

The truth about PDF document security

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MANY LAWYERS STILL BELIEVE THAT PROVIDING LEGAL DOCUMENTS IN PDF FORMAT PREVENTS TAMPERING WITH THEIR CONTENTS. HOWEVER, AS ANDREW SMYTH EXPLAINS, NOTHING COULD BE FURTHER FROM THE TRUTH. THIS ARTICLE WAS FIRST PUBLISHED IN THE AUGUST 2014 EDITION OF PROCTOR.



Lawyers and law firms have adopted email communications with great enthusiasm.

In a busy practice, with so many deadlines and time pressures, it is a boon to be able to exchange correspondence instantly with the other party, and indeed, your own client. This convenience has statutory support with the state and Commonwealth Electronic Transactions Acts.¹

The benefit, and sometimes burden, of transmitting a document electronically is that the recipient receives a perfect, working copy – which they can then edit (change) to suit their requirements. In a legal context it is often not desirable that the recipient be in a position to effortlessly and invisibly alter your carefully crafted letter or offer of settlement.

As a response to this issue, many lawyers choose to send their email correspondence as PDF² documents.

PDF security

Many people still think that all PDF documents are secure and cannot be changed. This misconception is due to the fact that they are accustomed to viewing them with free software (usually Adobe Reader) which does not give the user editing functions. However, PDF-editing software is widely available, and with it PDF documents may be edited in the same way that a Microsoft Word document (or any other format) may be edited.

Owner password

In response to demand for ‘locking’ capabilities, PDF software offers the user the ability to insert all kinds of security restrictions on copying, printing and editing.³ The restrictions are enforced by a password that you set.⁴ These functions allow a user to specify, for example, that the document may be viewed by the receiving party – but not changed without access to

the password. This is referred to as ‘owner password’ security.

The big problem is: *all of these restrictions only work if the software program used to open the PDF file honours those restrictions.*

At a security level, your PDF file is effectively just asking the recipient’s PDF software ‘please don’t let the user edit this file’. If the underlying software ignores these polite requests from the file (and many PDF software programs do) then the person viewing the PDF can edit the file in any way they like.⁵

If your PDF software does honour the PDF file’s instructions, limiting what you can do with the file, you can use any number of free, online services to unlock the file and remove these restrictions. These websites require no registration or pre-configuration – just drop the locked file into their ‘file in’ box, and it will immediately unlock it and give you an unlocked version, instantly, and free. (Try googling ‘pdf file unlocker’.)

Andrew Smyth is the managing partner of Robbins Watson Solicitors and writes about issues arising at the intersection between law and technology. He is a member of the QLS Litigation Rules Committee and was a contributor to the QLS Costs Guide 2014. Andrew also writes about superannuation, asset protection and business succession, and is co-author of the reference text 'Estate Planning', published by LexisNexis.



User password

There is another kind of PDF security, which locks the file completely – you cannot open and view the file at all unless you enter a password. This is known as 'user password' security. This method is far more secure, as the document is encrypted, and cannot be decrypted without the password. Online file unlocking services cannot open files with this kind of lock.

This method is secure, but is inconvenient, as the recipient has to know the password in order to open the file. This limits the usefulness of the function. Also, if you give the recipient the password to the file so that they can read it, they can then edit the file in any way they wish.

Alternatives?

The problem with PDF security is that what people are actually

looking for is a way to allow another person to be sent a document that they can look at, but not change. The owner password PDF editing restrictions give the appearance of this functionality, but the security is illusory.

The most effective response to this problem⁶ is the use of a digital signature in the document. Applying a digital signature to a document is not the same as pasting in a scanned copy of your pen-and-ink signature – it is, in fact, a mathematical process which effectively identifies exactly (at the binary level, down to the very last zero and one) what the document contained and looked like when the document was signed. Any change made after that time is immediately detected, invalidating the signature.

This does not prevent changes to the document, but clearly identifies to anyone viewing the PDF that changes have been made after it was signed. Standard PDF viewer

programs (such as Adobe Reader) can even show you exactly what it looked like before those changes.

Conclusion

While the PDF format is excellent for ensuring that the recipient will be able to view content that you send, it is not a security mechanism. You cannot be assured of the integrity of an electronic document after the file has left your computer system. The best you can do is ensure that you retain the means to prove what you actually sent. It has always been so.

Keep a copy! ●

(Endnotes)

1. *Electronic Transactions (Queensland) Act 2001; Electronic Transactions Act 1999 (Cth), and equivalents in other states.*
2. PDF stands for 'Portable Document Format', which, while originally created by Adobe, is now an open standard.
3. Options include any combination of restrictions on: View, Print, Copy content, Commenting, Signing – even text to speech.
4. These security options may also be applied by use of a digital certificate.
5. For the technically minded – the 'security' is analogous to the 'read only' flag that can be set for any file. The flag can be turned on or off at will.
6. Of which the author is aware. If you know of a solution to this Gordian knot please contact the author!

Executive summary

1. PDF documents are as capable of editing, and as easily, as MSWord documents.
2. If a person can open and view a PDF, then any security restrictions within the document can be bypassed at will.
3. If the PDF document is locked so that it requires a password to open and view, then this is secure (so long as the password used was secure). However, giving a person the password to allow them to view the file also gives them the ability to edit the file.