

## Creating a Back-up (or export) copy of your personal certificate(s) from Microsoft Internet Explorer

Your Medium Assurance Certificate exists only as an installed certificate on your computer unless (and until) you create a certificate back-up (or certificate export) file. You should keep this certificate back-up (export) file on external media (a CD or thumb drive, for example). You should keep the number of copies of your certificate back-up (export) files to a minimum to preclude the theft of your certificate (also called Private Key Compromise).

NOTE: These instructions are intended for exporting personal Medium Assurance Certificates. Medium Assurance Certificates include Identity and Encryption certificates (personal certificates – used by a person) and Component certificates (Server certificates, VPN IPsec certificates, etc. – used by a computer to identify the machine). These instructions are for exporting personal certificates. Medium Assurance Certificates are often referred to as “browser-based certificates” or “software (soft) certificates.”

These instructions are not meant for “hardware-based certificates.” Hardware based certificates are created on a smart card, or cryptographic token, or other cryptographic device. You cannot create a back-up copy of such a certificate because the private key cannot be copied off of the device. (But there should be no need to do so, since the certificate private key resides on the device and not on your computer’s hard drive.) Medium-Token Assurance and Medium-Hardware Assurance certificates are “hardware-based certificates.”

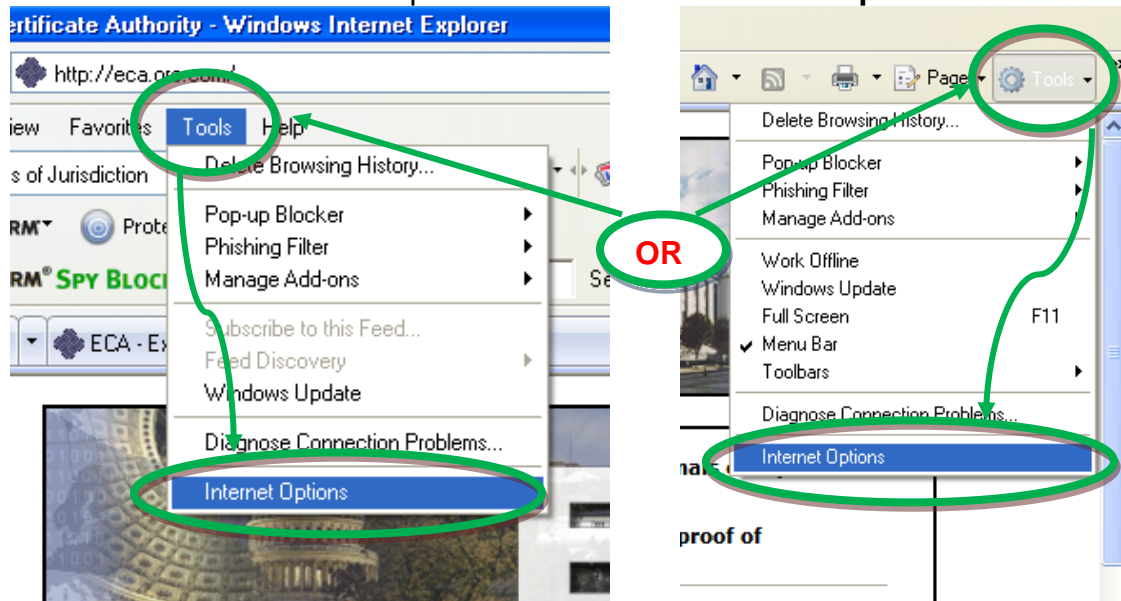
If you have obtained both an Identity and an Encryption certificate, then you will need to make a back-up (export) file for each certificate. (2 certificates means 2 back-up files) The only way to tell the back-up files apart is by the name that you assign to the file. The naming convention in the instructions below will assist you in keeping your files organized.

These instructions and associated screen captures were created with Internet Explorer 7 running on a Windows XP operating system. Variations in versions of Internet Explorer and the Windows Operating system will result in some variation of alert boxes and screen images. For the most part, the process and individual steps are the same across Windows platforms. (You might see a dialog box prompting you to ‘allow’ access on a Windows Vista/ Windows 7 computer; just click the buttons that seem to move the process forward.)

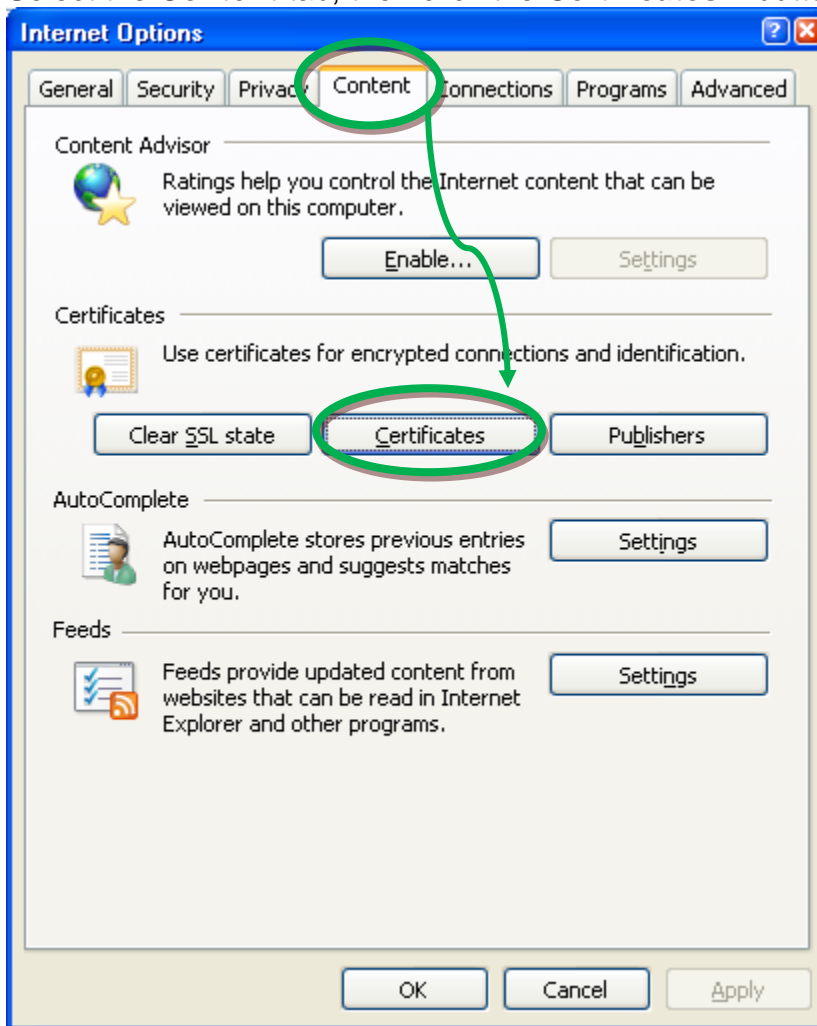
1. Start Internet Explorer



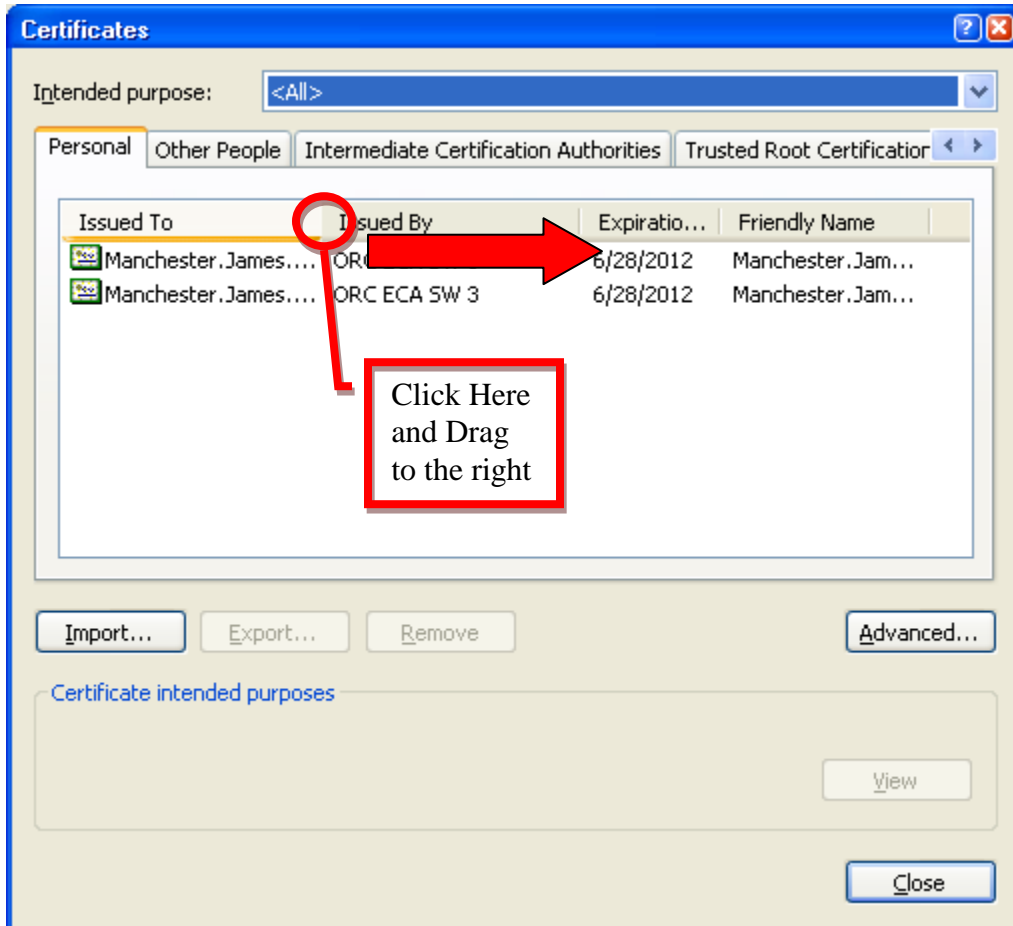
2. Click on the "Tools" menu option and then click "Internet Options...".



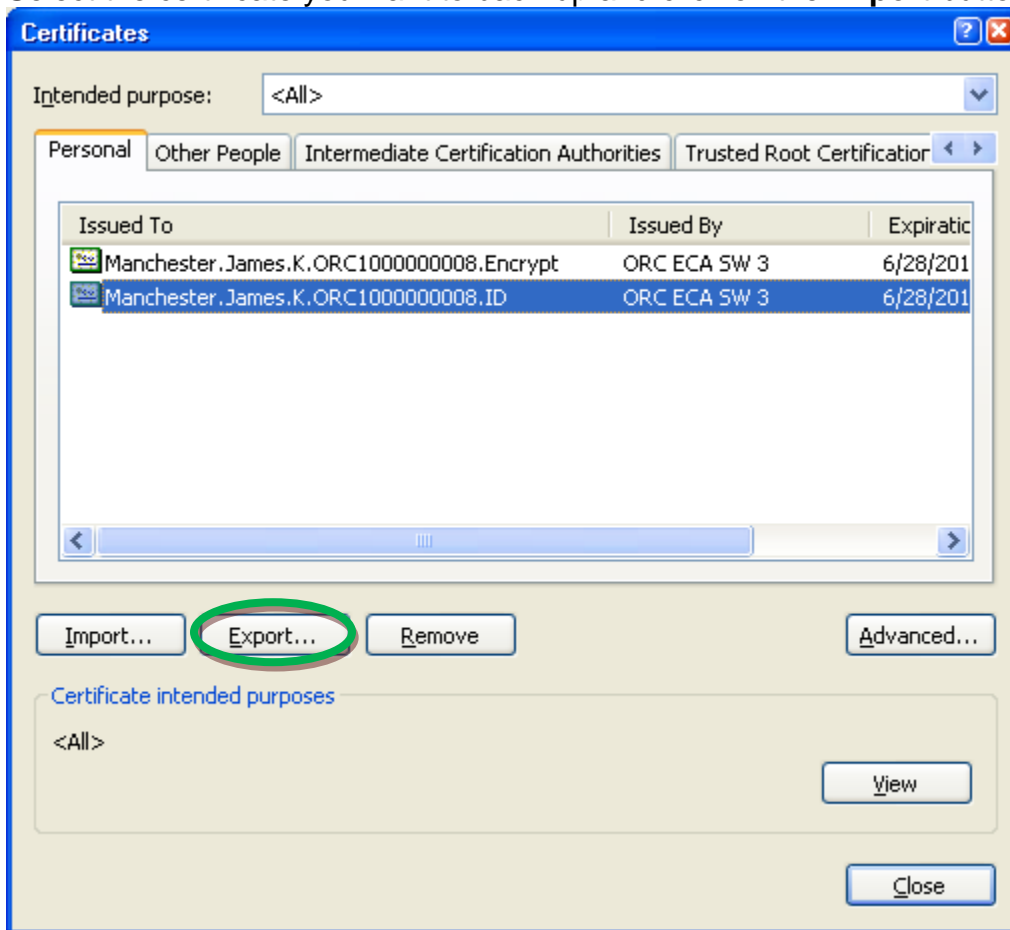
3. Select the **Content** tab, then click the **Certificates...** button.



4. On the Certificates dialog box, widen the **Issued To** column to read the entire certificate name.



5. Select the certificate you want to back-up and click on the **Export** button.

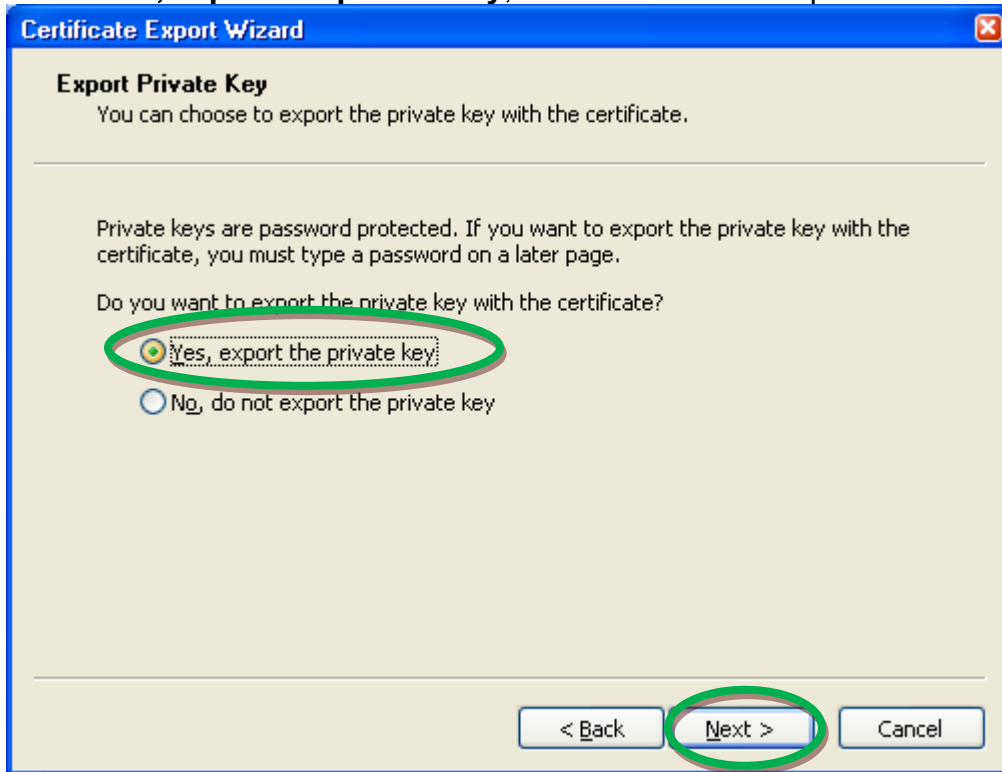


- When the Certificate Export Wizard pops up, click on the **Next >** button.



7. Select **Yes, export the private key** and click the **Next >** button.

**CAUTION:** it is possible to make 'copy' of your certificate that does not include the certificate Private Key, but it will NOT be a BACKUP copy. If you cannot select **Yes, export the private key**, contact the ECA Help Desk.



8. Make sure the **Personal Information Exchange** selector is selected and the **“Enable strong protection”** check box is checked. Click the **Next >** button.

**Certificate Export Wizard**

**Export File Format**  
Certificates can be exported in a variety of file formats.

Select the format you want to use:

- DER encoded binary X.509 (.CER)
- Base-64 encoded X.509 (.CER)
- Cryptographic Message Syntax Standard - PKCS #7 Certificates (.P7B)
- Include all certificates in the certification path if possible
- Personal Information Exchange - PKCS #12 (.PFX)**
  - Include all certificates in the certification path if possible
  - Enable strong protection (requires IE 5.0, NT 4.0 SP4 or above)**
  - Delete the private key if the export is successful

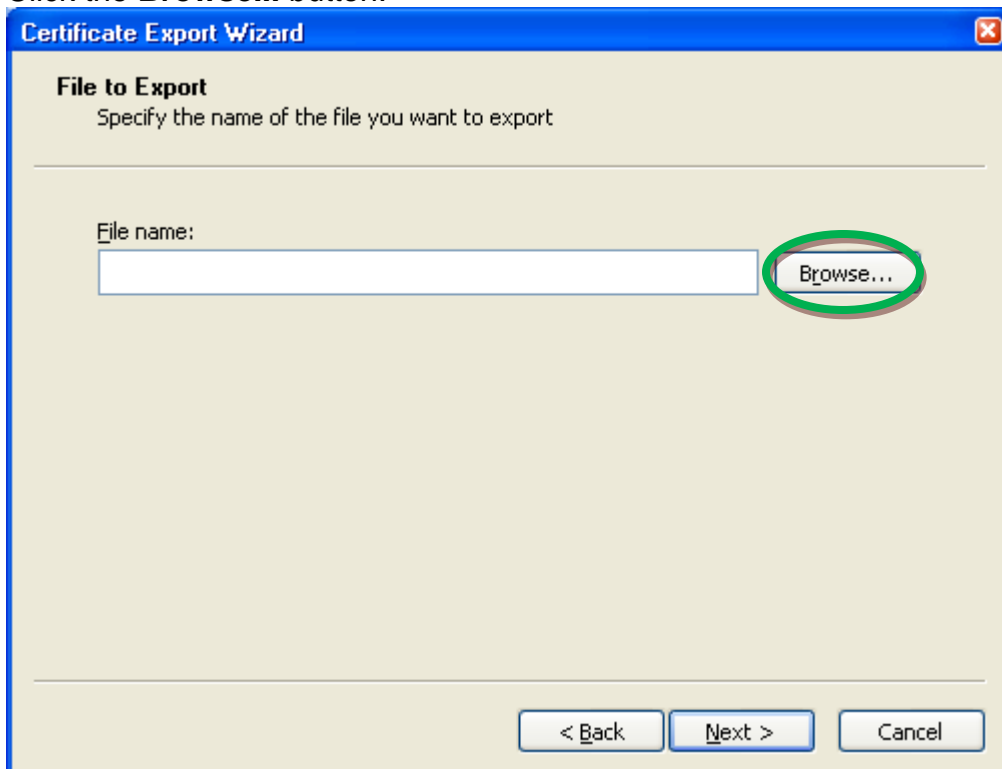
< Back   **Next >**   Cancel

- Assign (and confirm) a password to protect the certificate backup file that you are about to create. Click the **Next >** button. **IMPORTANT:** You will need to know this password in order to use the back-up file in the future



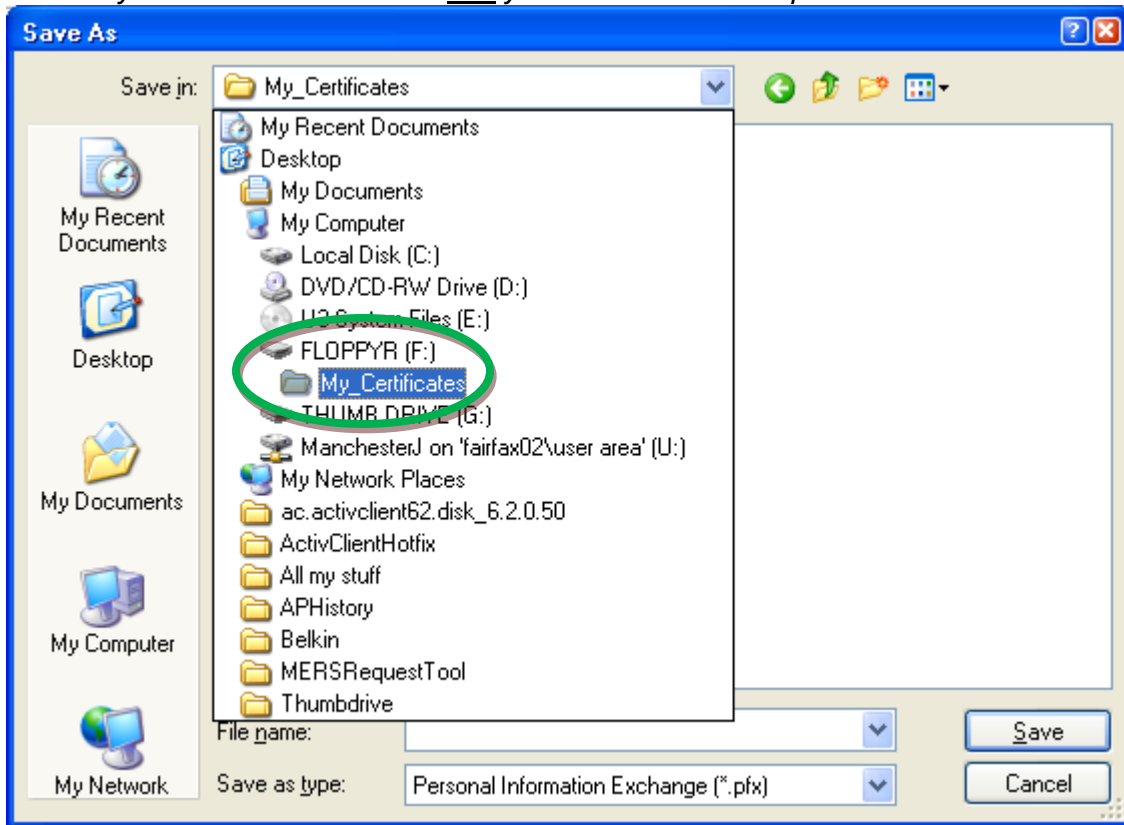
The screenshot shows the 'Certificate Export Wizard' dialog box at the 'Password' step. The title bar reads 'Certificate Export Wizard'. The main heading is 'Password', followed by the instruction: 'To maintain security, you must protect the private key by using a password.' Below this, it says 'Type and confirm a password.' There are two text input fields: the first is labeled 'Password:' and contains '\*\*\*\*\*'; the second is labeled 'Confirm password:' and also contains '\*\*\*\*\*'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is circled in green.

- Click the **Browse...** button.

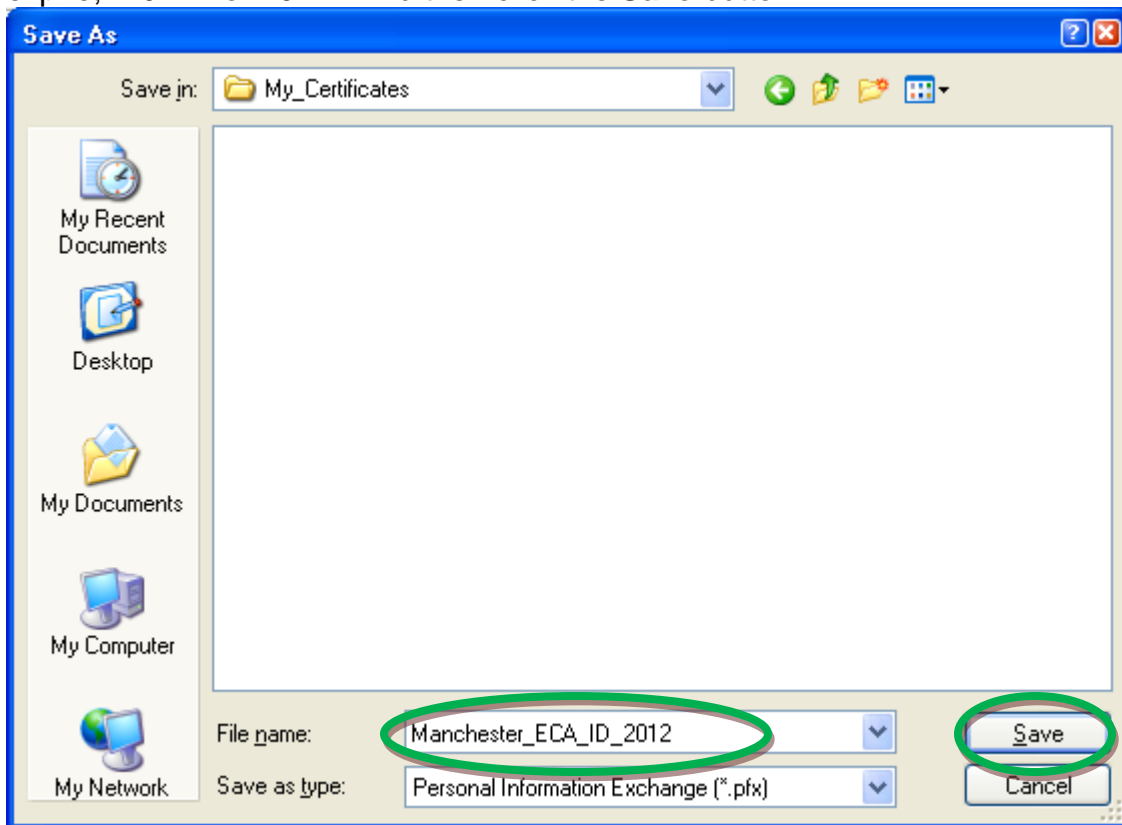


The screenshot shows the 'Certificate Export Wizard' dialog box at the 'File to Export' step. The title bar reads 'Certificate Export Wizard'. The main heading is 'File to Export', followed by the instruction: 'Specify the name of the file you want to export.' Below this, there is a text input field labeled 'File name:' which is currently empty. To the right of the input field is a 'Browse...' button, which is circled in green. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

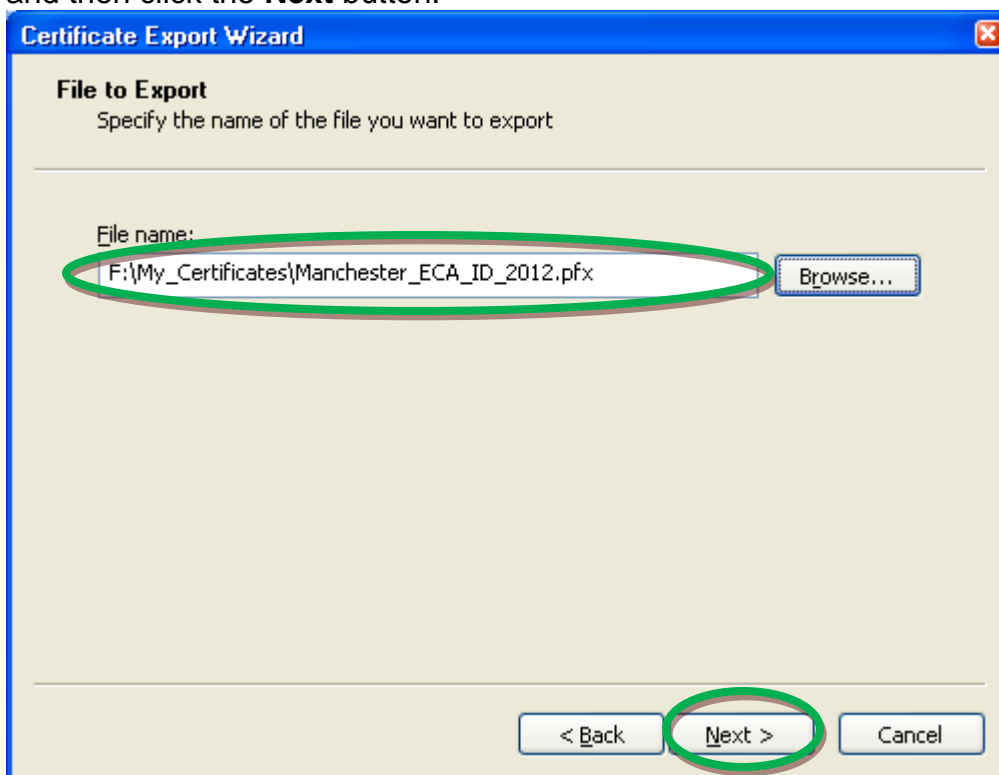
11. In the Save As dialog box navigate to the location where you want to save the certificate back-up file. *Note: You may save it to a temporary location on your computer, as long as you move the file later. Otherwise, if your hard drive crashes you will lose your installed certificates and your certificate back-up files.*



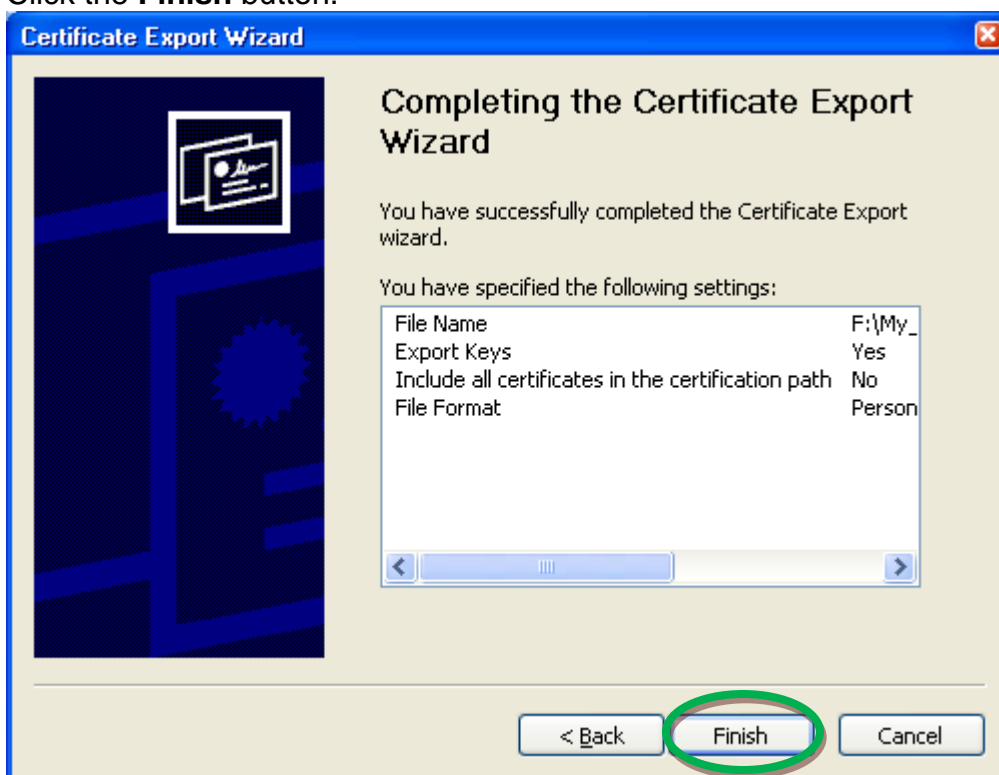
12. Enter a file name. We recommend that you make the filename "Yourlastname\_ECA\_ID\_YYYY" use ID for your IDentity certificate and EN for you ENcryption certificate. YYYY should be the year that the certificate will expire; "2012" for 2012. And then click the **Save** button.



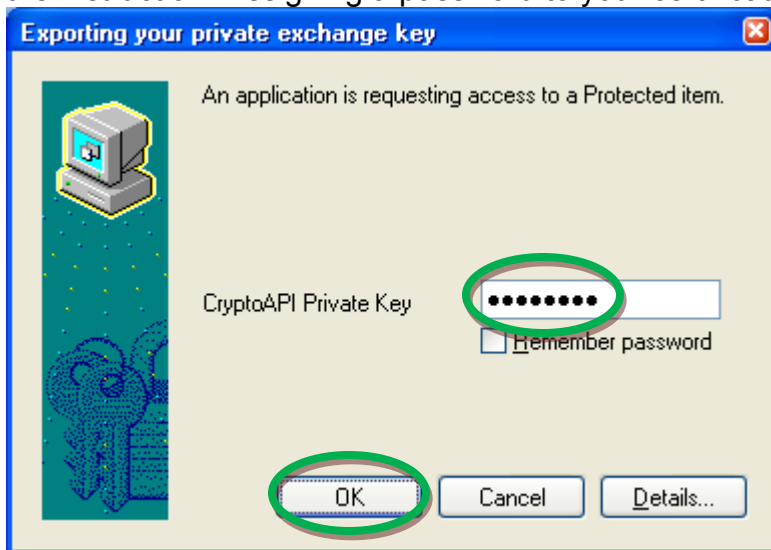
- Back on the File to Export dialog, confirm that the path and file name are correct and then click the **Next** button.



- Click the **Finish** button.



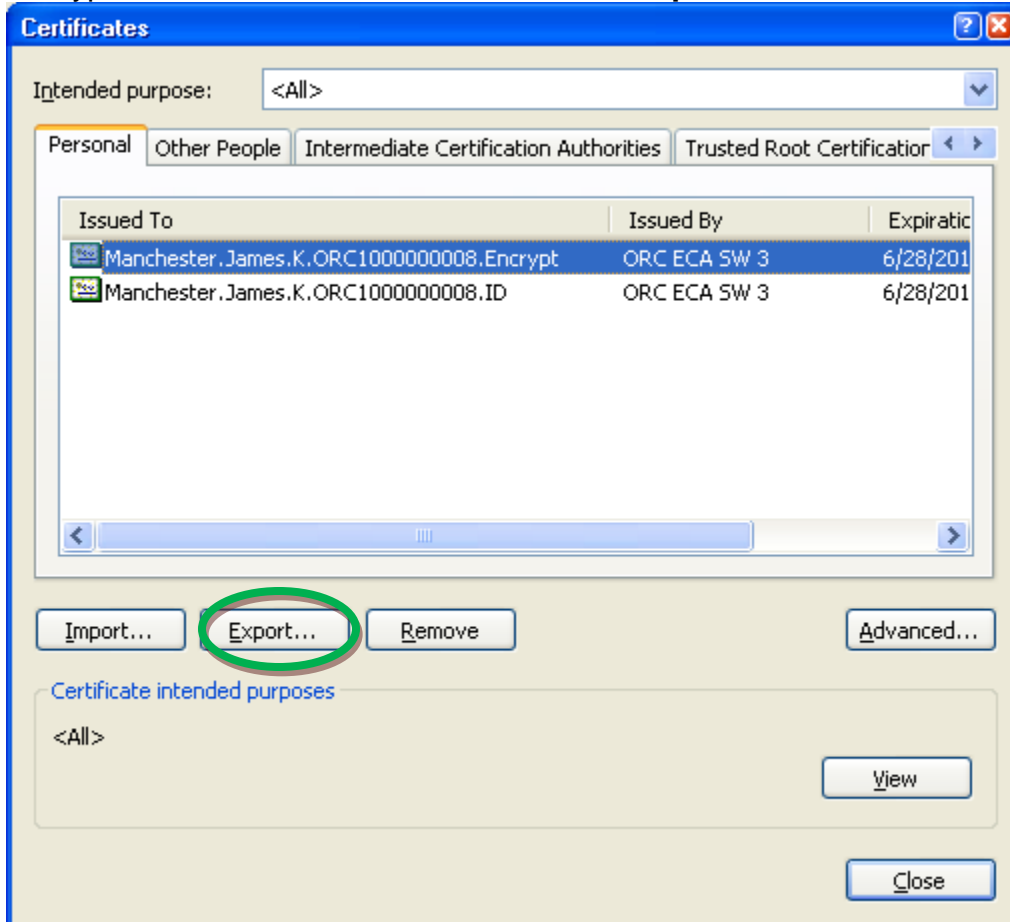
15. In the Exporting your private exchange key dialog, enter the password that you previously assigned to protect your certificate private key and Click the **OK** button. NOTE: If there is no text box for you to enter a password, it means that no password was assigned to protect the certificate private key when you requested (or last installed) your certificate. Just click the **OK** button. Then see the instruction “Assigning a password to your certificate in Internet Explorer.”



16. When you see “The export was successful”; click the **OK** button.



17. If you do not have an Encryption Certificate, you are done. If you do have an Encryption Certificate, select it and click the **Export** button.

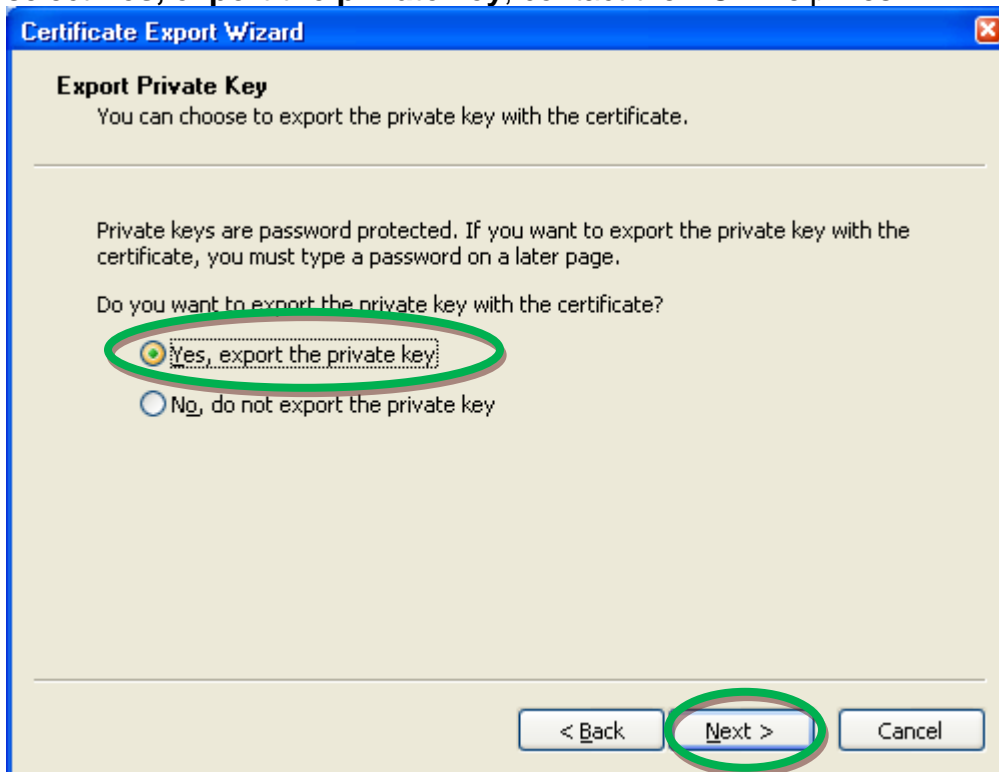


18. When the Certificate Export Wizard pops up, click on the **Next >** button.



19. Select **Yes, export the private key** and click the **Next >** button.

**CAUTION:** it is possible to make 'copy' of your certificate that does not include the certificate Private Key, but it will NOT be a BACKUP copy. If you cannot select **Yes, export the private key**, contact the ECA Help Desk.



20. Make sure the **Personal Information Exchange** selector is selected and the **“Enable strong protection”** check box is checked. Click the **Next >** button.

**Certificate Export Wizard**

**Export File Format**  
Certificates can be exported in a variety of file formats.

Select the format you want to use:

- DER encoded binary X.509 (.CER)
- Base-64 encoded X.509 (.CER)
- Cryptographic Message Syntax Standard - PKCS #7 Certificates (.P7B)
- Include all certificates in the certification path if possible
- Personal Information Exchange - PKCS #12 (.PFX)**
  - Include all certificates in the certification path if possible
  - Enable strong protection (requires IE 5.0, NT 4.0 SP4 or above)**
  - Delete the private key if the export is successful

< Back   **Next >**   Cancel

21. Assign (and confirm) a password to protect the certificate backup file that you are about to create. [We recommend that you use the same password that you used in Step 9, above.] Click the **Next >** button. **IMPORTANT:** You will need to know this password in order to use the back-up file in the future



The image shows a Windows dialog box titled "Certificate Export Wizard". The dialog has a blue title bar with a close button in the top right corner. The main content area is light beige and contains the following text:

**Password**  
To maintain security, you must protect the private key by using a password.

---

Type and confirm a password.

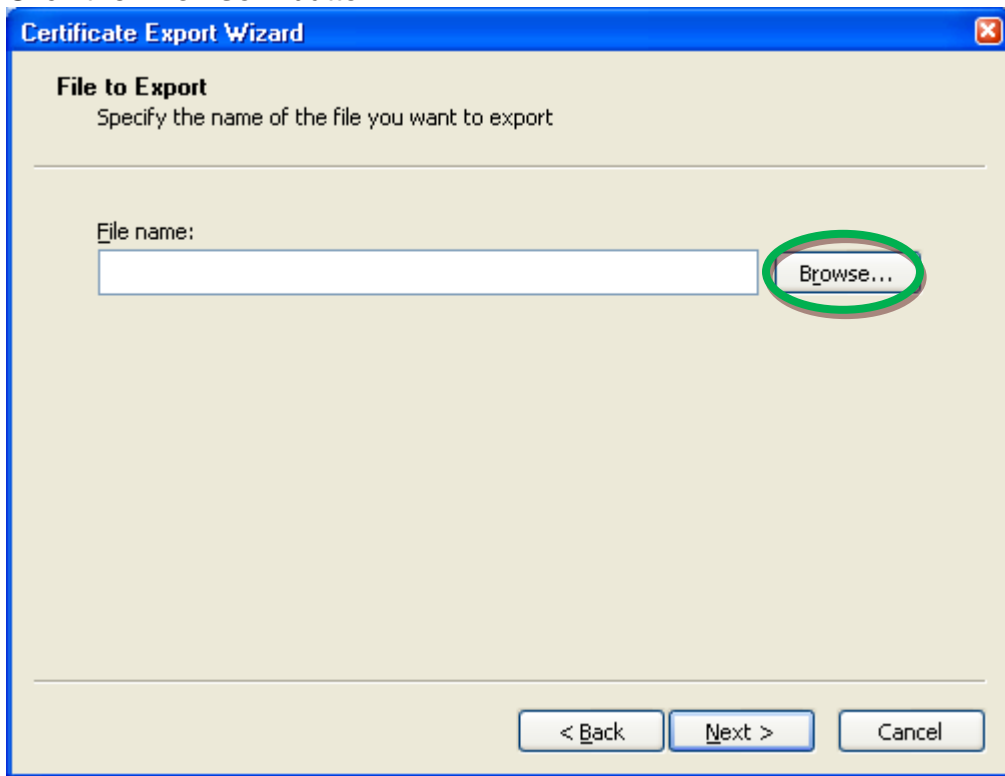
Password:  
\*\*\*\*\*

Confirm password:  
\*\*\*\*\*

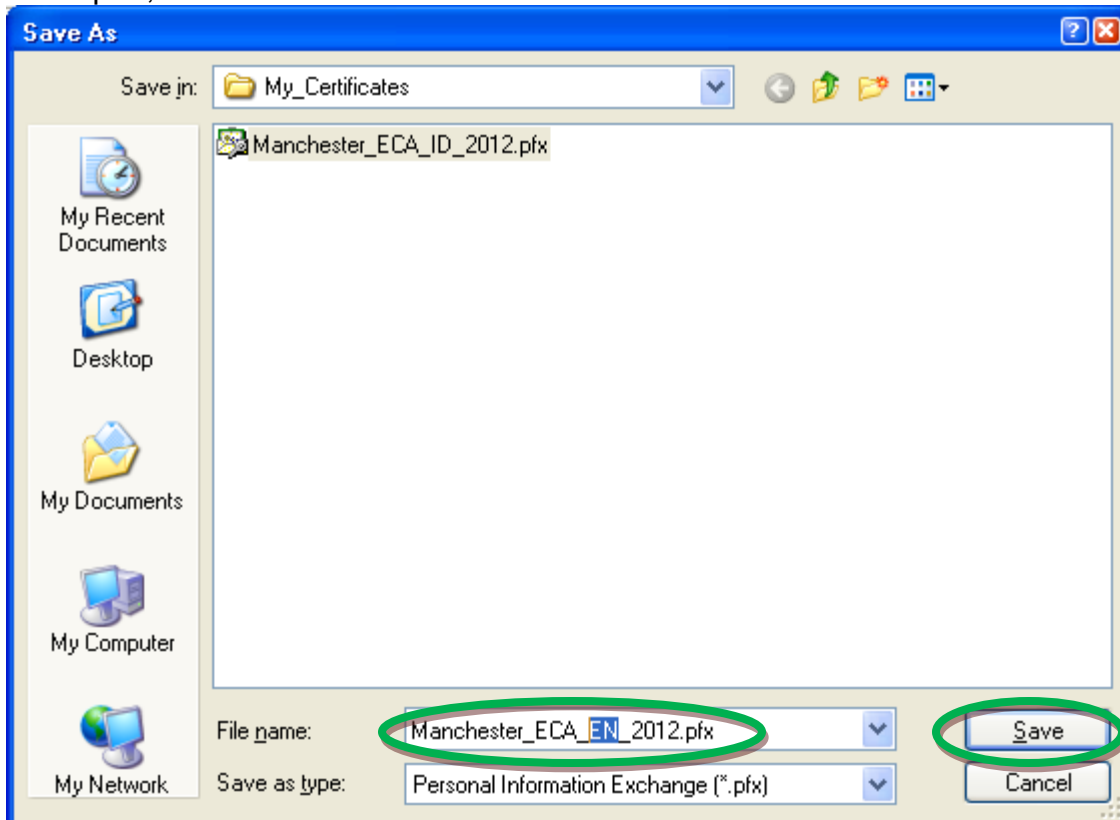
---

At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted with a green oval.

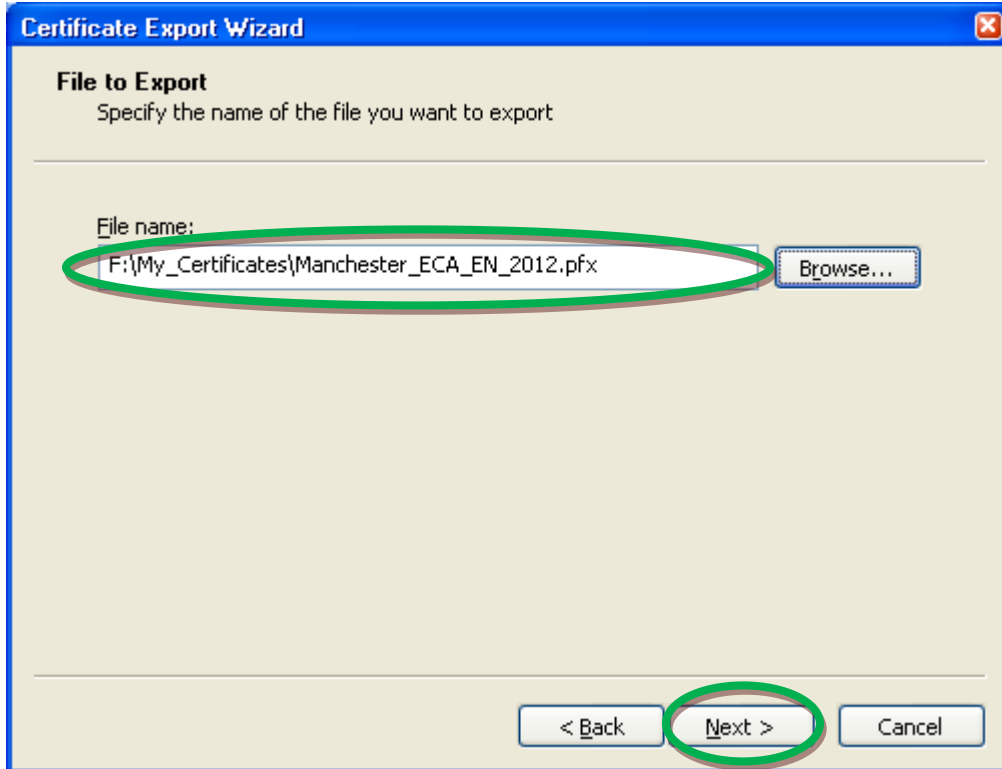
22. Click the **Browse...** button.



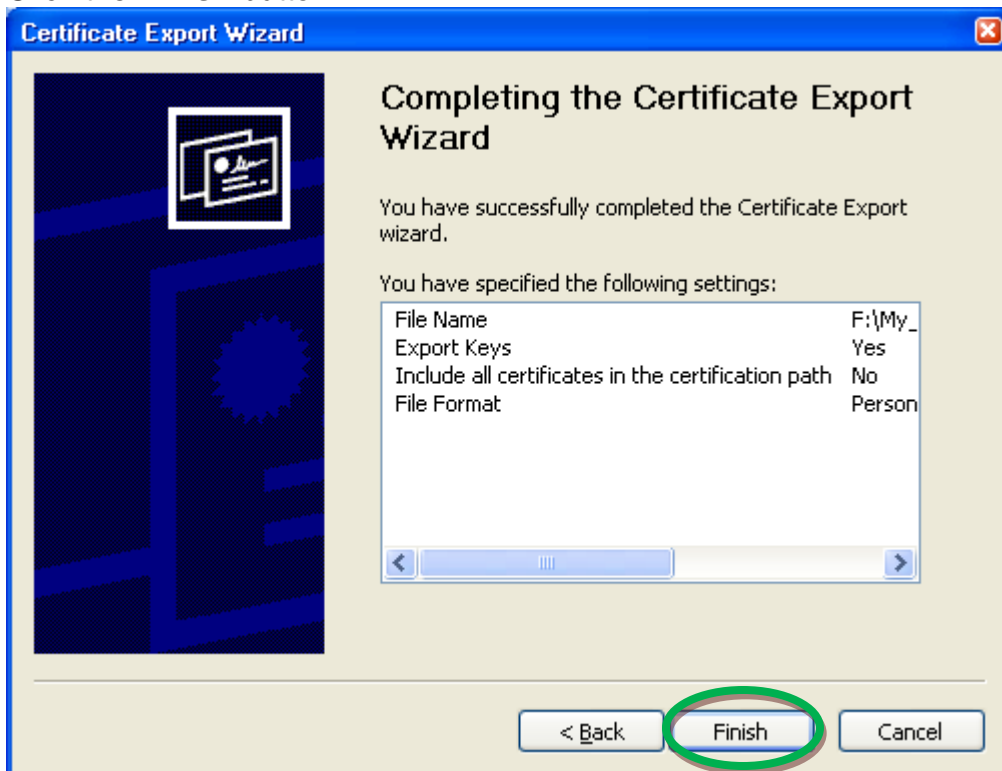
23. In the Save As dialog box, you should already be pointed at the location where you saved your ID certificate back-up file. We recommend that you make the filename "Yourlastname\_ECA\_EN\_YYYY" use ID for your IDentity certificate and EN for you ENcryption certificate. YYYY should be the year that the certificate will expire; "2012" for 2012. And then click the **Save** button.



24. Back on the File to Export dialog, confirm that the path and file name are correct and then click the **Next** button.



25. Click the **Finish** button.



26. In the Exporting your private exchange key dialog, enter the password that you previously assigned to protect your certificate private key and Click the **OK** button. NOTE: If there is no text box for you to enter a password, it means that no password was assigned to protect the certificate private key when you requested (or last installed) your certificate. Just click the **OK** button. Then see the instruction “Assigning a password to your certificate in Internet Explorer.”



27. When you see “The export was successful”; click the **OK** button.



28. Congratulations, you have successfully created certificate back-up files.