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## White Paper

# Roadmap for implementing Certified PDF workflows

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## Beyond Preflight – Use PDFs with confidence

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# Roadmap for implementing Certified PDF workflows

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## Roadmap for implementing Certified PDF workflows

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### 2. About this White Paper

This White Paper is designed to provide a concrete roadmap for managing the introduction of Certified PDF as a standard exchange format for digital files, both within your company and with external partners. It is based on the experience of several companies who have implemented such workflows over the last years. Most information is relevant for whatever user profile: creator, publisher or printer.

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### 3. Introductory remarks

1. Why bother?
2. Calculating Return on Investment
3. The time factor
4. Moving completely or partially to Certified PDF workflows?
5. Should I hire a consultant?

#### 3.1. Why bother?

Your profitability, that's why. By implementing a Certified PDF workflow, you reduce, to an absolute minimum, the risk of production errors that result from faulty files. You also limit the cost of sustaining this level of quality to a minimum. Very often you also eliminate "hidden costs" in your organization. This can include DTP and prepress activities related to correcting and preparing incoming files that are not being invoiced. With some commercial flair you can even create new sources of revenue from this workflow.

Your peace of mind might be another reason to bother. In present workflows, between 40 - 80% of the files received contain some type of error. Most of them are caught before they're reproduced several thousand times, but the stress and frustration associated with solving these issues before the inevitable deadline is not likely to reduce your stress level. Nor can you always recoup the associated costs from your customer.

With Certified PDF the workflow is - from a reliability standpoint- back to where we were with film, from a bygone era, but now coupled with the flexibility of digital data exchange.

Whatever your role or your market segment, reducing the error rate of exchanged files to the absolute strict minimum, at a very low cost, is the core added value of Certified PDF workflows. Zero error rates and free products only exist in Graphic Arts Heaven.

#### 3.2. Calculating Return On Investment (ROI)

It may be easier than you think to have your investment in Certified PDF workflows earn a financial return. The minimal software investment for introducing Certified PDF workflows varies between 500 and 2000 euro, plus implementation costs (training, communications). Large-scale implementations, for large printers and publishers can cost up to 15 000 euro, but even then, these are marginal costs related to the size of the organization and the payback time.

Some tangible elements that can be used to perform the ROI calculation are:

- measure the percentage of files that need to be reworked before being processed
- measure how much time and money is spent on checking, correcting and converting incoming files
- check to what extent the cost of this rework is being invoiced to customers
- check your telecommunications and storage costs associated with file exchange; reduced file sizes may result in significant savings

Statistics collected around the world show that in 40 - 80% of the cases, incoming files need reworking by commercial printers. In many cases the cost of

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reworking cannot be invoiced to the customer. In other cases the customer – often the creator – is faced with additional DTP costs. This often results in a lose-lose situation, as nobody appreciates unexpected additional costs. Annually, the smallest printing operation easily produces 6000 pages or more. If – conservatively speaking – 40 % of these pages (2400) need to be reworked "free of charge", this is an outlay of at least €/£ 24000 at €/£ 10 per page. For this type of operation, the switch to a Certified PDF workflow is done at 25 – 50% of the cost, providing an ROI in a period of 3 to 6 months! The payback for creators to move to print ready Certified PDF comes from streamlining the process, having 40 – 80% fewer obstacles in the internal processes, and smaller files to transfer. Depending on the volume, the cost for creating "print ready masters lies somewhere between €/£ 7 and €/£ 30 per page or document. With investments ranging from €/£ 2000 to €/£ 20000, payback time comes with 100 to 1000 pages.

### 3.3. The time factor

Implementing Certified PDF workflows is not rocket science. Depending on the size of your organization, a switch to Certified PDF workflows can take from a few days to a few months.

### 3.4. Moving partially to Certified PDF workflows

Moving almost completely to Certified PDF depends on the market segment and the type of customers being served. A fully Certified PDF workflow is ideal, because the advantages are applied to the whole process. For some processes such as ad delivery, the use of Certified PDF is becoming more or less mandatory. For commercial printing, the ability to migrate depends primarily on the type of commercial arrangements that exist between customer, creator and processor of the files. Even in a partly converted workflow the advantages of using print ready Certified PDFs pay off extremely well. Additionally, it allows for a ranking of the files according to their state of preparedness. This can be used to price the processing of these files differently. Internally, once checked for being Certified PDF as per the proper standard, the Certified PDF files can be sent straight to prepress, while other files are sent to DTP for conversion to Certified PDF.

### 3.5. Should I hire a consultant?

There's nothing wrong with consultants. They know their job and can help you to be up and running fast while avoiding possible pitfalls. Some governments even subsidize the hiring of consultants to stimulate the use of digital communications between companies.

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### 4. Practical steps in implementing Certified PDF workflows

A successful implementation of Certified PDF workflows generally involves the following steps:

1. Decision by management, to define the internal implementation team
2. Acquiring the required software
3. Training the technical staff
4. Selection of the appropriate Certified PDF specifications
5. Implementing the Certified PDF workflow in-house
6. Developing a commercial approach to convince customers
7. Training commercial staff to communicate the Certified PDF strategy to customers
8. Piloting the implementation of Certified PDF workflows with selected partners
9. Publishing Certified PDF specifications on CertifiedPDF.net
10. Communicating to customers and partners
11. Providing assistance (helpdesk) to creators during the changeover

#### 4.1. Decision by Management, to define the internal implementation team

As with most decisions, management will have to be convinced of the value to the organization for a move to Certified PDF Workflows. In the previous chapter we provided some guiding elements to help in this decision. Implementing a Certified PDF workflow is a relatively simple process, but it requires the attention of different departments:

- management's involvement is required to drive the process and make cross-departmental efforts succeed
- commercial staff, including sales and customer relations personnel have to "sell" the workflow to customers and understand the advantages for all parties involved
- DTP and prepress operators have to work with the new tools and provide support to the customers during the changeover to Certified PDF

As with other change processes, only a concerted company-wide approach will guarantee success. Companies that successfully implemented Certified PDF workflows often created a Certified PDF Team, comprised of staff from different disciplines. Management and the Certified PDF Team should decide on the period of transition, the type of customers to start with, and the results required. Milestones will help fine-tune the process and build in flexibility for unexpected issues along the way.

#### 4.2. Acquiring the required software

Changing to a Certified PDF workflow requires an investment in software.

##### 4.2.1. At the document creator side

For those creating Certified PDF documents, the minimum software investments are: Adobe Acrobat and Enfocus Instant PDF. The total investment in software starts at less than €/\$ 600 per station.

When higher volumes of digital pages (20 – 50 or more per day) are being produced, it becomes useful to automate the process by using server-based

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software. Such a process requires Adobe Acrobat Distiller Server or equivalent and Enfocus PitStop Server.

### 4.2.2. At the document receiver side

For those receiving Certified PDF documents, the minimum software investments are: Adobe Acrobat and Enfocus PitStop Professional. The total investment in software starts with less than €/\$ 1 000 per receiver station. With PitStop Professional incoming files can be checked if they are Certified, non Certified PDFs can be certified, the standard PDF Profiles used by the creators can be adapted to specific requirements of the process used, and if needed, corrections can be made to the PDFs. When higher volumes of digital pages (20 – 50 or more per day) are produced, it becomes useful to automate the process by using server-based software. Such a process requires Enfocus PitStop Server. All the above-mentioned software has broader use, so the investment can be recovered over other applications as well.

### 4.3. Training the technical staff

Moving to a Certified PDF workflow initially requires an overall understanding of the abilities of PDF and Adobe Acrobat. The additional knowledge required to use Certified PDF is relatively straightforward. Although DTP staff is mostly self-trained, it is advised to use Adobe and Enfocus Certified Training centers to train your DTP and/or prepress staff. Proper training also involves recommendations on appropriate settings for the applications software, print drivers etc.

Such training can be obtained from Enfocus Certified Resellers and training centers and takes around 1 day for creators and 1 – 2 days for the prepress specialists. Training should be foreseen for the staff that normally prints and collects for service bureaus on the creation side. At the receiver side, the DTP or prepress staff involved in preflighting, needs to be trained.

### 4.4. Selecting the appropriate Certified PDF specifications

The objective of moving to Certified PDF is to implement clear technical specifications for the PDFs used in the graphic arts process. As described in the White Paper "PDF, Certified PDF and PDF Standards, making sense of it all", graphic arts industry associations have developed a number of public specifications. Companies are advised to implement one or a number of these existing specifications. Which one should be used depends on the business activity of the company.

In some cases it might still be appropriate to develop one's own specifications. It is recommended when there are compelling technical reasons and the required technical expertise is available in-house. The components that need to be covered in these specifications must contain at least a Certified PDF Profile, used for creating and preflighting/certifying the PDF file. Additionally one can specify separate Distiller job options, printer styles, print drivers, PPD's and ICC color profiles.

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### 4.5. Implementing the Certified PDF workflow in-house

The first step in implementing Certified PDF workflows is converting one's internal processes to Certified PDF.

#### 4.5.1. Printers

The introductory step at a printer is converting the internal prepress production to Certified PDF. Certified PDF then becomes the sole file format exchanged between the internal DTP and prepress departments. In this phase, the DTP department becomes responsible for the proper conversion of all incoming files to Certified PDF and the approval of the customers. From then on, the prepress department only works on Certified PDF documents for trapping, imposition and proofing purposes, creating a more reliable workflow.

#### 4.5.2. Publishers

The first step at a publisher is identical. All incoming files (advertisements) must be converted into Certified PDF files. Certified PDF then becomes the single file format. Then, layout can only be made on Certified PDF documents, reducing hassle with fonts and final output.

#### 4.5.3. Creators

In a creator environment, testing the Certified PDFs can be done for a certain time, and both "open" files and print ready Certified PDFs can be delivered to the next player downstream. The first few productions will require this parallel process and appropriate feedback. Thereafter, a lot less feedback will be needed than with "open" files.

### 4.6. Defining a commercial approach to partners

The changeover to Certified PDF workflows involves adjusting the working methods of external companies with whom one has a commercial relationship (supplier or customer). Therefore, it is often advisable to develop a convincing commercial argument for those partners. The nature of the commercial relationship between the partners, and the degree of general awareness of Certified PDF (through for instance communications by industry associations) may impact the nature of the proposal.

#### 4.6.1. Printers

Initially, commercial printers may have the most challenging task to convince their customers to switch over to Certified PDF, rather than sending over unprepared files. Some printers have used the occasion to re-establish a different pricing scheme for their prepress activities, in function of the kind of files received from their customers. They define digital files under one of three categories:

- "digital designs": any digital file that still needs complete preparation for becoming a 'print prepared' or 'print ready' file
- "print prepared" files: like QuarkXPress or PDF files that are complete, including all necessary fonts, image files etc. and contain the correct specifications for overprint, color space etc., but are not controlled and

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certified using the Certified PDF specifications and therefore need checking and processing before using them downstream

“print ready” files: Certified PDFs created and certified according to the specifications defined by the printer (and in some cases still TIFF/IT P1 files). These files are complete for further processing downstream

If as a printer you already charge a job-starting-cost, a lower or fixed prepress cost, when delivering print ready files, could provide the extra incentive for some clients to change over. The cost savings resulting from “print ready” files are thus shared between both parties. The opposite approach is to start charging DTP costs for not delivering “print ready” files. This method would lead to charging clients for work that had not been previously invoiced. The switch to Certified PDF Workflows can lead to significant cost savings. So much so that some printers may simply decide to invest in equipping their best customers with the required software. Enfocuss provides multi-license packages allowing printers to distribute Enfocuss Instant PDF to their customers. Providing key customers with the tools and training needed to change over to Certified PDF can strengthen the ties between you and your customers.

Publishers in many countries are implementing standards to obtain advertisements as Certified PDFs. As with printers, commercially attractive packages are offered to advertisers when delivering Certified PDFs.

In some cases “open” files are sent straight to a prepress company for conversion, generating an additional cost of 20 to 30 % per advertisement. Several publishers in the newspaper and consumer magazine environment have made Certified PDF obligatory after a changeover phase of 12 months.

### 4.6.2. Creators

Although creators are not often aware of it, changing over to Certified PDF is an advantage that can be expressed in cost savings as well. Corporate creators that work in a time-sensitive environment move to Certified PDF to avoid time loss at publishers and printers. Commercial advantages can be obtained by avoiding the double work at the creator and producers when working with “open files”.

## 4.7. Training commercial staff to communicate the Certified PDF strategy to customers

Once the commercial proposal is developed, the company's commercial staff must be trained. They are the ones that must convince the customers that this changeover is beneficial to all parties involved. They must therefore be aware of the negative impact on profitability of the current working methods. Some background on both the present system of working and the Certified PDF way of doing things is needed. A tailored training session set up by sales management and prepress caters to this need. It might also be appropriate to devise an incentive for sales people to convince their customers.

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### 4.8. Piloting the implementation of Certified PDF workflows with selected partners

It is advised to identify a limited number of customers to start the Certified PDF workflow. A small brainstorming session with the sales team and the prepress people will help to identify the suitable partners for piloting the Certified PDF workflow.

Following criteria can be used to identify the appropriate partners:

- technical competence, in other words, creating few problems with "open files"
- willingness to invest in new ways of working
- not requiring intensive last minute corrections
- proximity in order to meet face to face and discuss issues

Prior to the start of the pilot project, selected partners should be consulted as to what merits could be obtained and what benefits and issues to expect. It is recommended to identify criteria to measure the impact of the changeover: time savings, evolution of percentage of files containing errors. Such information can be used as a basis in subsequent communication. The pilot partners should be trained on the appropriate software applications prior to implementing Certified PDF. In-house staff or certified trainers could conduct this training.

### 4.9. Publishing Certified PDF specifications on CertifiedPDF.net

CertifiedPDF.net is an on-line resource for Certified PDF specifications, recently developed by Enfocus. It can be used to communicate the Certified PDF specifications internally as well as externally. All users can subscribe from within their Enfocus applications to the specifications published by contributing members. Subsequently they will be notified whenever a change is made to one of the specifications or the accompanying documentation. This greatly facilitates the process of keeping all partners up to date on the specifications used, and gives them easy access to support resources.

### 4.10. Communicating to the wider customer base

A communication plan aimed at other partners could contain the following elements

#### 4.10.1. Brochure

A number of companies have developed a brochure or a flyer explaining the concept. It mentions the advantages as well as the steps needed to implement Certified PDF workflows. In some cases this is accompanied by a CD, containing the settings needed, as well as links to websites containing further information about the specifications and the required products.

Such collateral can then be used as a handout during seminars and trainings, or can be used in a mailing.

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### 4.10.2. On-line information

It is advised to develop the necessary on-line information around the Certified PDF workflow. This can be done on the website of the company and on CertifiedPDF.net. The latter allows contributors to publish their specifications and related information, and provides a wide range of more generic support information, and access to support forums related to Certified PDF. This information should contain both general information as well as in-depth technical info. Being able to refer to this on-line information will significantly facilitate the implementation and alleviate support needs.

### 4.10.3. (e)Mailing

Depending on the number of companies that need to be addressed, several methods of communication should be considered. Physical mailings or emailing, though often force important, rarely constitute enough to convince companies to change their working methods. Mailings should be used in conjunction with other actions.

### 4.10.4. Seminar

Seminars are often the most effective way to communicate to a medium sized audience. A half-day program generally allows for a complete exposition, while at the same time allowing for attendee feedback (and personal contact). Such events can be organized in collaboration with Enfocus Certified Resellers and Trainers. Especially when using specifications defined by industry associations, people can be directed to more generic seminars organized by those associations, or by Enfocus and its partners.

### 4.10.5. On-site visits

On-site visits to customers and partners can be the most effective, but time-consuming way, to communicate information about Certified PDF workflows. It allows for a tailored approach, concrete set-up of the software, and hands-on training. In some organizations employees that were previously involved in controlling and correcting incoming files have been responsible for this task.

## 4.11. Assistance and support

If proper attention is given to it during the pilot phase, the large majority of start-up issues will have been identified, solved and documented by the time the larger scale implementation is started. It is advised to address recurring issues by providing on-line documentation, such as simple step-by-step guidelines, and a Frequently Asked Questions document.

It is advised to have the staff, previously involved in controlling and correcting incoming files, to provide some phone and email support. Not only is it a good form of customer service, they also benefit from having the best understanding of each other's internal processes and work methods.

In almost all cases this support is only necessary during the initial startup for a few projects or weeks. Subsequently there will be less support needed. Only during the change of standards is this type of support likely to increase.

While companies have created their own helpdesk, others have subcontracted this work to specialized partners, such as consultants, Certified Resellers and Trainers and integrators.