LAW SOCIETY OF SOTLAND - SMARTCARD Verifying a Digital Signature in Electronic Documents - Word

This guide will take you through how to view and validate signatures on documents you have received. You do not need a Smartcard to verify the signature applied with one, but you need to be connected to the internet. The most common types of document used within the profession are Microsoft Word (DOC) and Adobe Acrobat (PDF), which is why we are concentrating on these.

Since different firms use different editions of word processing software, the following steps are duplicated - one version for Word 2010 & Office 365, and one for Adobe PDF. Even if you use a different version of either processing software, you will be able to use either of the following instructions. (The buttons might look different, but the functionality will be the same.)

Regardless of what word processing software or edition is used: You need to interrogate the digital signature itself, NOT the visual representation that may or may not be visible on the document. That means, validating or confirming a digital signature is only possible on the computer, not with a print-out of the document.

Digital Signature Verification – Microsoft Word 2010

STEP 1 – "Marked as Final"

When receiving a Word document that is digitally signed, the first thing you'll notice is the yellow bar on the top. This indicates that the documents is "protected" somehow and cannot be edited.



Should any recipient ignore the warning, and click "Edit Anyway," the yellow bar will disappear. But so will the signature embedded in the document and it will be obvious to subsequent recipients that the document has been altered en route.

STEP 2 – Viewing/confirming a digital signature

As mentioned earlier, validating or confirming a digital signature is only possible on the computer, not with a print-out of the document.

Home Insert Page Layout References Mailings Review View Add-Ins 🚽 Save Information about Letter to schools with digital sig 🔜 Save As C:\temp\Letter to schools with digital sig.doc 蔖 Open 首 Close Signed Document This document has been signed and marked as final. It should not be edited. If Info anyone tampers with this document, the signatures will become invalid. View Recent Signatures

Select FILE menu, then the INFO tab where the option to VIEW SIGNATURES is available

Once selected, a new menu will appear highlighting the valid digital signature and the date it was applied:

 26 Drumsheugh Gardens
 Signatures:

 Edinburgh EH3 7YR
 ANNE NESS

 Legal Post LP1 Edinburgh -1
 14/08/2014

CLICK the digital signature you want to check, then choose **SIGNATURE DETAILS** from the drop-down menu:

	😨 Signatures	→ ×
	📥 🔛 Valid sig	inatures:
ens	ANNE NESS	14/08/20
	=	🐊 🛛 Sign Again
irgn - 1		Signature Details
		Signature Setu <u>p</u>
		Remove Sig <u>n</u> ature
8250		

The following window appears showing "purpose," "signing as" and "issued by":

Verifying a Digital Signature - Word.doc 2

Signature Details	8 23		
Valid signature - This signature and the signed content have modified since the signature was applied.	not been		
Signature type: XAdES-EPES			
Purpose for signing this document:			
Final document for issue			
Signing as: ANNE NESS Issued by: ACA - Certificados Trusted Demo	<u>V</u> iew		
See the additional signing information that was collected	Close		

The most important information is right here: "Valid signature - This signature and the signed content have not been modified since the signature was applied." This is your guarantee that the document has not been tampered with and that its content has not been altered since it was signed by the signatory. In addition, the name of the person signing the document is also spelt out, so that you can confirm whether or not this is the right person you expected to complete this transaction with.

Select **VIEW** to further clarify the digital signature:

Certificate 🛛 🕅
General Details Certification Path
Certificate Information
This certificate is intended for the following purpose(s):
 Proves your identity to a remote computer Protects e-mail messages
* Refer to the certification authority's statement for details.
Issued to: ANNE NESS
Issued by: ACA - Certificados Trusted Demo
Valid from 13/08/2014 to 13/08/2017
$\ref{eq:product}$ You have a private key that corresponds to this certificate.
Issuer Statement
Learn more about <u>certificates</u>
ОК

This window contains more technical information about the underlying certificate of the electronic signature. The "Certification Path" will show every underlying certificate up to the root certificate these are based on; the "Details" tab shows serial numbers and algorithms, etc.

One further details can be gleaned from the "General" tab: the validity dates. These become important years later when proving that at the time of signing, signature and signatory were legitimate. As described earlier on, the signature panel shows the name of the signatory and the date the signature was applied:



You can compare the date with the "Valid from... to..." dates given in the Certificate Information panel.

Digital Signature Verification – Microsoft Office 365

Please remember that you can only verify a digital signature on the computer. Looking at the "physical representation," the print-out on a piece of paper, will not give you the information you need to validate the digital signature embedded in the document.

STEP 1 – "Marked as Final" & "Signatures"

This edition of Microsoft Word will have two yellows bars at the top, alerting the recipient that the document is "Marked Final" and that signatures have been applied:



As with previous versions of Word, this shows that the document and its content are "protected" and cannot be altered. Should any recipient ignore that statement and decide to "Edit Anyway," the yellow bars will disappear and the signature will be invalidated. Any following recipient after that will notice that the document has been altered.

STEP 2 – Viewing/confirming a digital signature

Select **VIEW SIGNATURES...** on the yellow bar on the top to see the signature panel:

Valid signatures:		
JAMES IAIN NESS 27,	/03/2020	
and strive to This document is signed. eds of our Any edits made to this document excellent legal the digital signatures.	will invalid	ate
ch we are	ffice	

It will tell you who signed the document and on what day. As with other versions of Word, this is the first indicator of who actually signed the document and whether or not it is the person you expected to sign. The name of the signatory showing here is taken directly from the Smartcard signature on the chip of the card; not from what may have been typed onto the signature line of the document.

Alternatively, you can double-click the signature line at the bottom of the document, this will open up the signature panel as well.

Again, bear in mind that what you see on the signature line, the one starting with "X," is a representation of that person's signature. It is not the digital signature itself. It will give you information, as to what name was typed and on what date, but it will not confirm validity. For that, you need to interrogate the digital signature embedded in the bits and bytes of the document itself.

ocument as final to discourage editing.	Edit Anyway		
8 9 10 11 12	13 · · · 14 · · · 15 · · · 1	Signatures	~ ~
		Valid signatures:	
		JAMES IAIN NESS	27/03/2020
		E.	<u>S</u> ign Again
nal body for over 12,000 Scottich o	olicitors and was		Signature Details
g objective of leading legal excellen	ice, and strive to		Signature Setu <u>p</u>
ody, understanding and serving the	e needs of our		Remove Si <u>gn</u> ature
d standards to ensure the provision	of excellent legal		
indence in scotland s legal professio			
work in the public interest, a duty work to promote a strong varied	which we are		
the public and protecting and prom	oting the rule of		
airer and more just society through	active		
ingdom governments, parliaments,	wider		
		This document is sig	ned
		Any edits made to thi	s document will
		invalidate the digital s	signatures.
		Learn more about sig documents	natures in Office
	anal body for over 12,000 Scottish so g objective of leading legal exceller ody, understanding and serving the d standards to ensure the provision fidence in Scotland's legal professio work in the public interest, a duty our work to promote a strong, varied the public and protecting and prom fairer and more just society through ingdom governments, parliaments,	example of the public interest, a duty which we are ur work to promote a strong, varied and effective the public and protecting and promoting the rule of fairer and more just society through active ingdom governments, parliaments, wider	exament as final to discourage editing. Edit Anyway

CLICK on the signature you want to check (it is possible to have multiple signatures in one document) and from here select **SIGNATURE DETAILS...** to check all necessary information in the following window:

Signature Details ? X
Valid Signature - The signed content has not changed and the signer's certificate is valid.
Signature type: XAdES-EPES
27/03/2020
X
James Ness Signed by: JAMES IAIN NESS
Signing as: JAMES IAIN NESS Issued by: ACA - Trusted Certificates - 2014
See the additional See information about Close signing information that the signer Close

Most importantly is obviously the first sentence confirming that this in fact a valid signature and that the document has not been tempered with since it was signed.

CLICK on the **VIEW...** button to open op information about the underlying certificate itself.

🔲 Certi	ficate		×
General	Details Cert	ification Path	
	Certificate	e Information	
This	• Proves your • Protects e-m	s intended for the following purpose(s): identity to a remote computer ail messages	
*Re	fer to the certif	fication authority's statement for details.	-
	Issued by:	ACA - Trusted Certificates - 2014	
	Valid from (09/05/2017 to 09/05/2020	2
		Issuer Statem	ent
			ок

This window tells you who owns the signature ("Issued to: ...") and who the Certification Authority is ("Issued by: ...") - the organisation in charge of the underlying certificates. It also confirms the validity period of the signature in question.

•	Signatures	- ×	
	Valid signatures:		
	JAMES IAIN NESS	27/03/2020	

This will ascertain that the owner/signatory had a valid digital signature when s/he signed the document.