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.
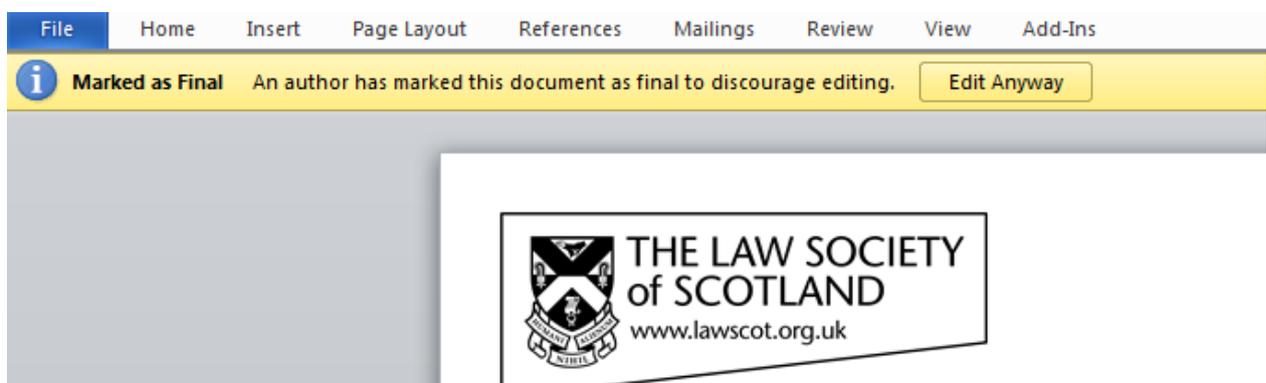

Should any recipient ignore the warning, and click "Edit Anyway," the yellow bar will disappear. But so will the signature embedded in the document and it will be obvious to subsequent recipients that the document has been altered en route.

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.
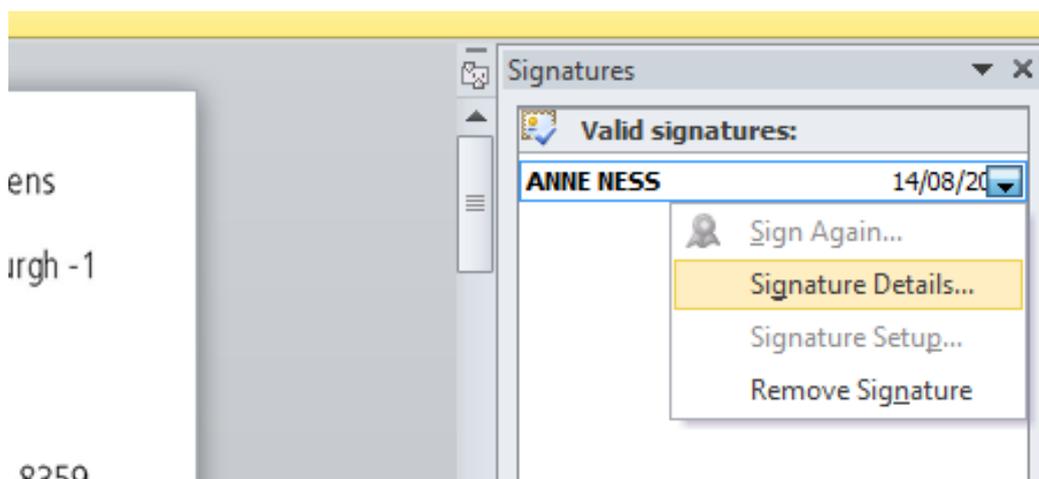
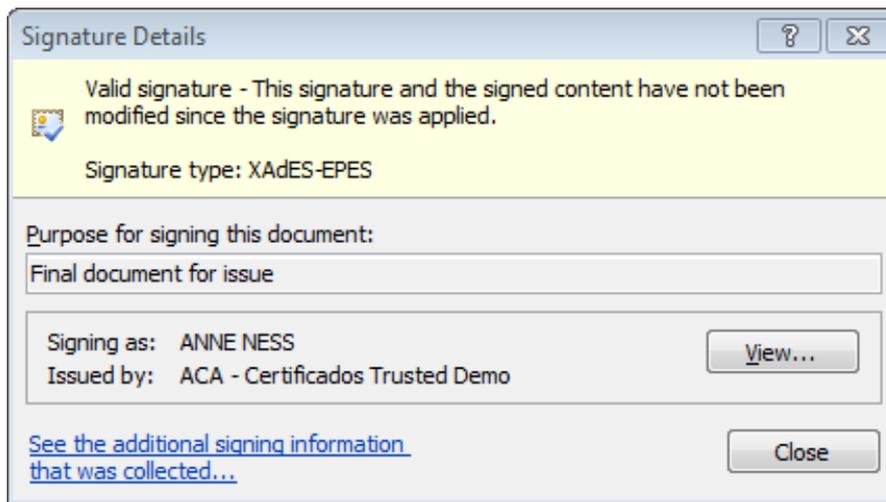Select **FILE** menu, then the **INFO** tab where the option to **VIEW SIGNATURES** is available
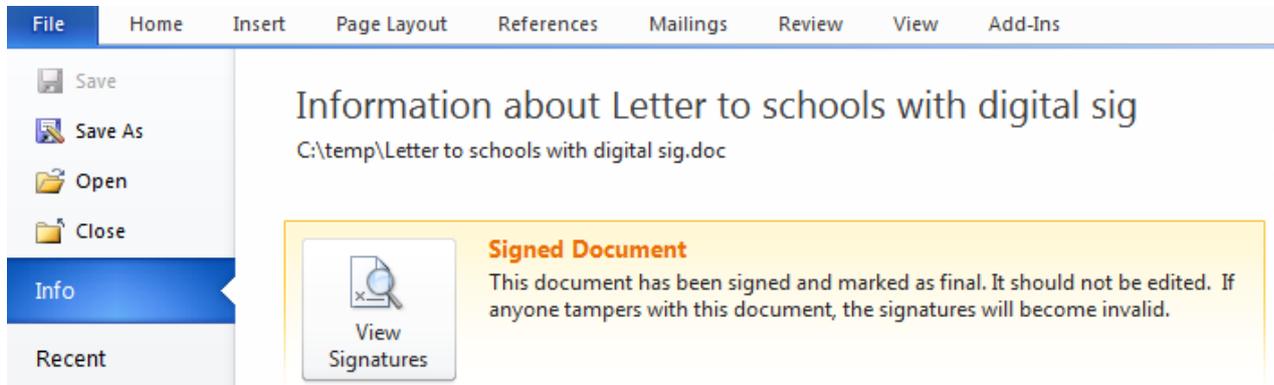
Once selected, a new menu will appear highlighting the valid digital signature and the date it was applied:

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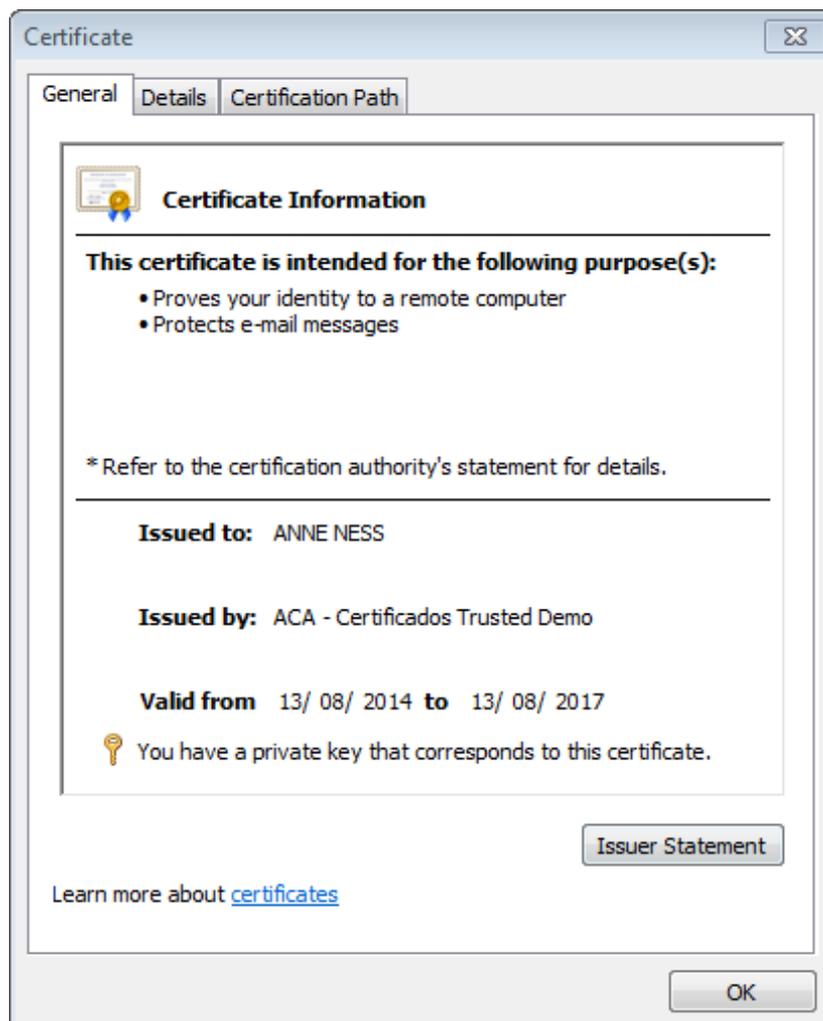

The following window appears showing "purpose," "signing as" and "issued by":

Signature Details   [?] [X]

Valid signature - This signature and the signed content have not been modified since the signature was applied.

Signature type: XAdES-EPES

Purpose for signing this document:

Final document for issue

Signing as: ANNE NESS
Issued by: ACA - Certificados Trusted Demo

[View...]

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   [X]

| 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

You have a private key that corresponds to this certificate.

[Issuer Statement]

Learn more about certificates

[OK]

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:
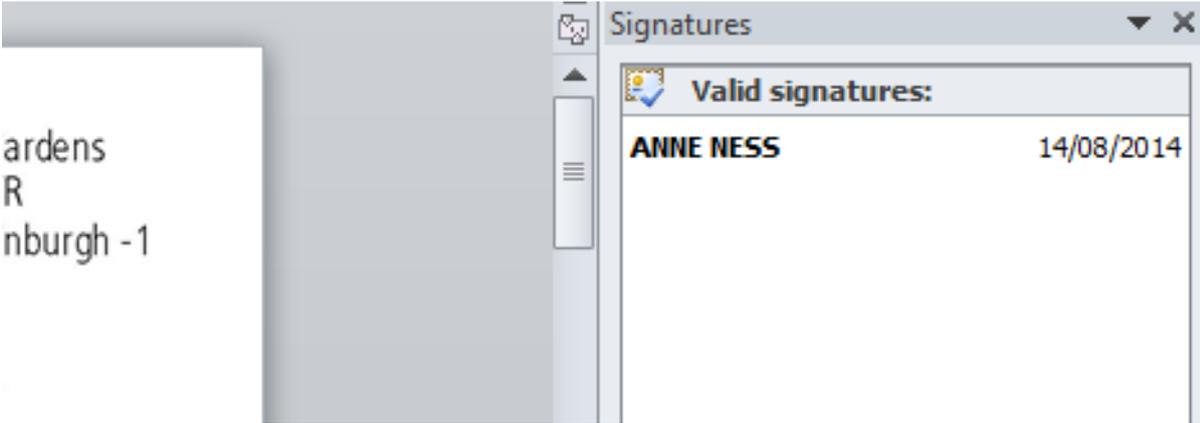

You can compare the date with the "Valid from… to…" dates given in the Certificate Information panel.

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:
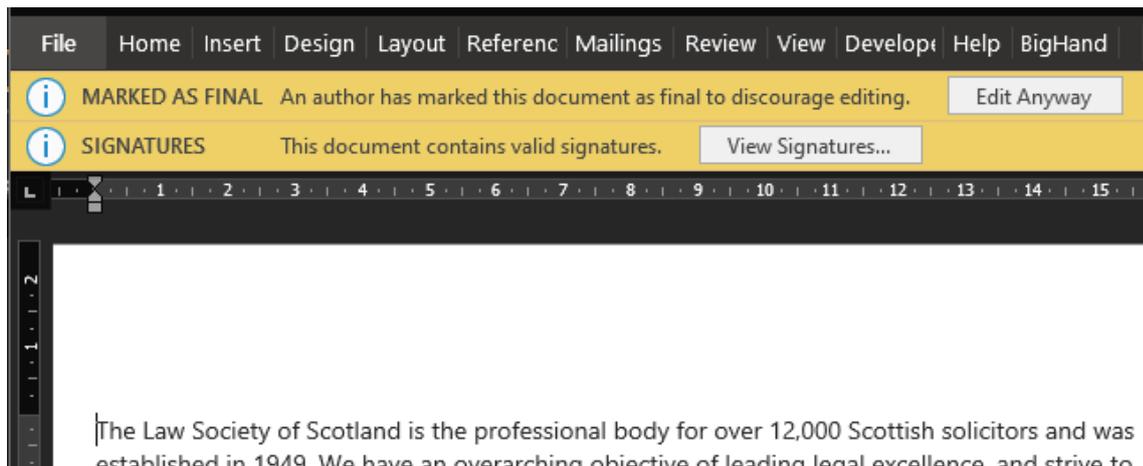
As with previous versions of Word, this shows that the document and its content are "protected" and cannot be altered. Should any recipient ignore that statement and decide to "Edit Anyway," the yellow bars will disappear and the signature will be invalidated. Any following recipient after that will 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:
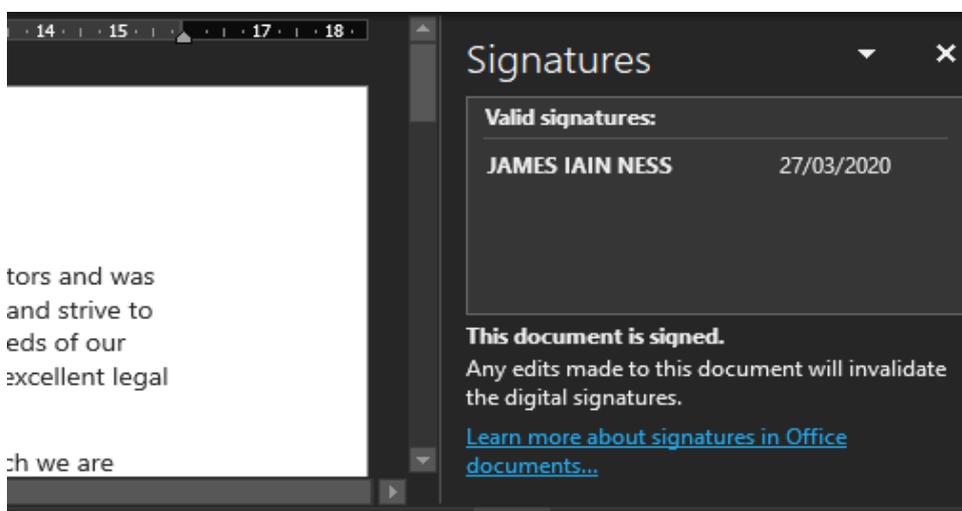
It will tell you who signed the document and on what day. As with other versions of Word, this is the first indicator of who actually signed the document and whether or not it is the person you expected to sign. The name of the signatory showing here is taken directly from the Smartcard signature on 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.
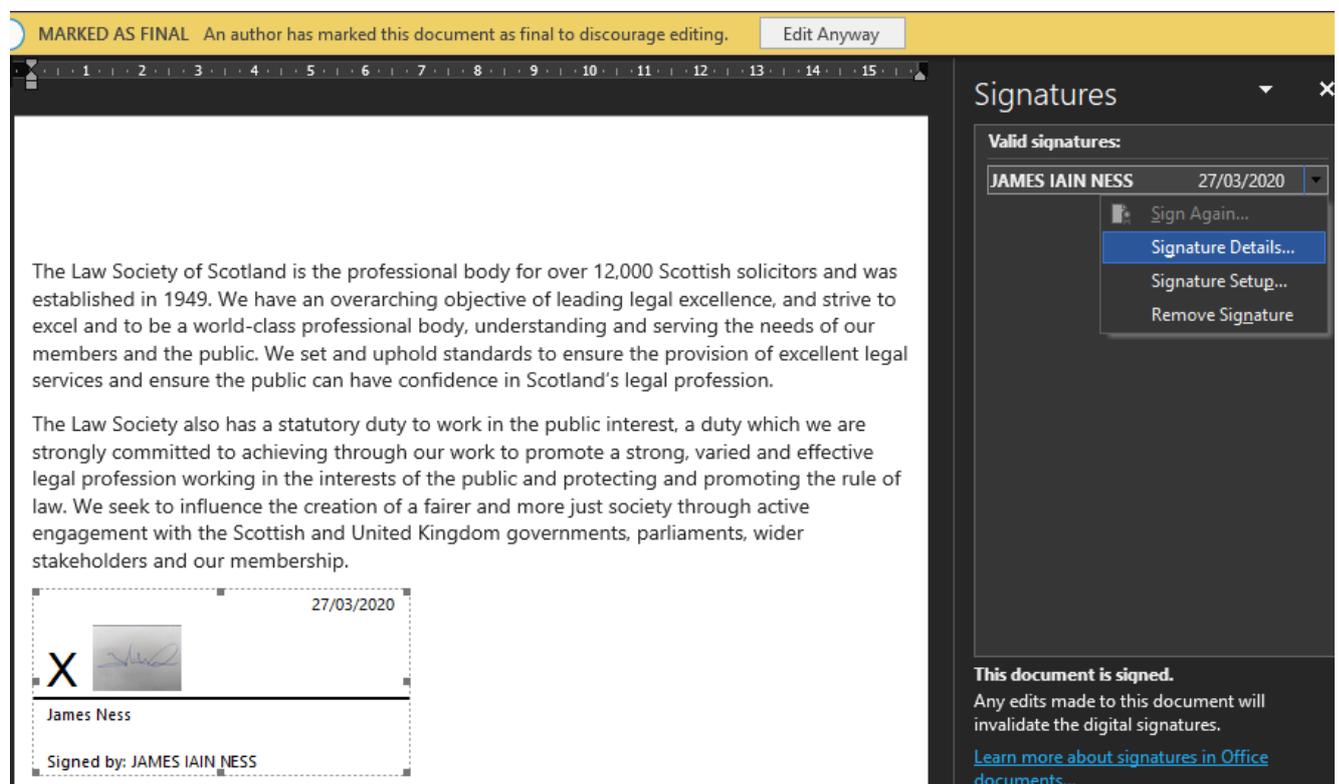

CLICK on the signature you want to check (it is possible to have multiple signatures in one document) and from here select **SIGNATURE DETAILS…** to check all necessary information in the following window:
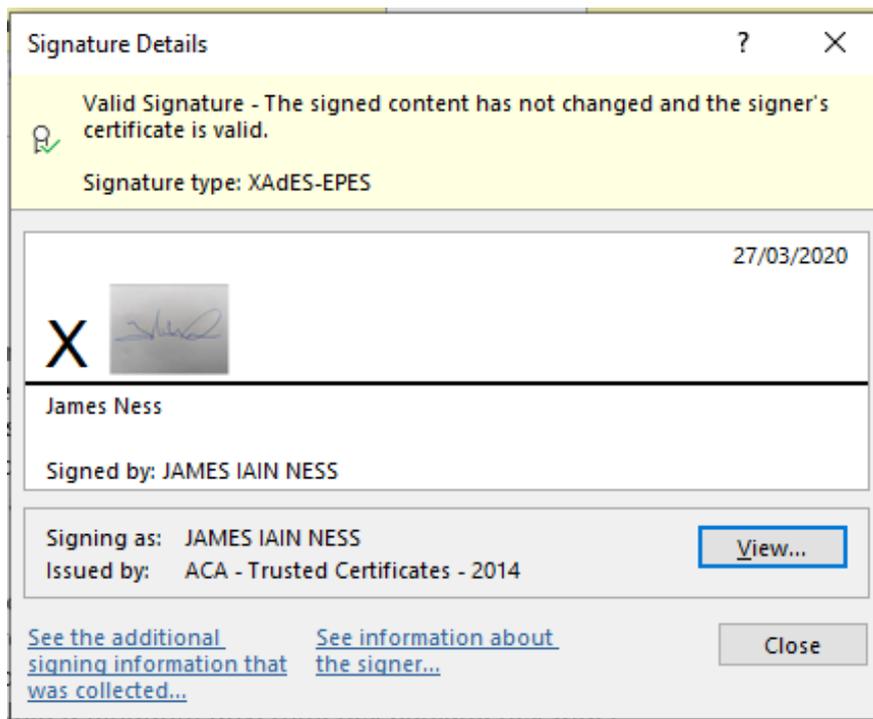
Most importantly is obviously the first sentence confirming that this in fact a valid signature and that the document has not been tempered with since it was signed.

CLICK on the **VIEW...** button to open op information about the underlying certificate itself.
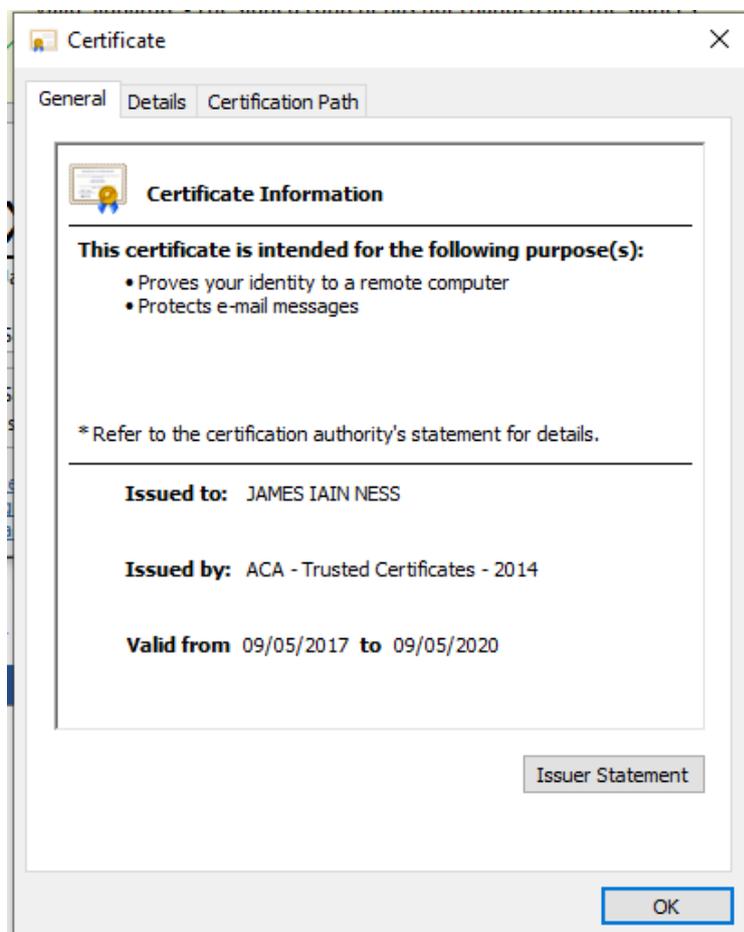
This window tells you who owns the signature ("Issued to: ...") and who the Certification Authority is ("Issued by: ...") - the organisation in charge of the underlying certificates. It also confirms the validity period of the signature in question.

You can check these validity dates against the date showing in the signature panel:

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