

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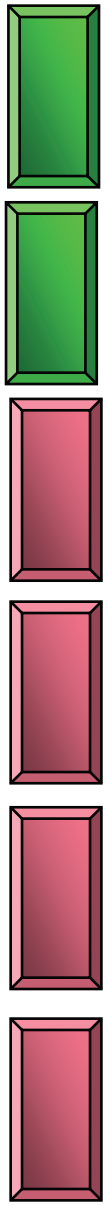

What is PDF/A?

Motivation

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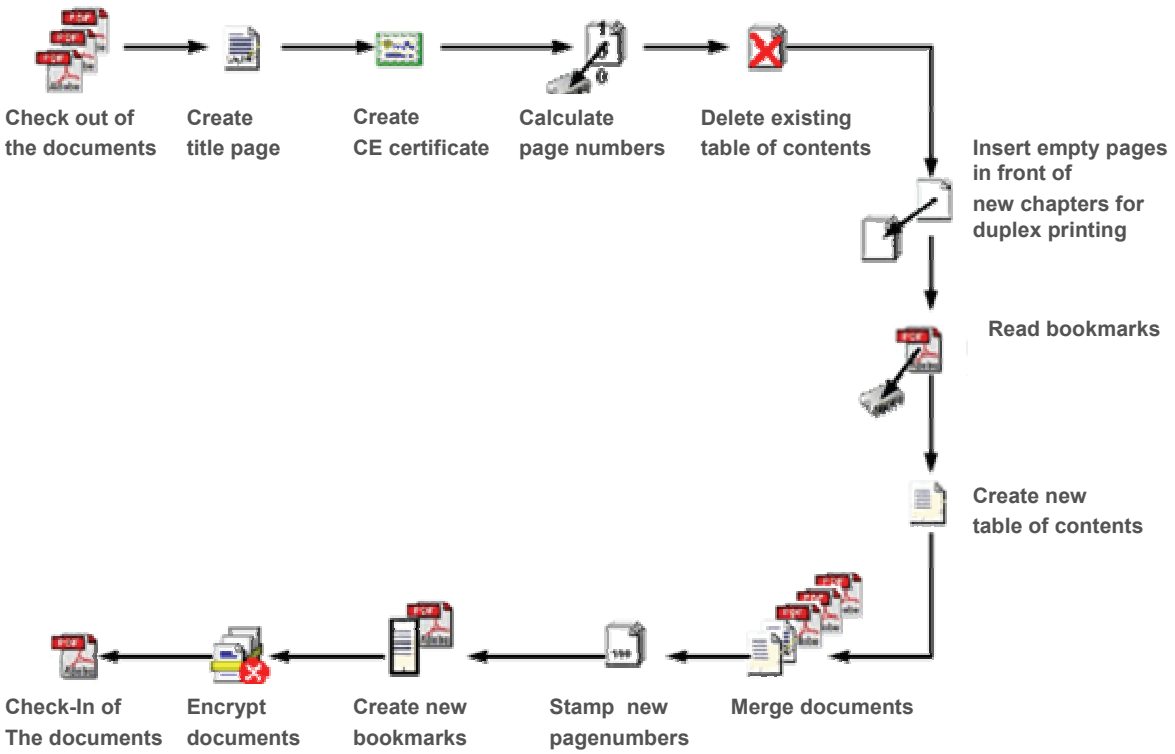
1st Customer Scenario

- **Automatic creation of complex product documentations, based on existing PDF documents stored in the PDM/DMS system**



- **Runtime errors just in the publishing process are caused by some of the documents which are not convertable**

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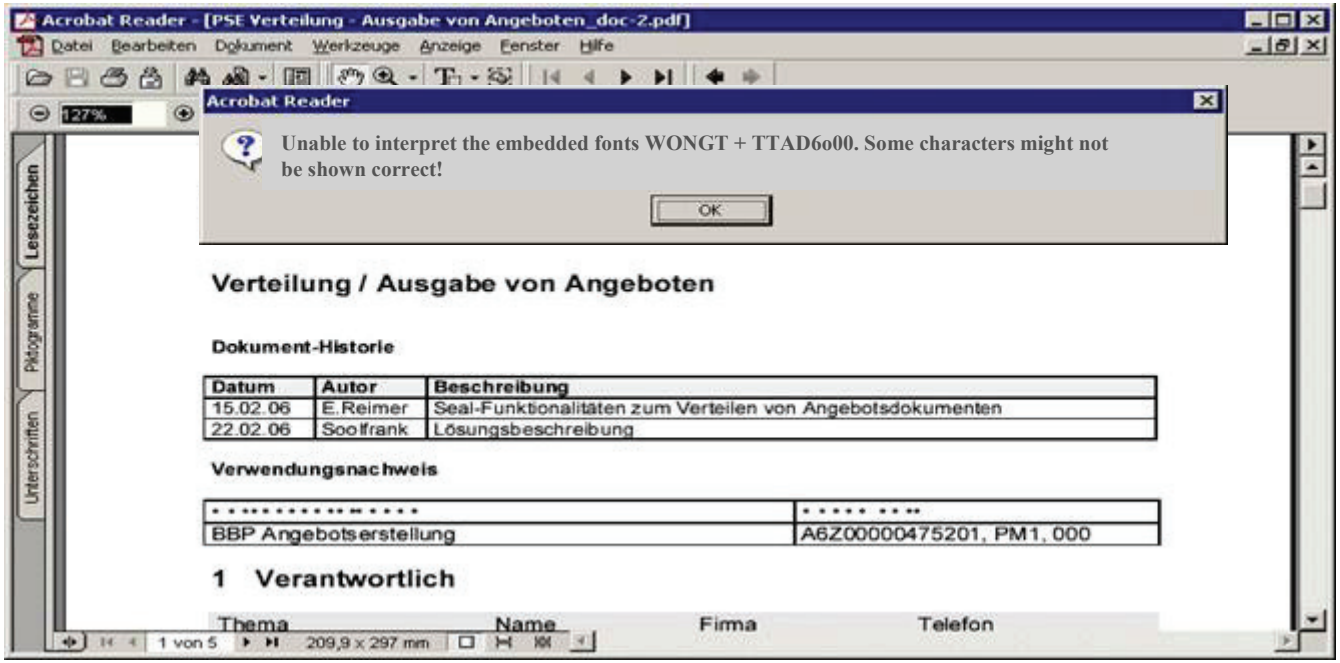
2nd Customer Scenario

- **Production shop papers are distributed by viewing and printing processes to the users**



- **Sporadically documents with errors are popping up. These documents can be quite old.**

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3rd Customer Scenario

- **Due to product lifecycles of up to 100 years in the aerospace industry, the document readability has to be guaranteed over the same period.**

Recommendations on PDF for Long-Term Archiving

Study for Airbus Deutschland GmbH

AIRBUS

- **Processes and formats need to be identified for this requirement**

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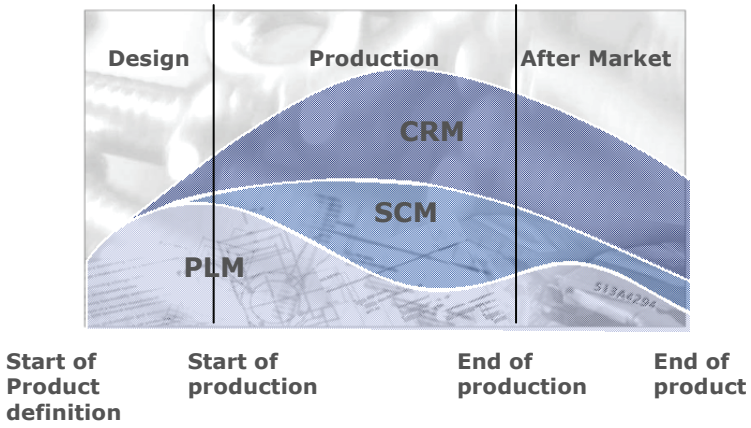
Why to use PDF/A in the engineering?

- Compliancy
  - ISO, DIN
  - FDA
  - FAA
- Process security
  - Production
  - Maintenance
  - Purchasing
- Document accessibility
  - Long term oriented
  - From every authorized person



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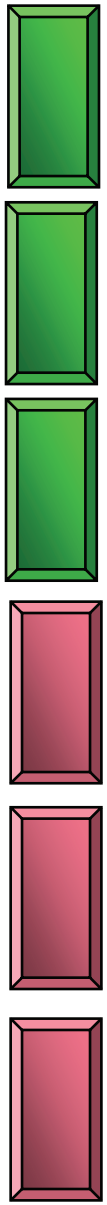

What is PDF/A?

Motivation

How do I get PDF/A ?

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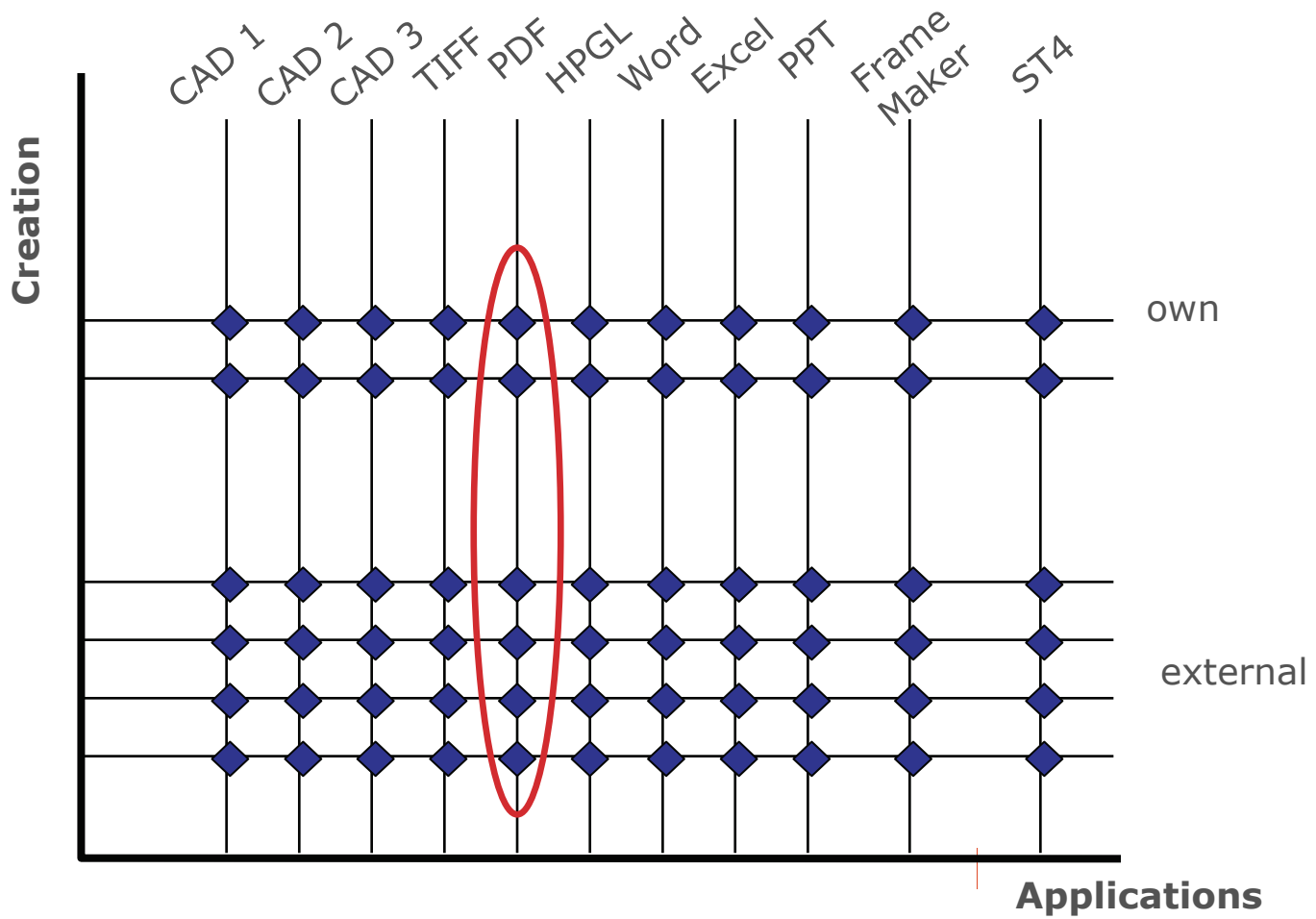
Document Classification



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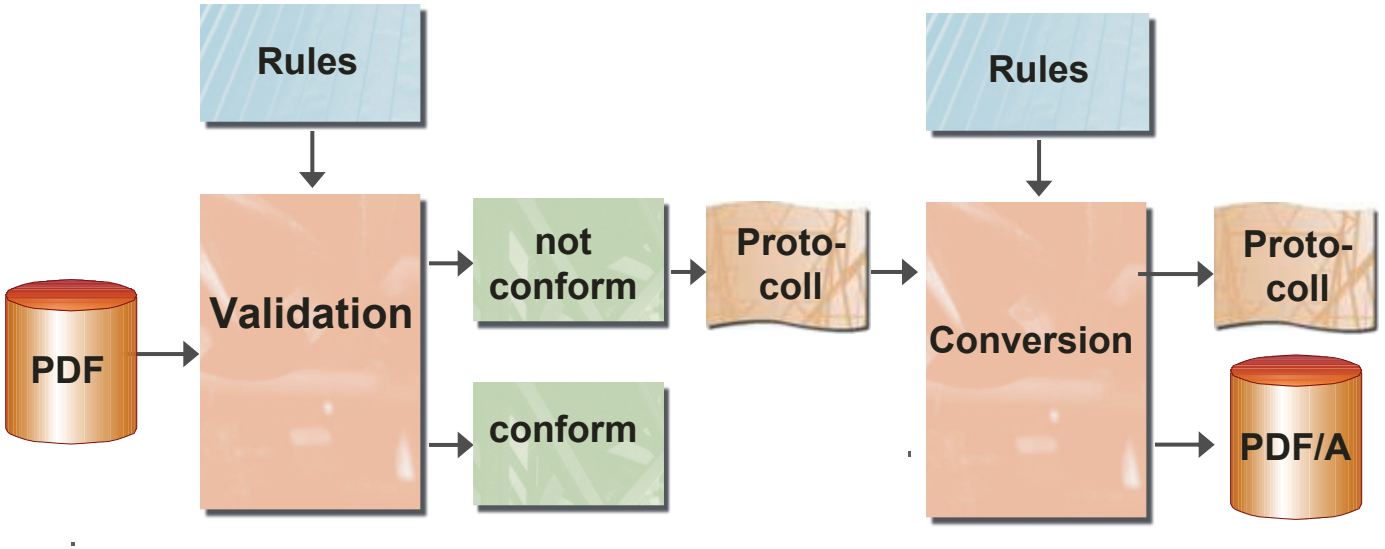
PDF/A Validation and Conversion Workflow



From PDF to PDF/A

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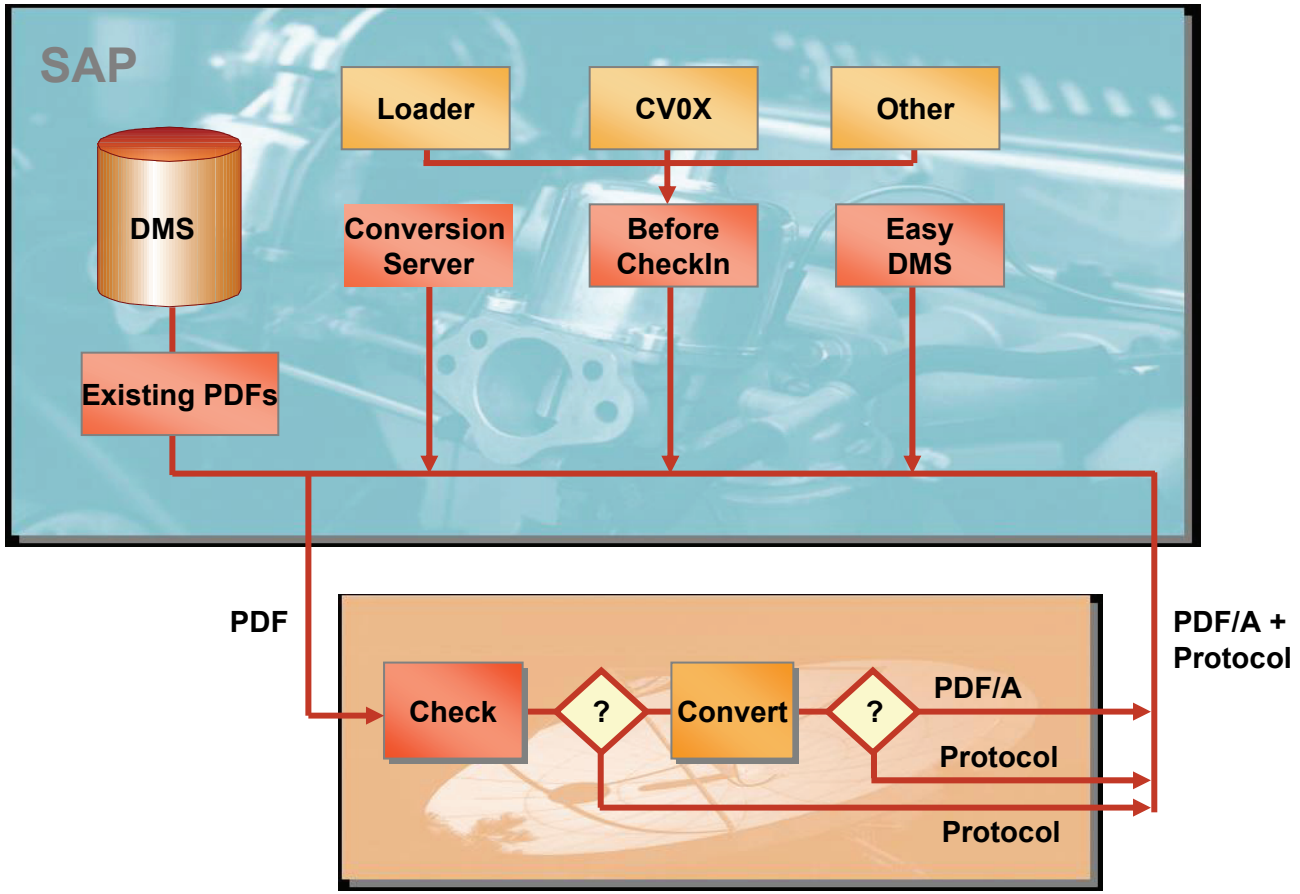
PDF/A Check- and Adjust Workflow for SAP DMS



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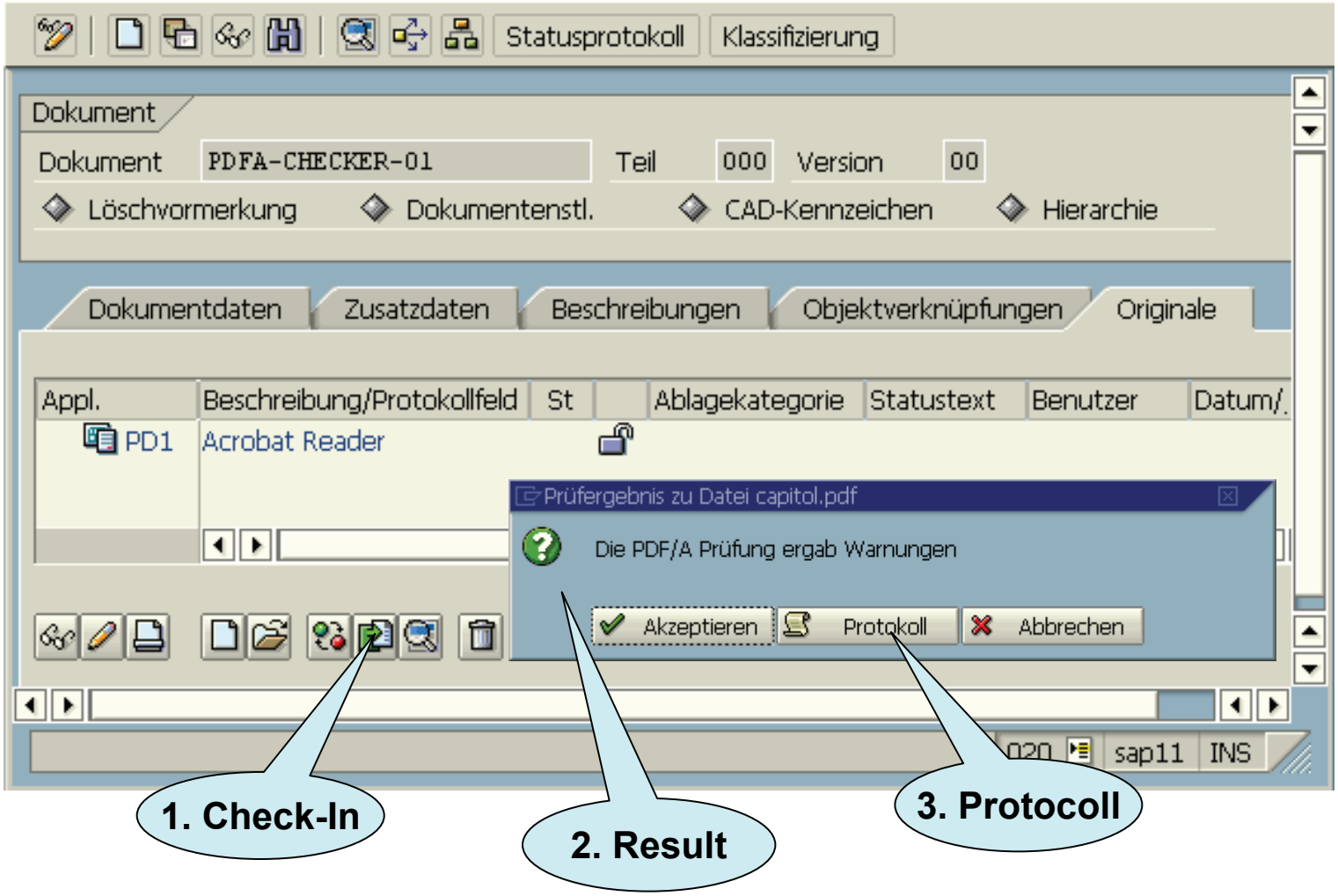
Interactive Check-In into SAP DMS



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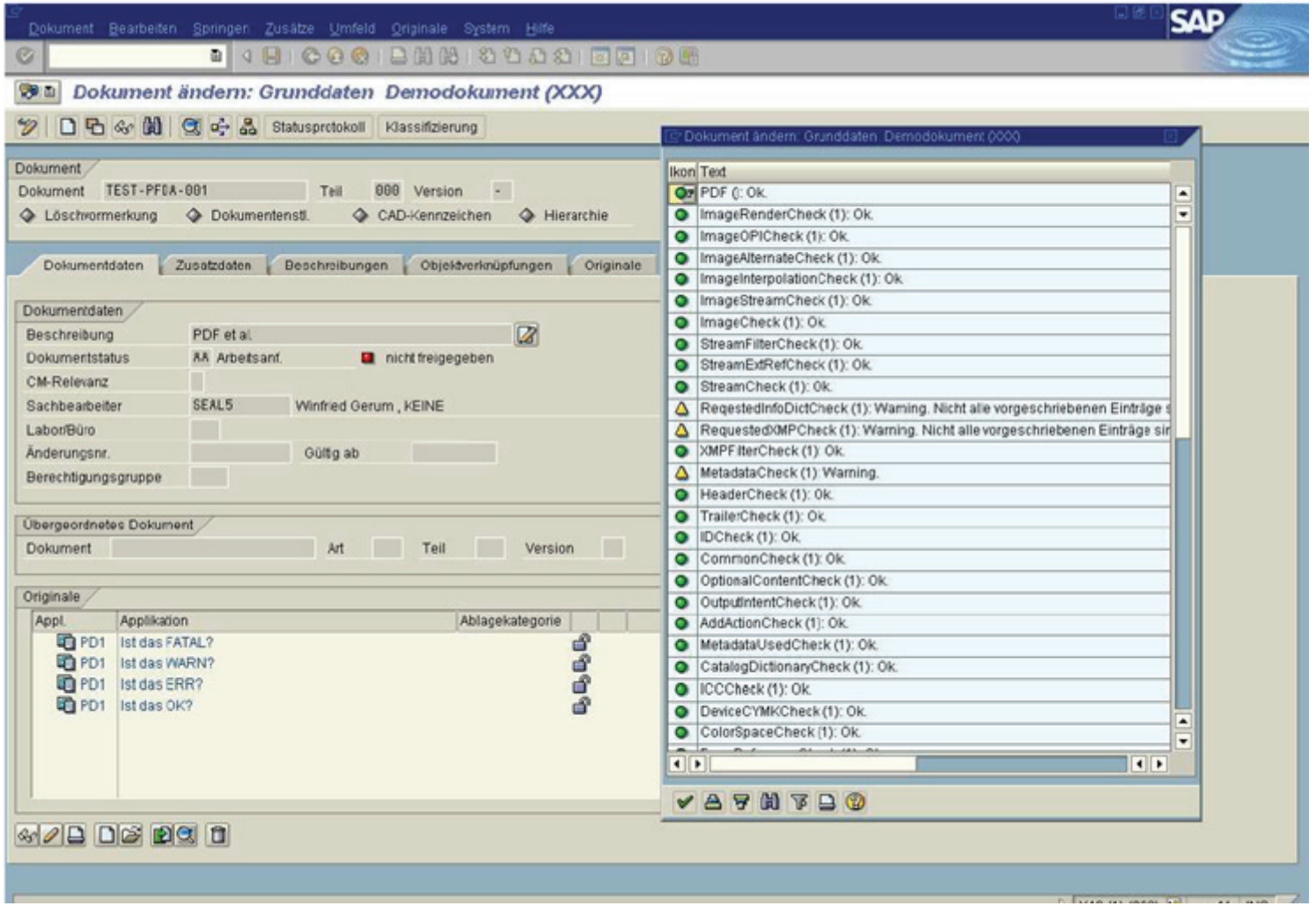
Viewing of the check protocoll



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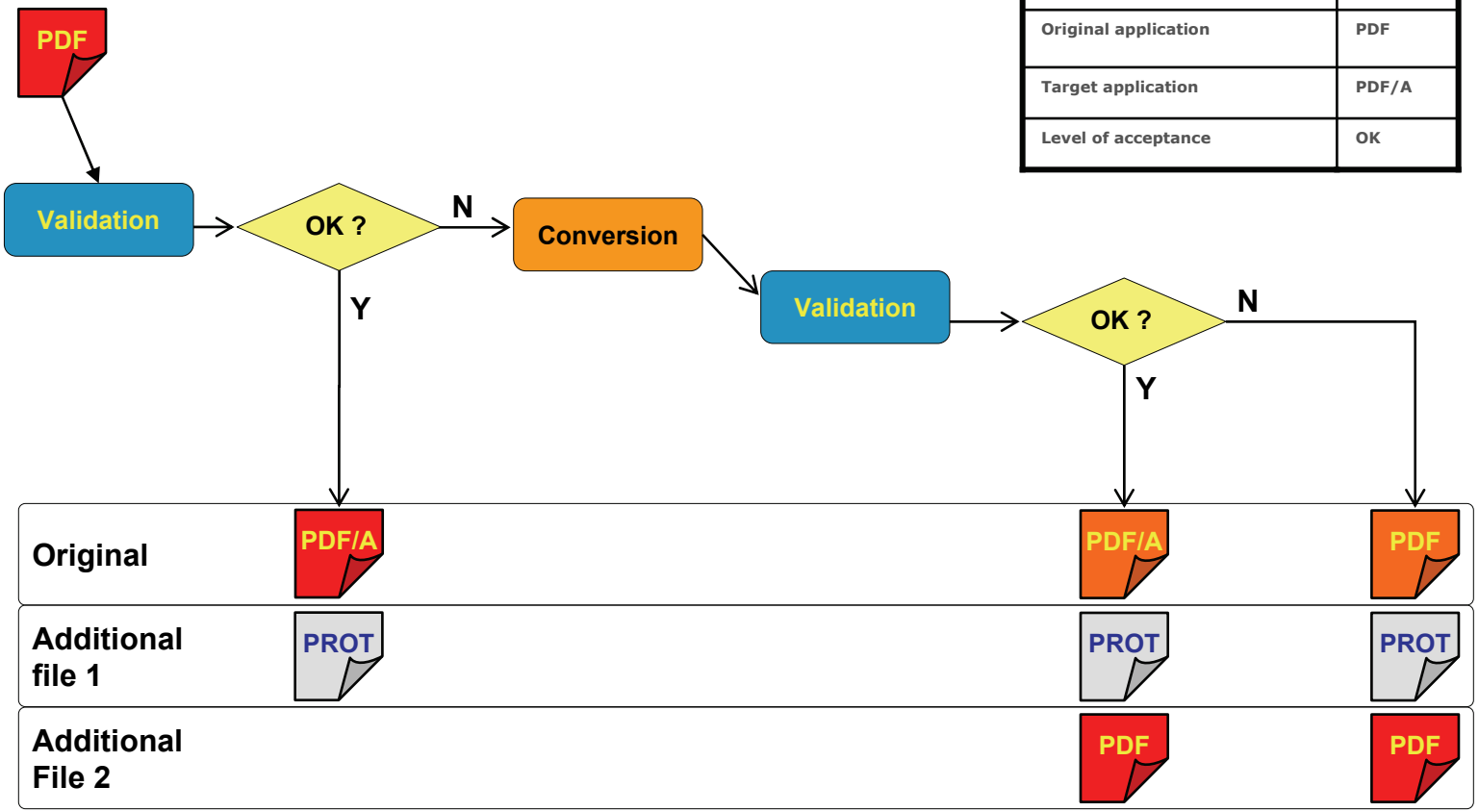
One input – two outputs

Specific Settings	
Save original	Yes
Save protocol	Yes
Original application	PDF
Target application	PDF/A
Level of acceptance	OK



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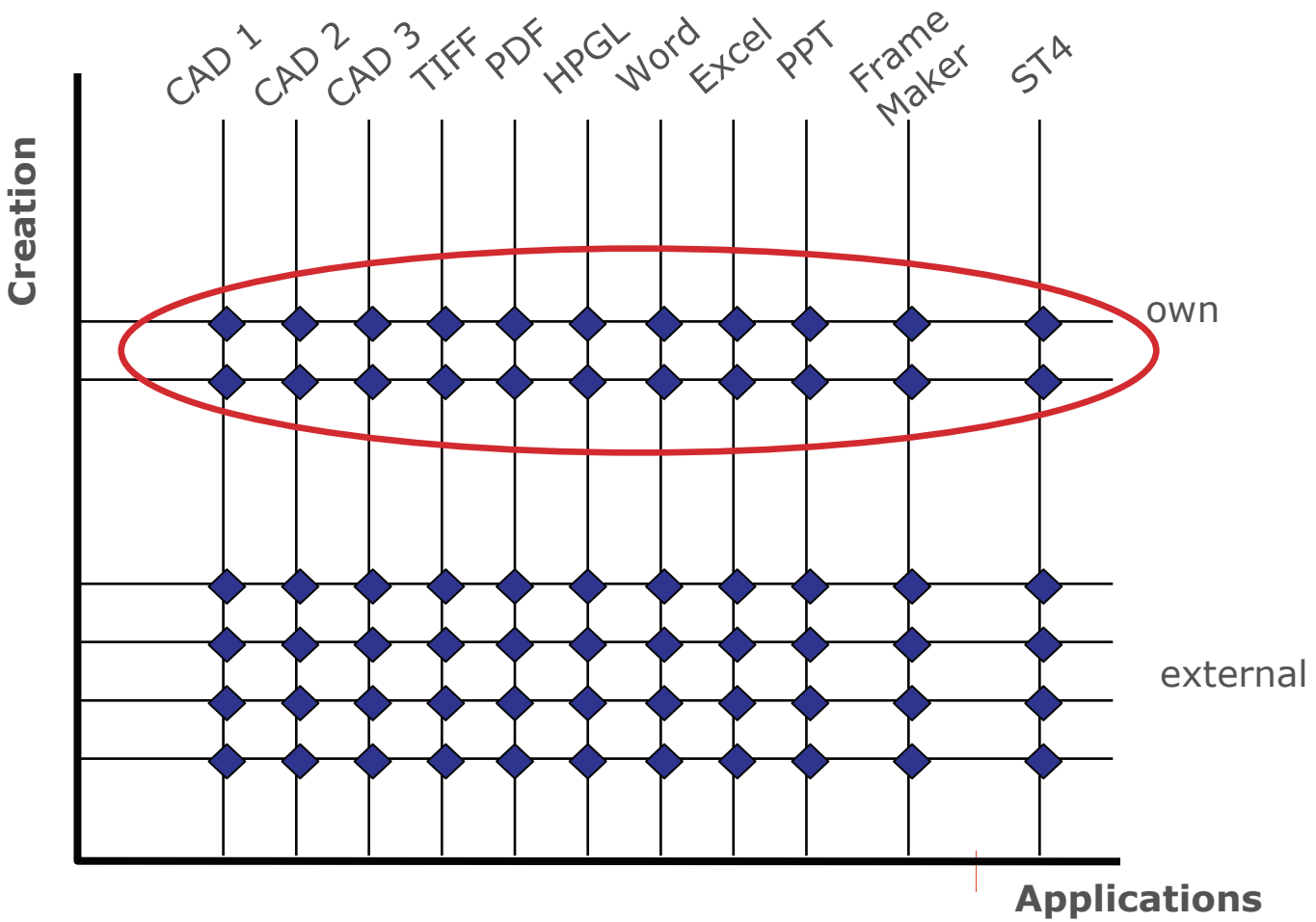

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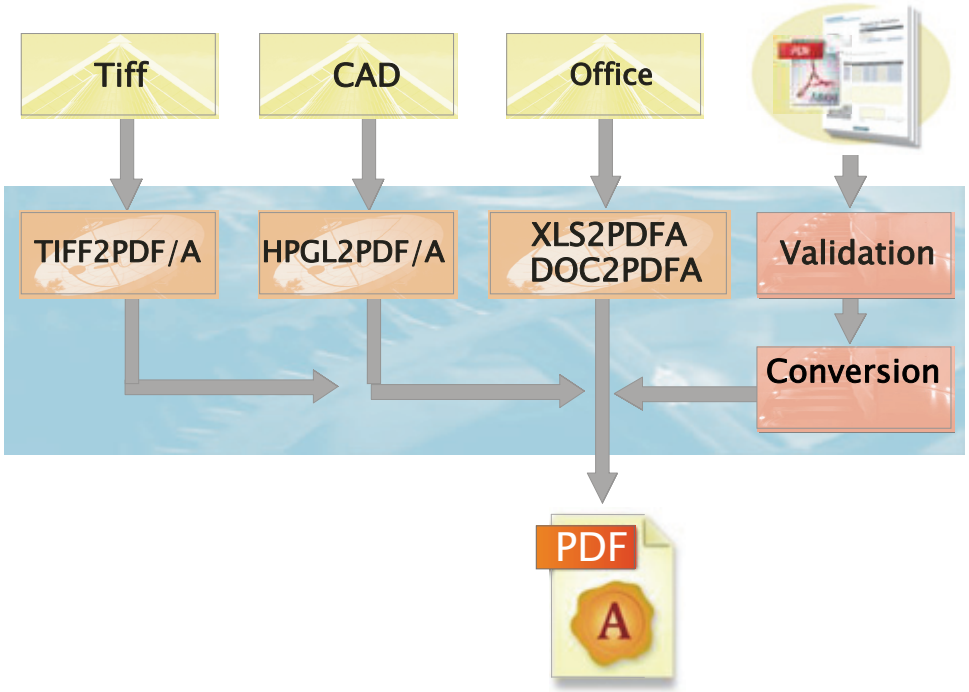
PDF creation out of the applications



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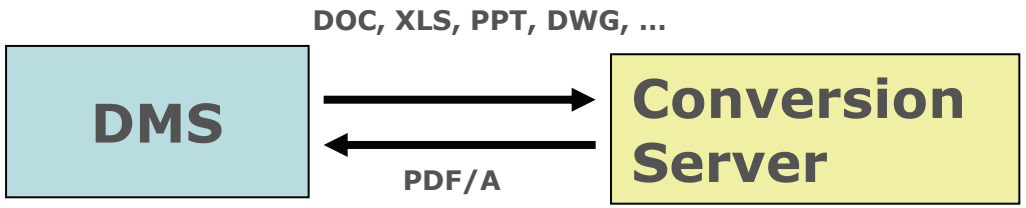
Automatic PDF/A Creation

- Interactive creation by the user with application drivers
  - Not secure
  - Requires high quality drivers for each application
- Process: Print – Approval - Scan
  - Time consuming
  - Expensive
  - Not secure
- Automatic creation with conversion servers and application converters, triggered by the DMS
  - Fast
  - Cheap



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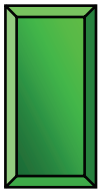
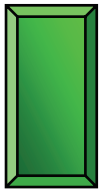
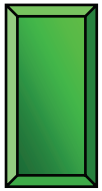


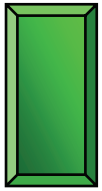
What is PDF/A?



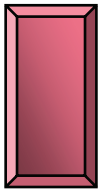
Motivation

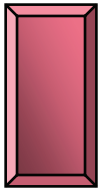


How do I get PDF/A ?



Which problems can pop up?





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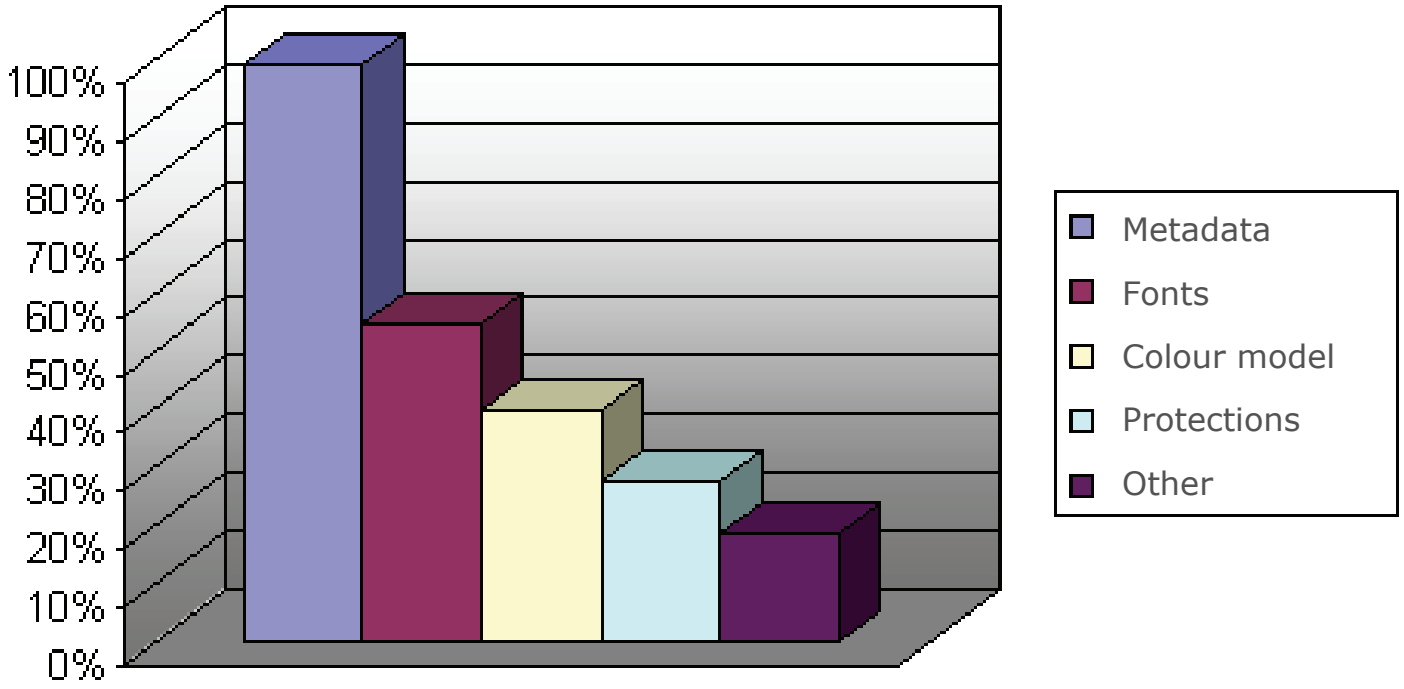
The most typical technical problems

The most important discrepancies



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The most typical legal problems

- You do not have the copyright
- Non conform documents are already released
- Rejection of documents is not possible
- Personal Responsibilities and Authorisations are not clear

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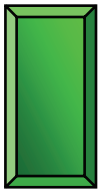

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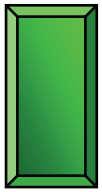

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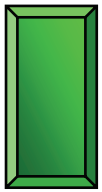

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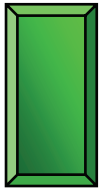

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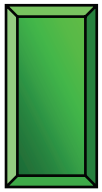
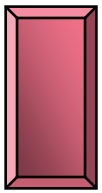


How should I setup a PDF/A implementation project ?



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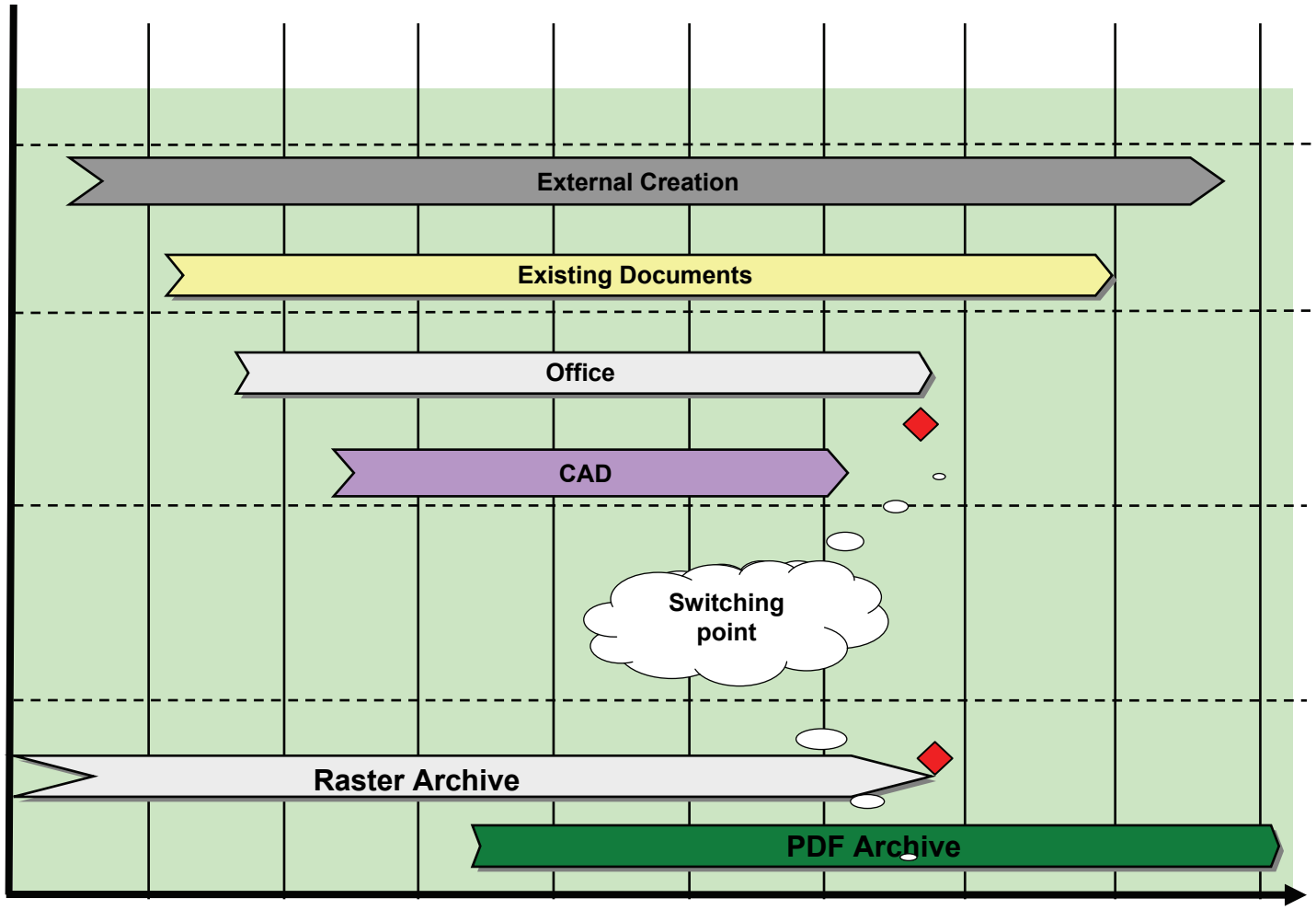
Project plan of a PDF/A migration



No offline time for a migration!

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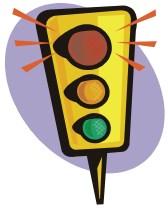
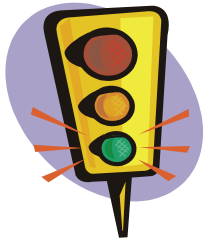
What else should be thought about?



- Plan multiple PDF qualities
- Store the original files
- Switch after the own creation processes are migrated
- Train the users



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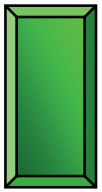

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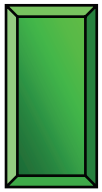
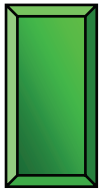


Motivation



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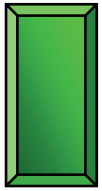

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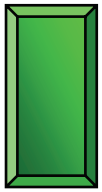

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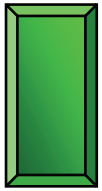

Summary

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Summary

- PDF/A is able to replace the well known TIFF format as long term archiving format
- It combines the advantages of PDF (full text retrival, colour, ...) and TIFF (reliable reproduction)
- Solutions for the direct creation of PDF/A from any application are available
- Solutions for the conversion of PDF documents to PDF/A are available
- Integrated and automatic processes increase the process security

PDF/A is the answer for long term archiving in the product life cycle

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Your Benefits!

- Secure processes

- Satisfied users

- Satisfied customers

- Security for the worst case

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Additional Information

- Flyers for relevant products
- Publications "PDF/A – a norm for archiving„

  "PDF/A – Companies should now change the archiving strategy„
- Publication „A statement for generations"
- Success Story "Giesecke & Devrient: „Securtiy and Progress –
  From TIFF/G4 to PDF/A„
- „Secure Documents"

  and more information is available on our homepage at

  www.pdfforever.com and at www.pdfa.org

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Additional Information

3rd International PDF/A Conference
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