

How to validate a signature on a digitally signed document

You will be receiving PDF licences and letters through SPIRE and ICMS which will be digitally signed.

1. Prerequisite

Before opening a licence please ensure that you have the latest version of Adobe Acrobat Reader installed (This can be found at: <https://get.adobe.com/uk/reader/>). Ideally it is also recommended that you view the licences on a Windows system.

2. Opening the licence

Please ensure that you open the licence in the Adobe Reader and not in the Adobe web browser plugin (which is the default option in most cases). You will need to save the licence to your computer and open the file in Adobe Acrobat Reader DC.

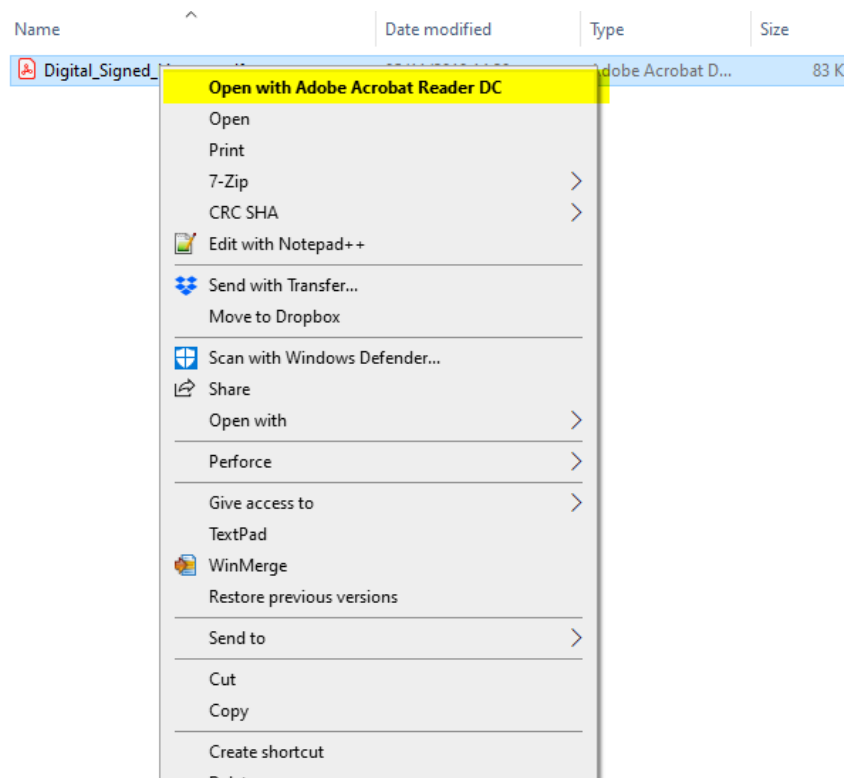


Figure 2.1

In Figure 2.2 you can see what the options will look like if you are in the Adobe Browser plugin, the normal options are not present when you right click on the signature. Instead you only have print/rotate/save as etc.

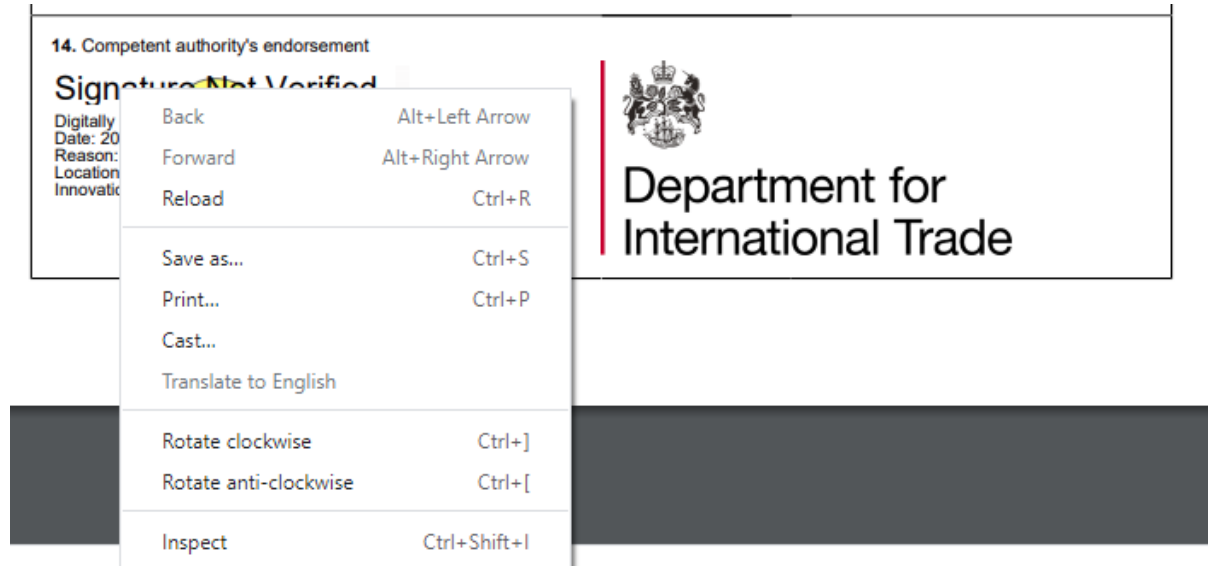


Figure 2.2

3. Validating the Signature

The licence you receive will probably have the following image where you would normally expect to see a signature.

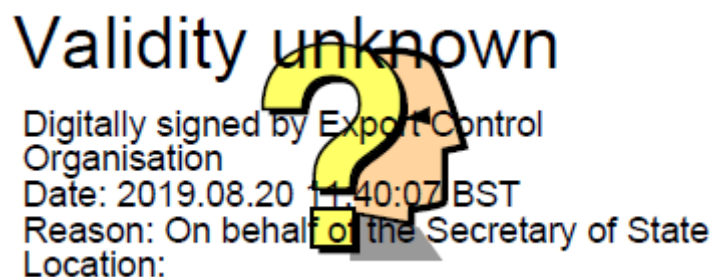


Figure 3.1

In order to validate the signature, you should right click on the signature and select 'Show Signature Properties' option (see Figure 3.2).

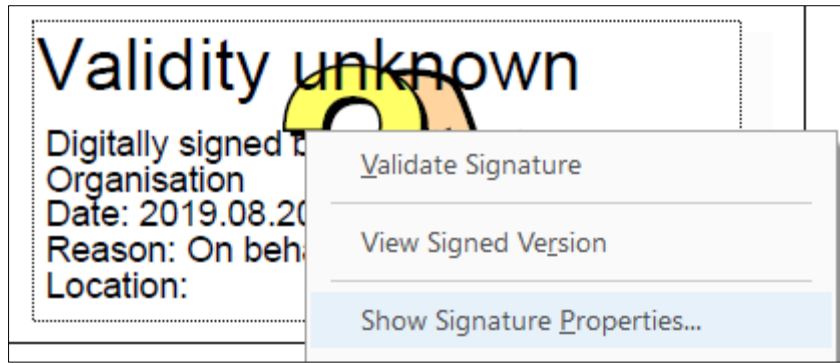


Figure 3.2

The following box up will then appear.

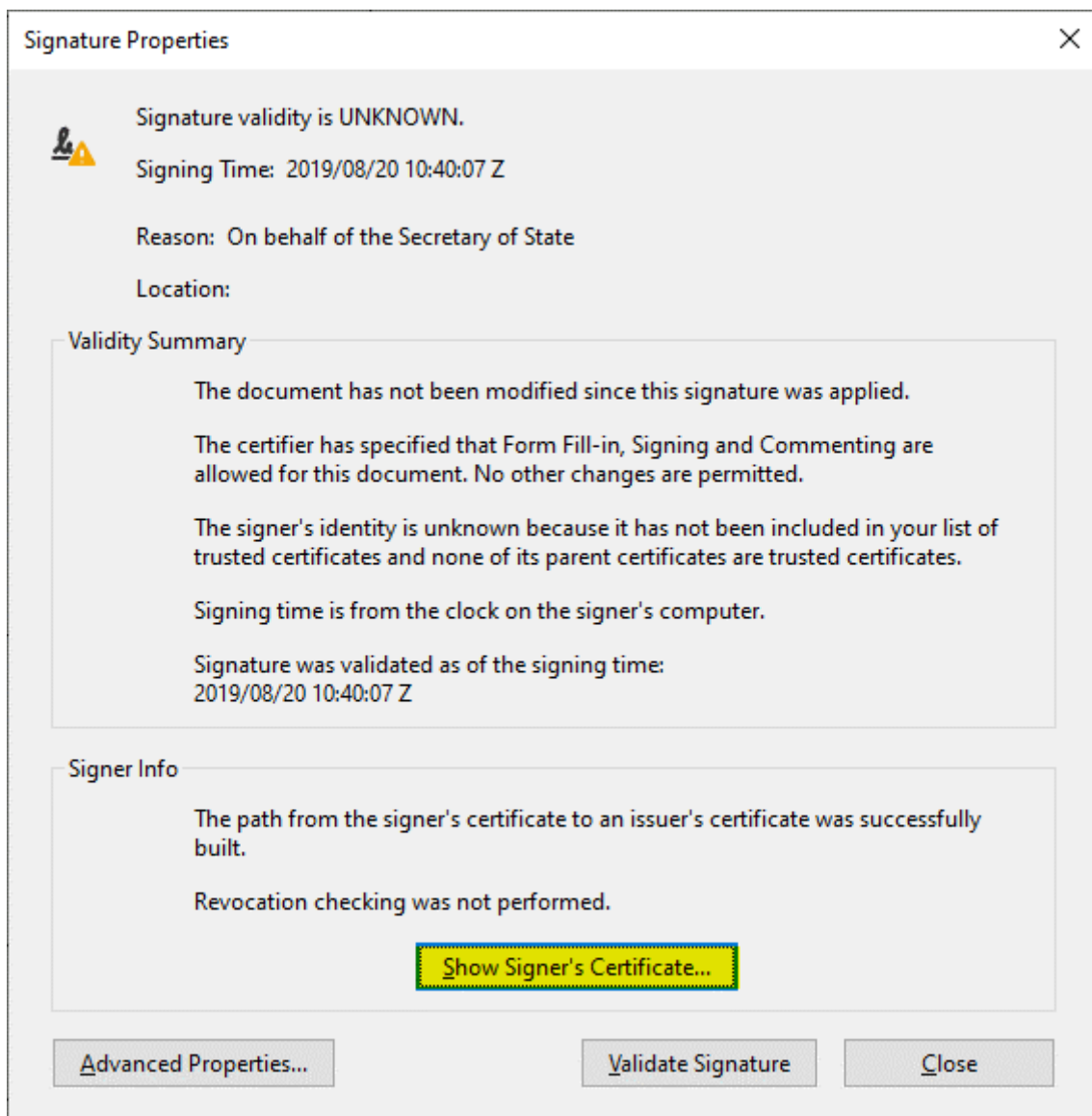


Figure 3.3

Click on the 'Show Signer's Certificate' button. In the next dialogue box (Figure 3.4) select the 'Trust' tab. Then make sure the lowest level certificate is selected in the left pane (highlighted in blue below). Then click on the 'Add to Trusted Certificates...' button.

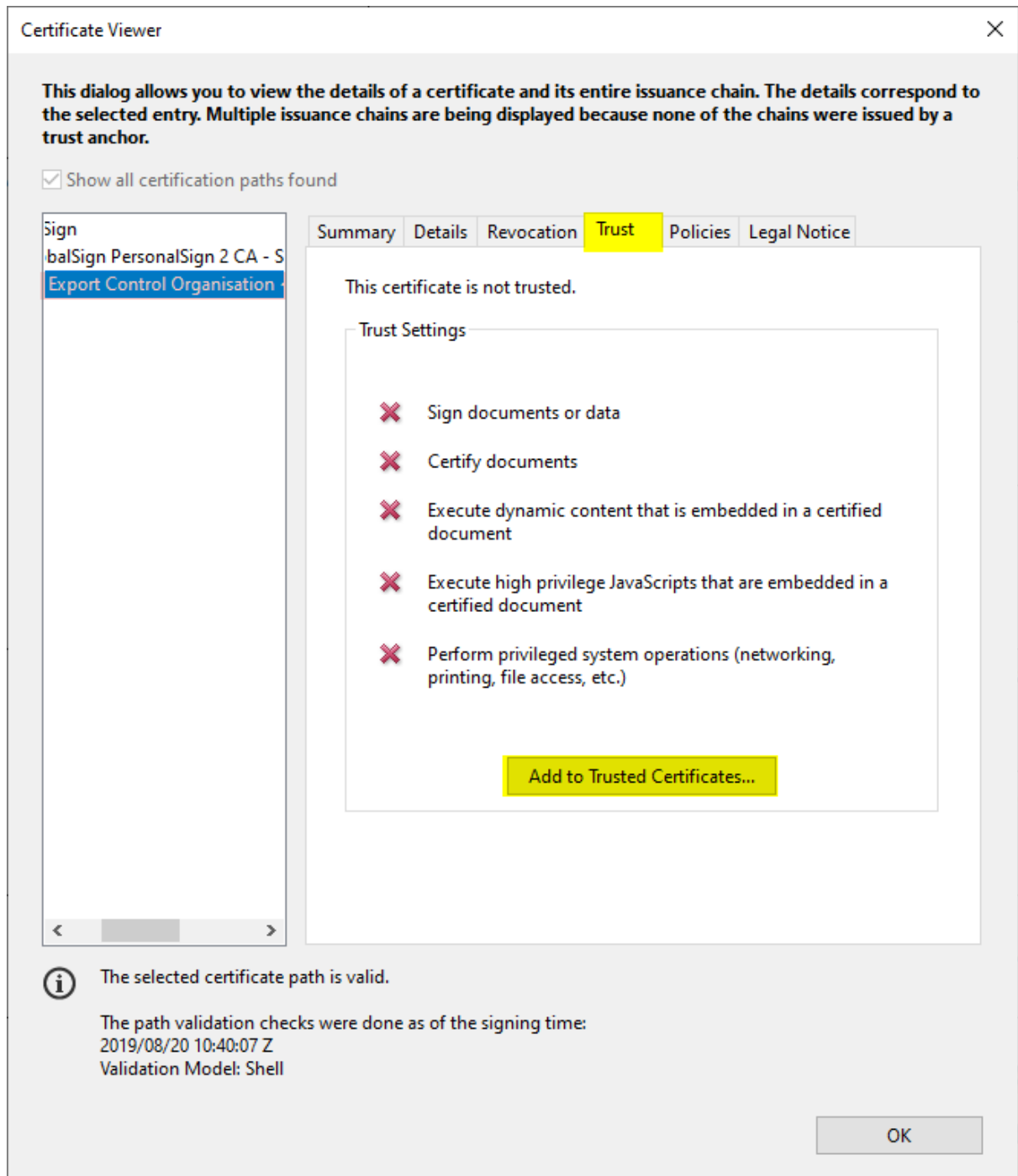


Figure 3.4

You will then be presented with the security box below. Click on the 'OK' button.

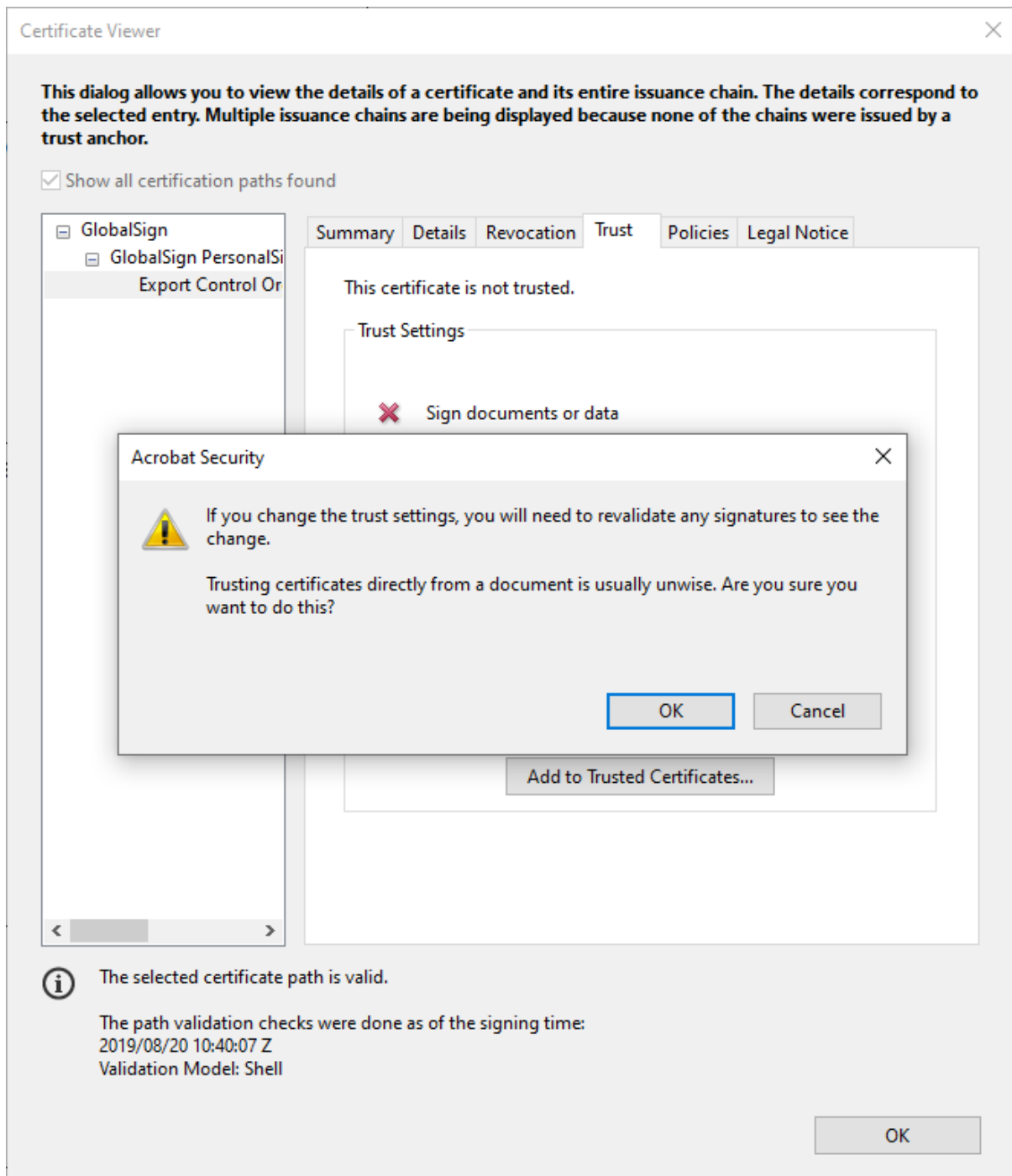


Figure 3.5

In the next dialogue box (Figure 3.6) make sure the 'Use this certificate as a trusted root' tickbox is checked and then click the 'OK' button.

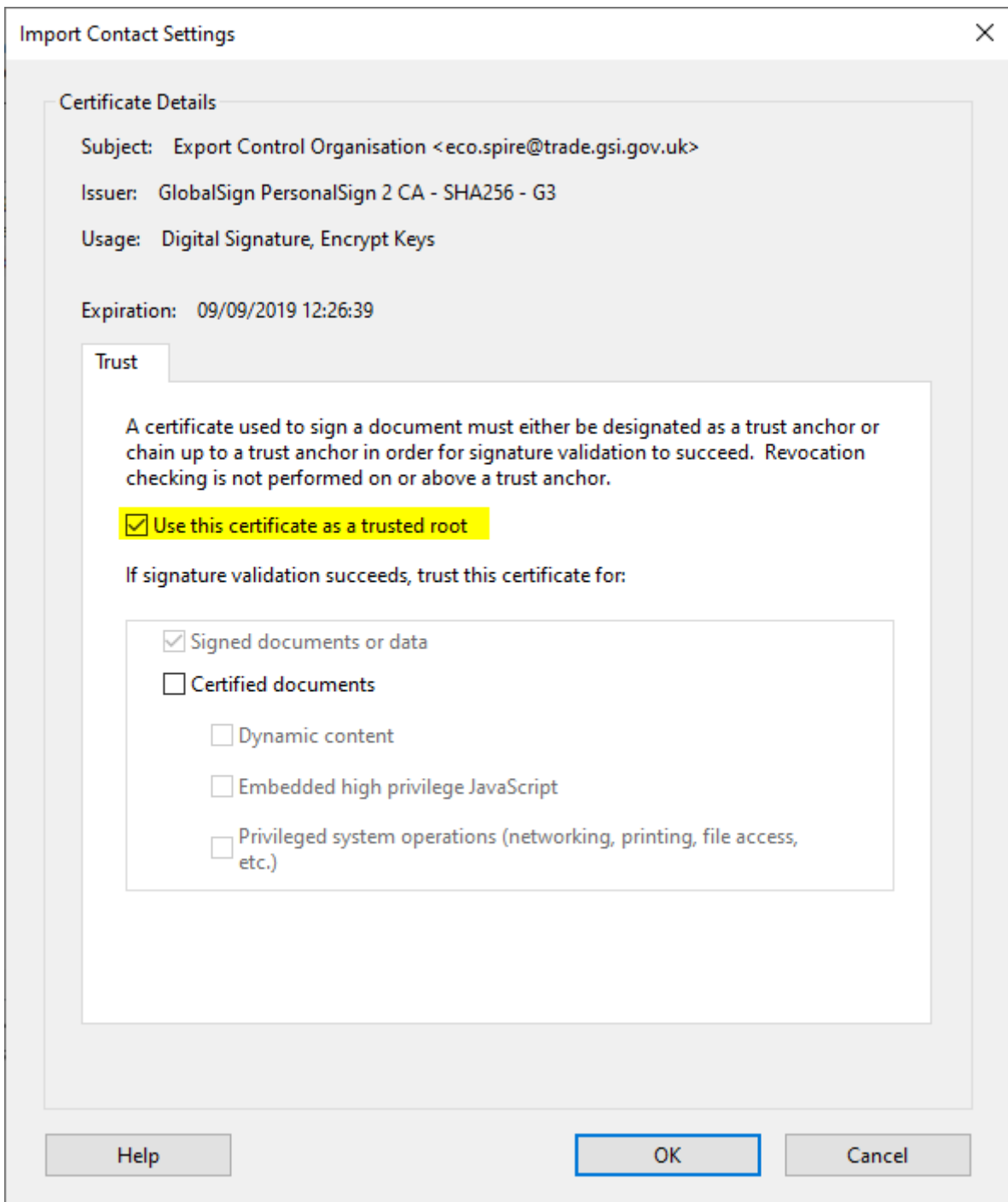


Figure 3.6

You will be returned to the box shown in Figure 3.7, where you will need to click on the 'OK' button.

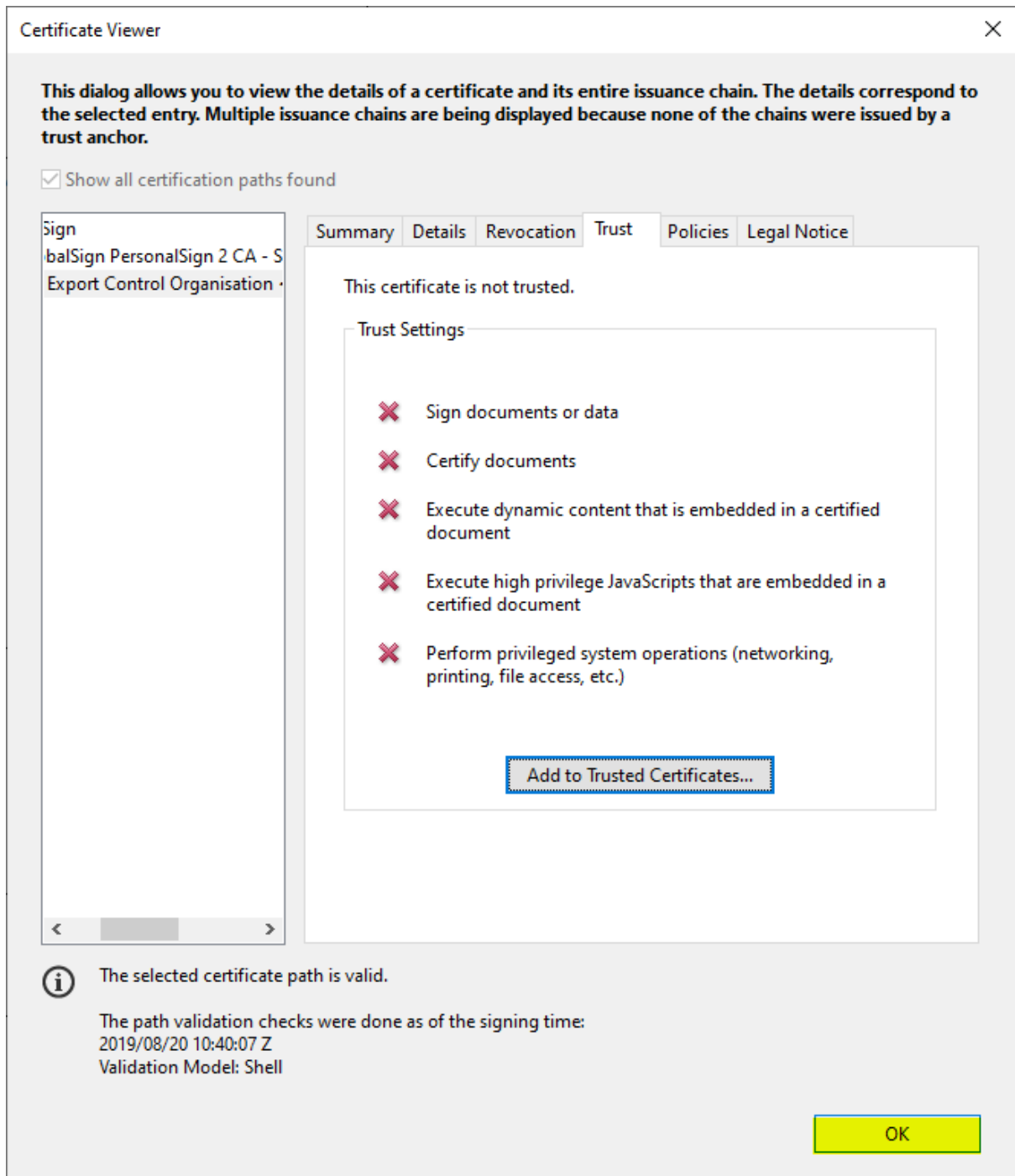


Figure 3.7

In the next box (Figure 3.8) click on the 'Validate Signature' button. Finally click the 'Close' button.

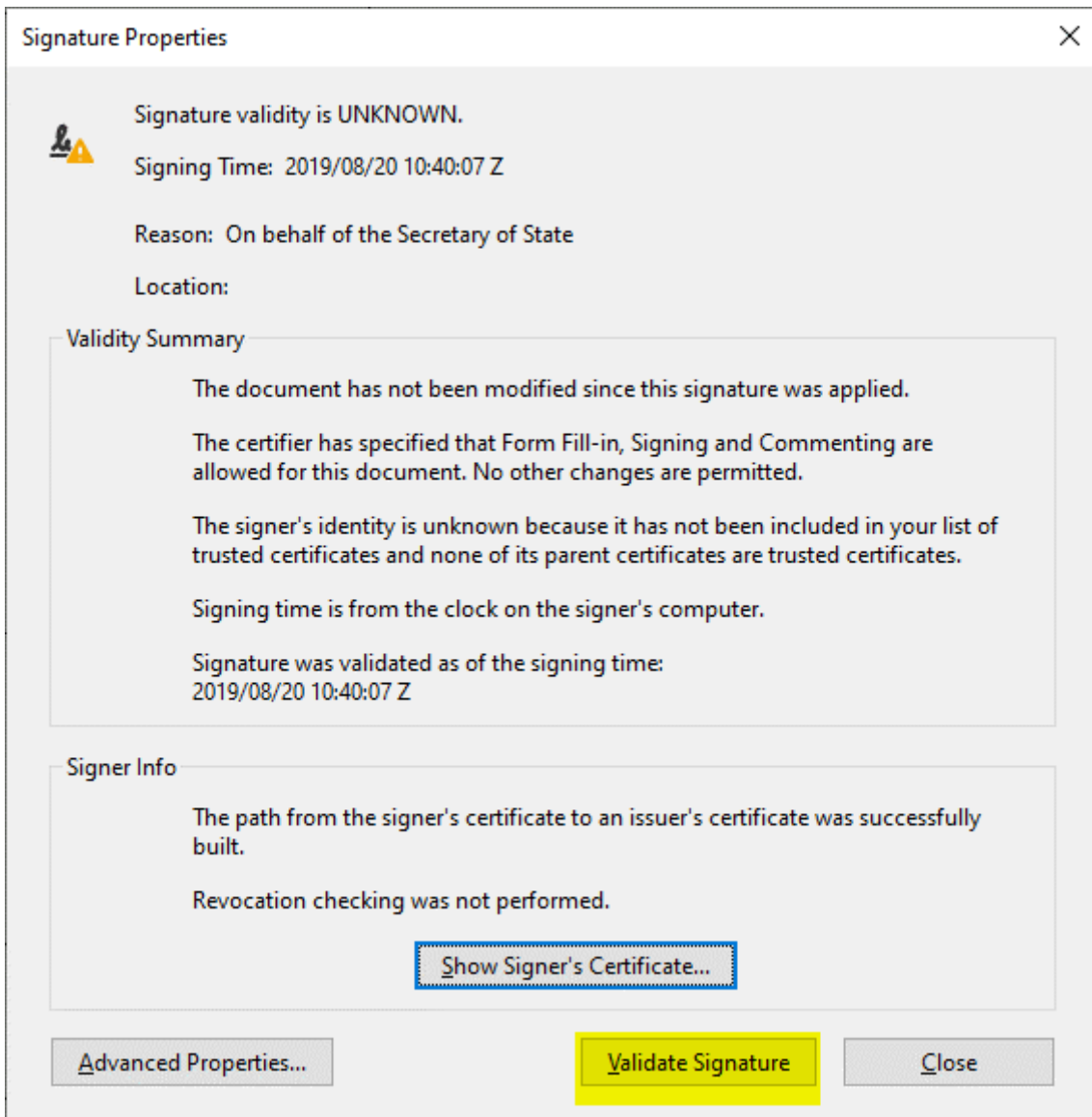


Figure 3.8

When you look again at your pdf document, you should see the following image where you would normally expect to see a signature:



Figure 3.9

From that point on, all PDF documents sent by us should show the above image.

4. Troubleshooting

If upon completing the steps listed in section 3 you find that the signature is still displaying 'Validity unknown'. Please return to the dialog box shown in Figure 3.4. If it looks like the box below (Figure 4.1) with the 'Add to Trusted Certificates' button disabled, then it is likely that you did not tick the 'Use this certificate as a trusted root' tickbox as shown in Figure 3.6 above.

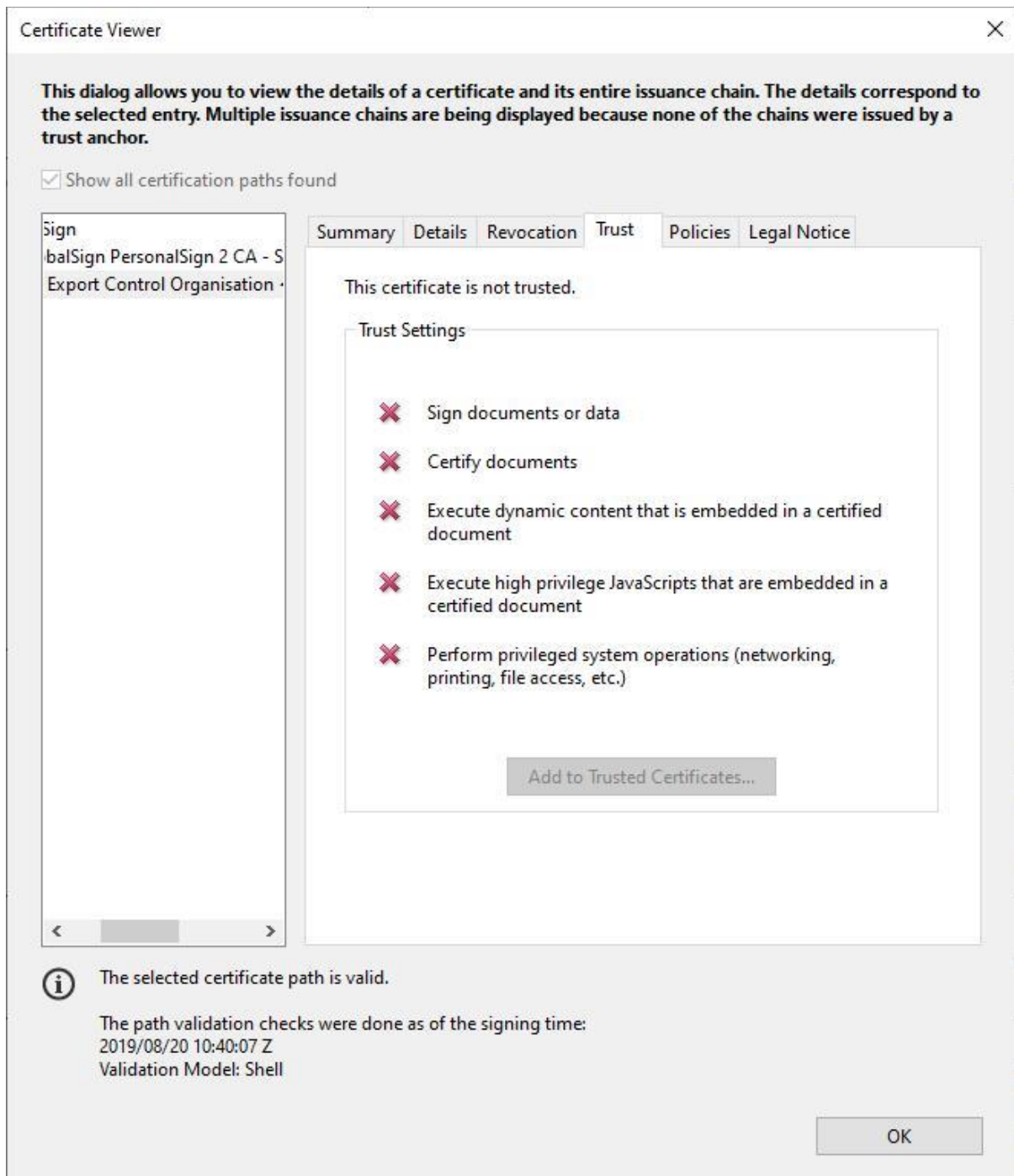


Figure 4.1

To solve this you will have to remove the certificate and re-add it. To remove the certificate, go to the Preferences option under the Edit menu.

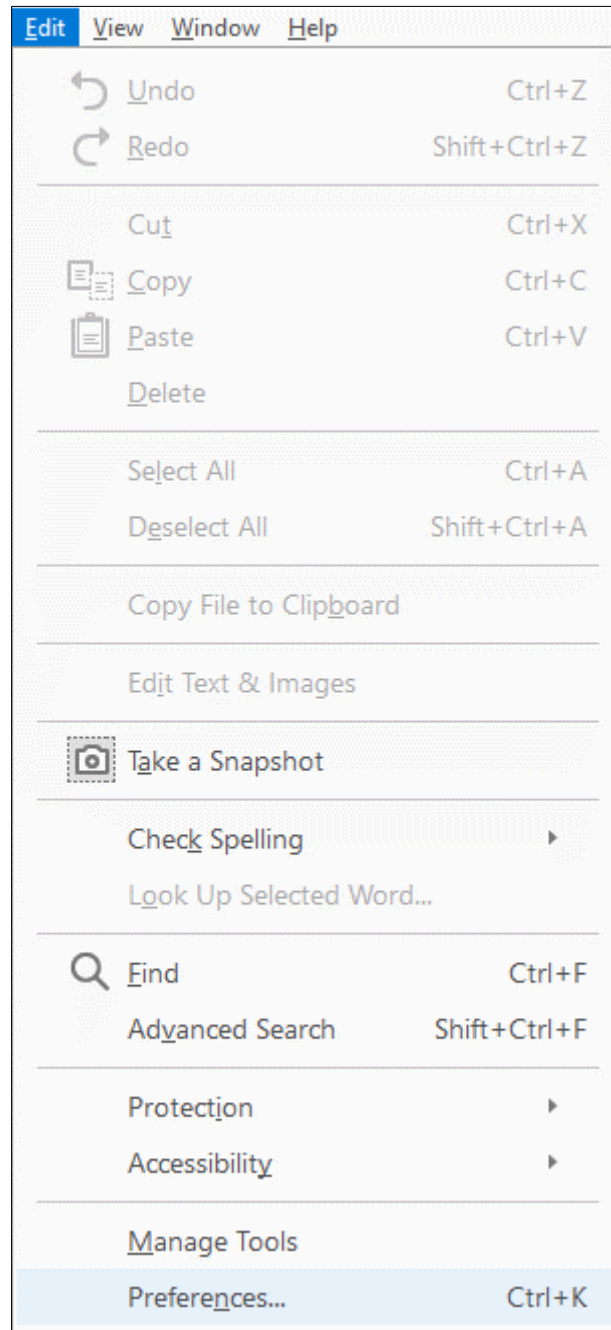


Figure 4.2

The box displayed in Figure 4.3 will then appear. Under the Signatures category select the button for 'Identities & Trusted Certificates'

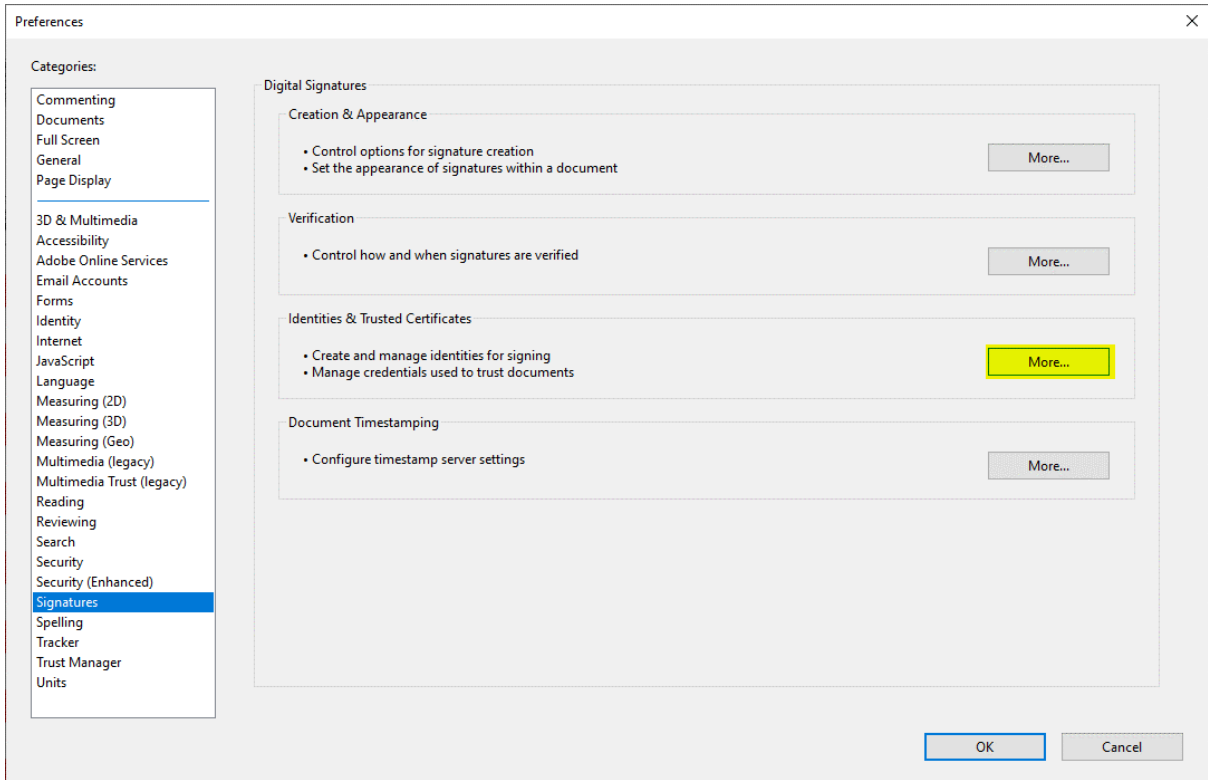


Figure 4.3

In the next box (Figure 4.4), select 'Trusted Certificates' in the left section and then scroll down to select the name of the certificate that you added in section 3 (e.g. Export Control Organisation <eco.spire@trade.gsi.gov.uk>). Next click on the 'Remove' button at the top of the box. Finally click 'OK' in the confirmation box that then appears.

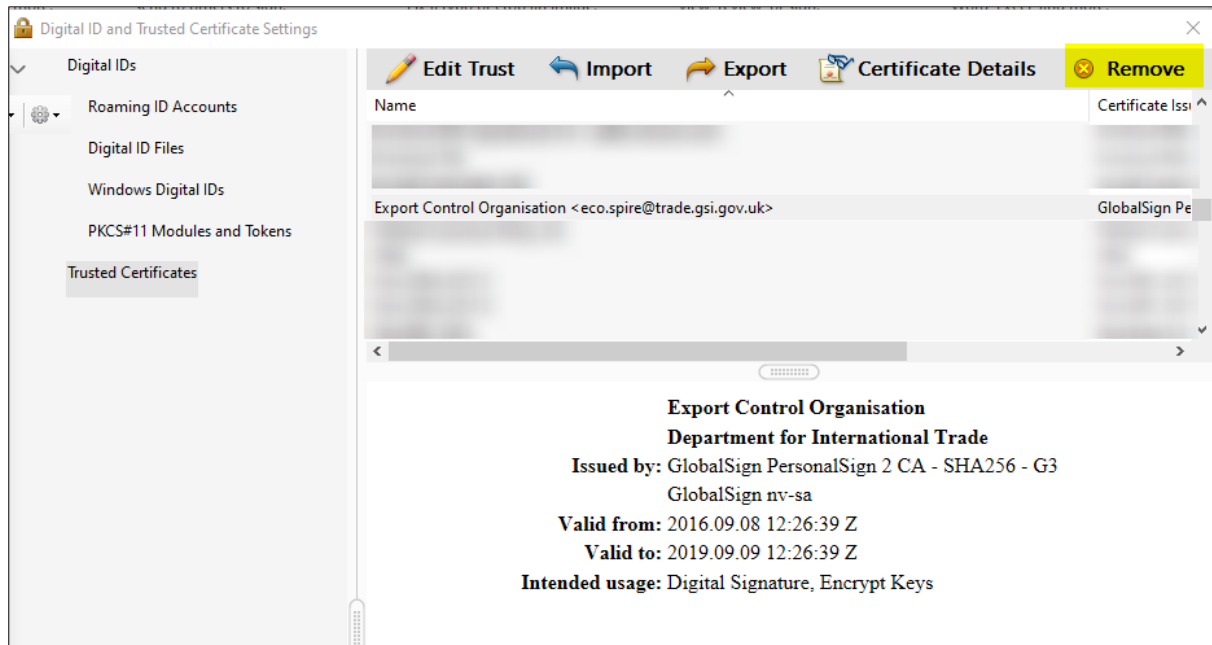


Figure 4.4

You will then be able to go back and follow the instructions listed in section 3 to add the certificate again, remembering to tick the 'Use this certificate as a trusted root' tickbox as shown in Figure 3.6.

5. MAC Problems

There is a known problem with the preview app and digital signatures on a MAC computer. If the user has viewed the PDF with Preview prior to opening it in Adobe Reader they will not be able to validate the signature.

When this happens Adobe thinks that the signature is just an image (see Figure 5.1).

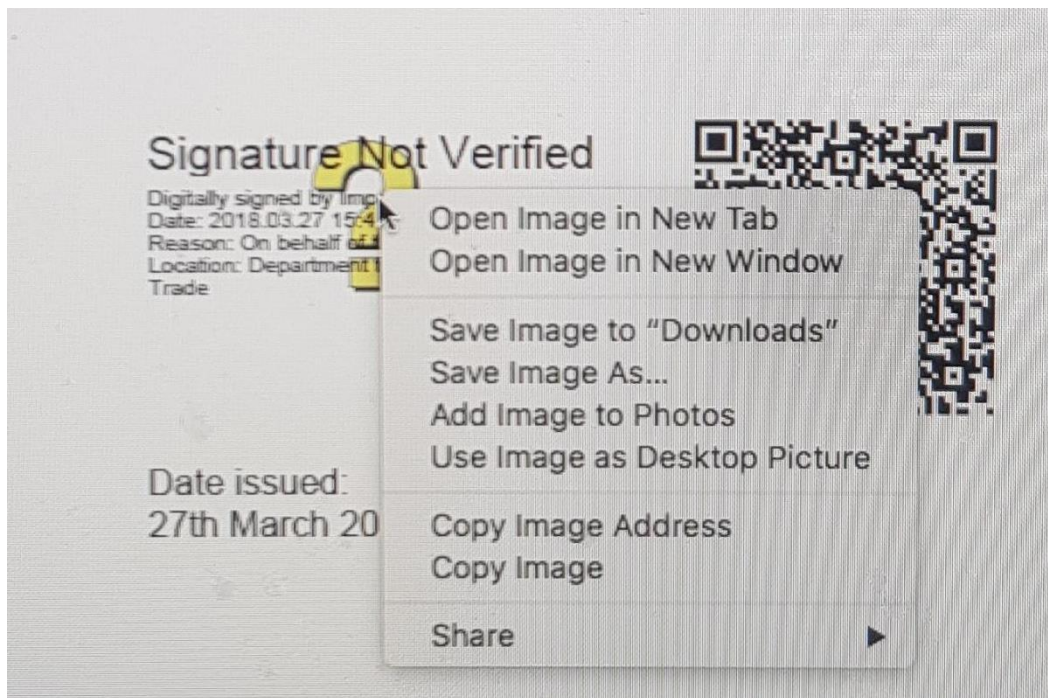


Figure 5.1

To resolve this, try the following...

- 1) Download the PDF again, making sure that if it does get opened in Preview you quit out of it without clicking on any element in the PDF at all - this is what causes Preview to break the signature. Then open the file in Adobe Reader and follow the instructions in section 3 of this document.
- 2) If that does not work try to get Preview to undo any changes it has made. Force Preview to open the PDF by right clicking and going open with preview

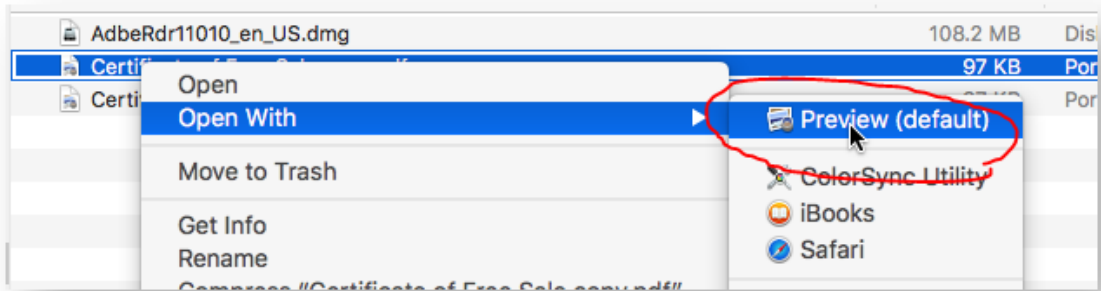


Figure 5.2

Within Preview, under the File menu, go to Revert To => Browse All Versions (See Figure 5.3).

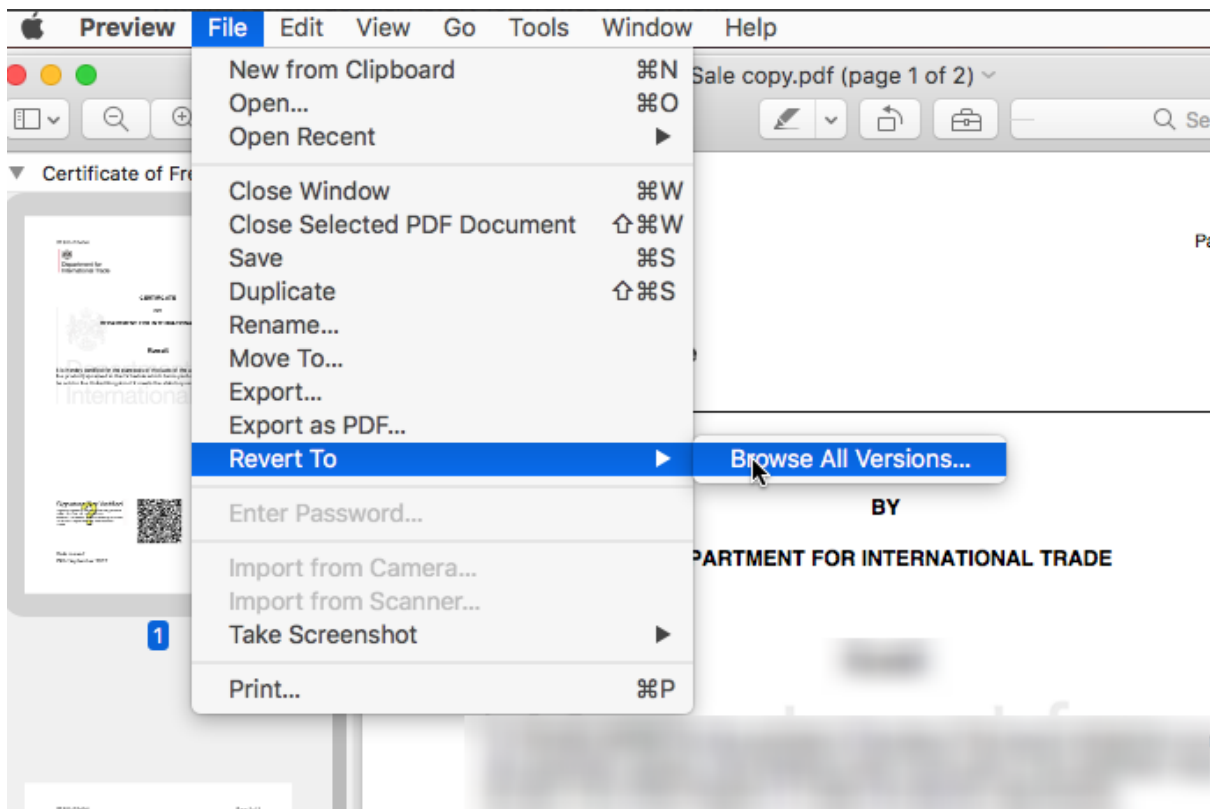


Figure 5.3

In the version selector click the up arrow to get to the earliest revision of the file - this should be a version identical to the one downloaded. Then click Restore.

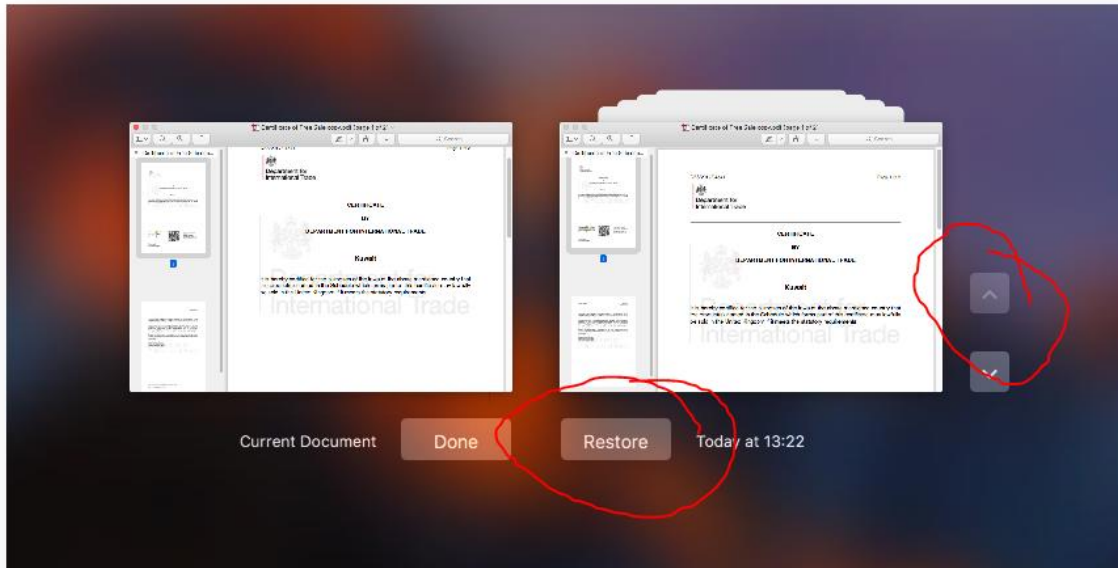


Figure 5.4

Quit Preview and open the PDF with Adobe. The normal validation instructions should then work.

3) Alternatively use a windows PC. There's no equivalent default preview application in Windows that does anything like what MacOS Preview does.

The users might like to consider the following guide <http://osxdaily.com/2012/08/22/turn-off-auto-save-os-x/> to disable auto-save in MacOS.

7. New Digital Certificates

Digital certificates are periodically replaced (normally every few years). When this happens, you would need to repeat the steps listed in section 3 to make the new certificate trusted.