

CAC Digital Signature/CAC Email Encryption in Thunderbird (Windows 7 - 64 Bit)

Updated: 14 NOV 2010 Presented by: 2LT Dennis Henrickson

This is a howto on how to use Mozilla Thunderbird and utilize DoD CAC digital email signatures to sign and/or digitally encrypt messages.

Software needed:

ActivClient CAC x64 (6.2)

<https://militarycac.com/activclient.htm>

Latest DoD Certificates

<https://militarycac.com/dodcerts.htm>

dod_configuration-1.2.xpi (or higher)

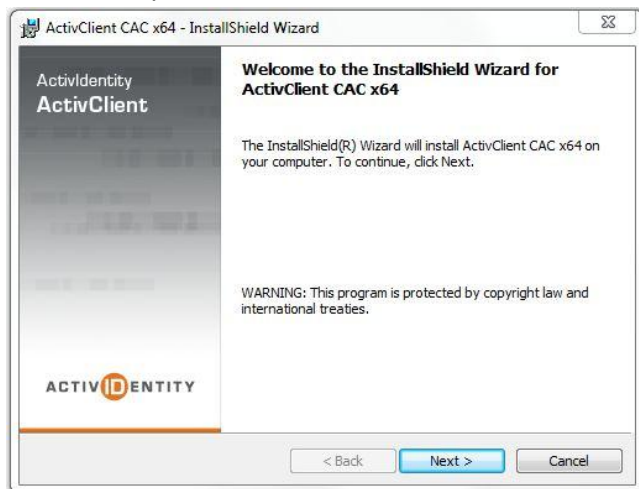
<http://forge.mil/Resources-Firefox.html>

Mozilla Thunderbird (Lanikai 3.1.6) 64 Bit. **Lanikai is not an official release of Thunderbird.** Once Mozilla releases an official 64 Bit version of Thunderbird this procedure should work with it also.

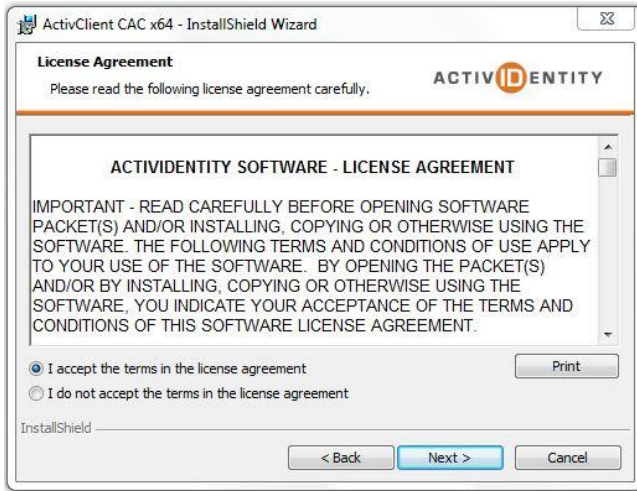
<http://wiki.mozilla-x86-64.com/Thunderbird:Download>

Procedure

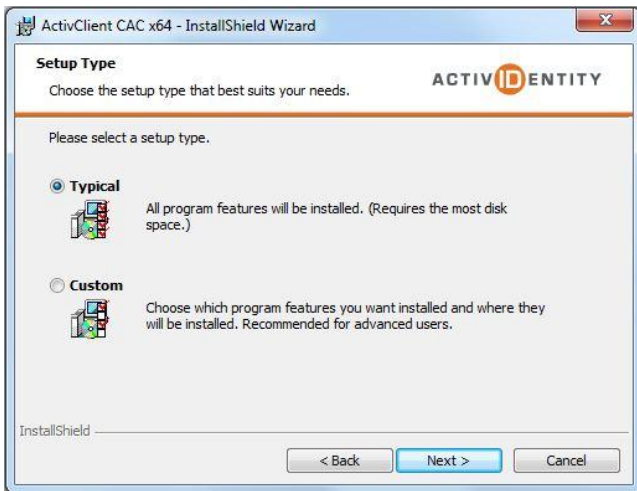
1. If you already have ActivClient CAC x64 installed skip to step 9.
2. Download and install the latest DoD certificates from “AKO CAC Reference Center.” With the Windows 7 64 bit you will have to right click on InstallRoot_v3.13A - Effective 3 FEB 2010.exe and select “Run as Administrator.”
3. Download ActivClient CAC x64 (6.2) from the “AKO CAC Reference Center.”
4. Double-click on ActivClient_CAC_x64_6.2.msi (note: if you have “Hide file extensions” selected in Windows you will not see the msi extension.



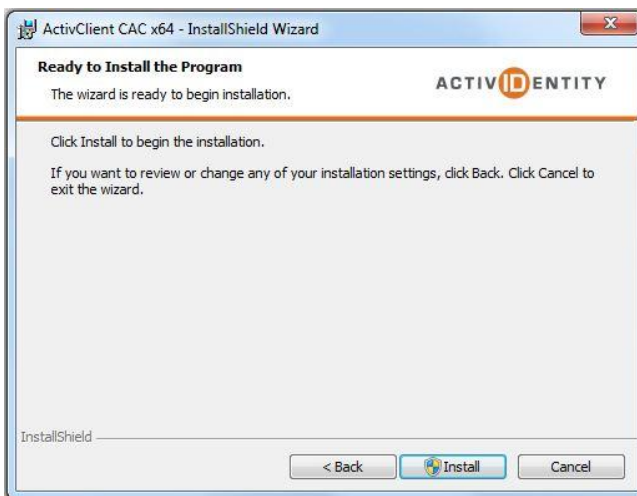
5. Click “Next” and accept the license agreement.



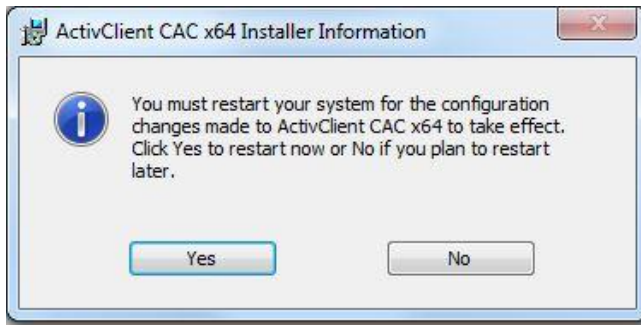
6. Select “Typical” and click Next again.



7. Select “Install.”



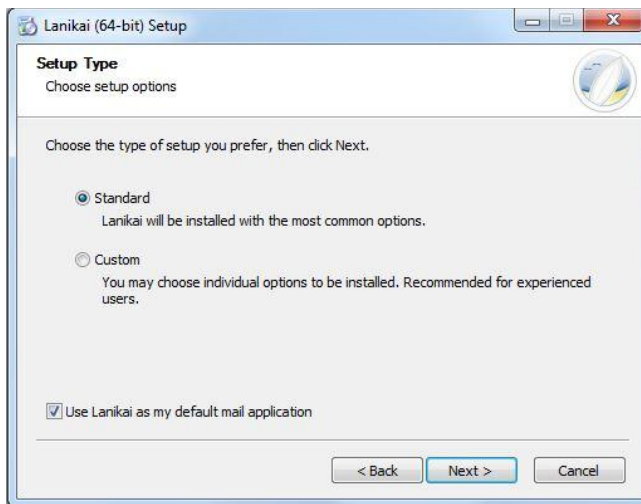
- Restart your computer.



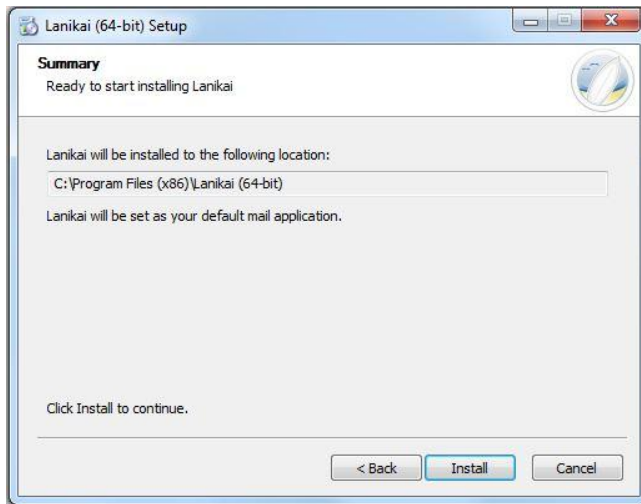
- Go to <http://wiki.mozilla-x86-64.com/Thunderbird:Download> and download Thunderbird (Lanikai 3.1.6) 64 Bit and install it. Click next to continue.



- Select Standard and click next.



11. Select Install.



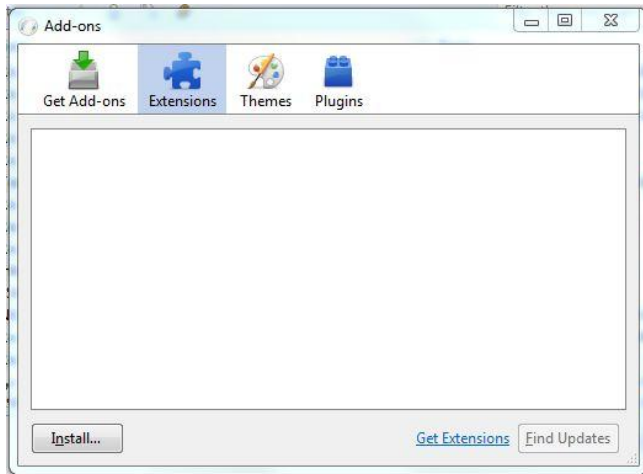
12. Select Finish.



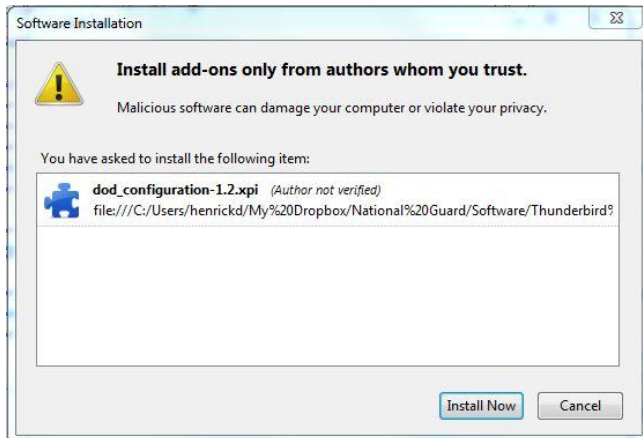
13. Configure Thunderbird following the instructions in AKO Helpdesk *Thunderbird Integration* article (Answer ID 243).

14. Once you are able to send and receive email from Thunderbird (Lanikai) download `dod_configuration-1.2.xpi` from <http://forge.mil/Resources-Firefox.html>.

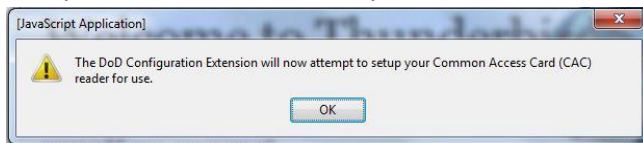
15. With Thunderbird open click on Tools > Add-ons from the menu.



16. Drag the dod_configuration-1.2.xpi file into the extensions tab and install the add-on.



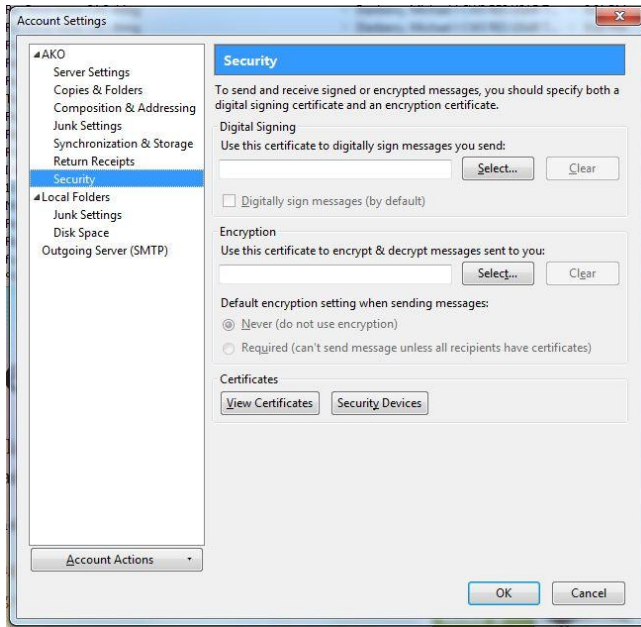
17. The DoD add-on will attempt to configure your CAC reader. Make sure you have it plugged in with your CAC inserted before you hit OK.



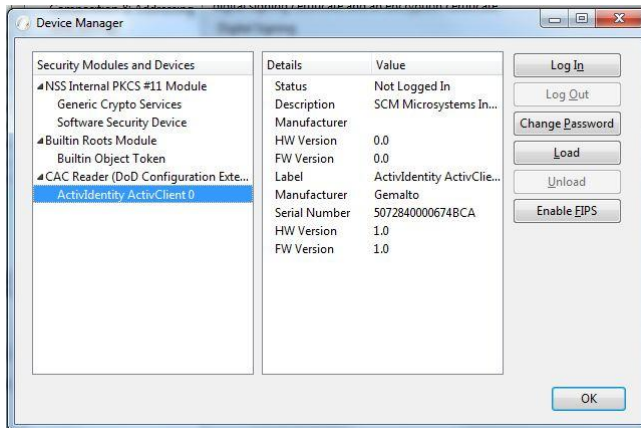
18. The DoD add-on will attempt to download the latest extensions. It will never finish so close the four progress boxes.



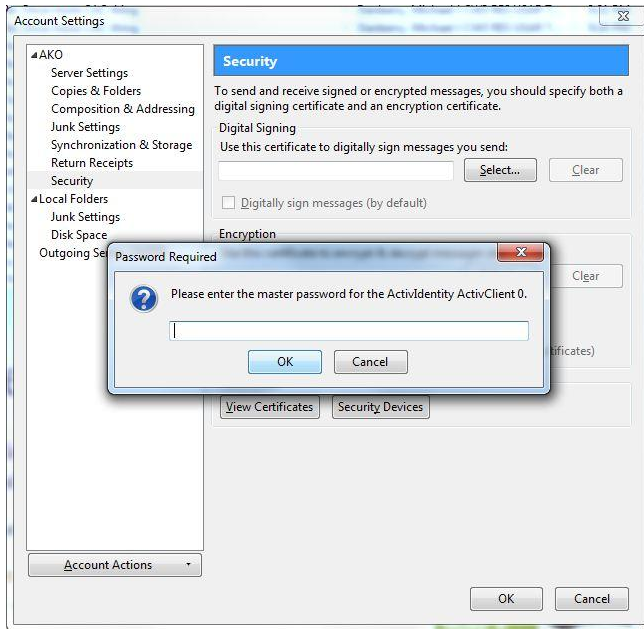
19. At this point you can click on Tools > Account Settings > Security to configure your digital signatures.



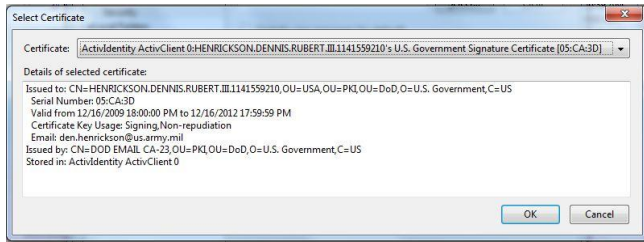
20. Click on Security Devices to make sure your CAC reader has been successfully installed. You should see CAC Reader (DoD Configuration Extension). If you select ActivIdentity ActivClient0 you will see a status of "Not Logged In." Click OK to go back to the previous menu.



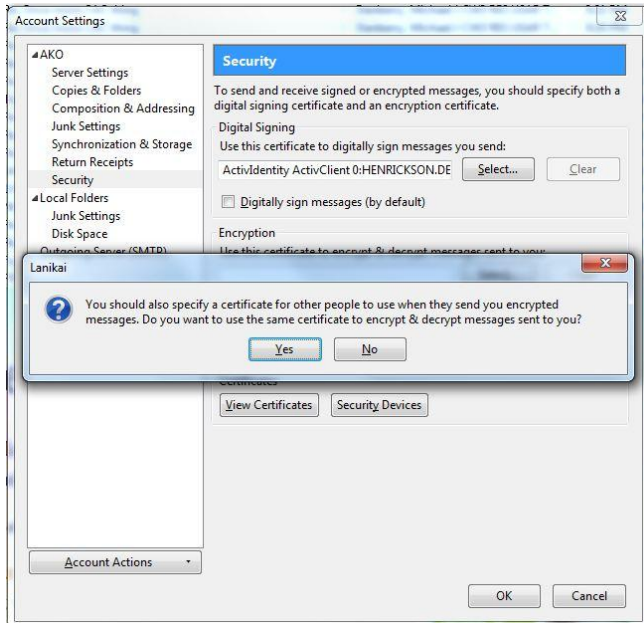
21. Click on Select to pick your signature to use for signing emails. It should prompt you to enter your CAC pin.



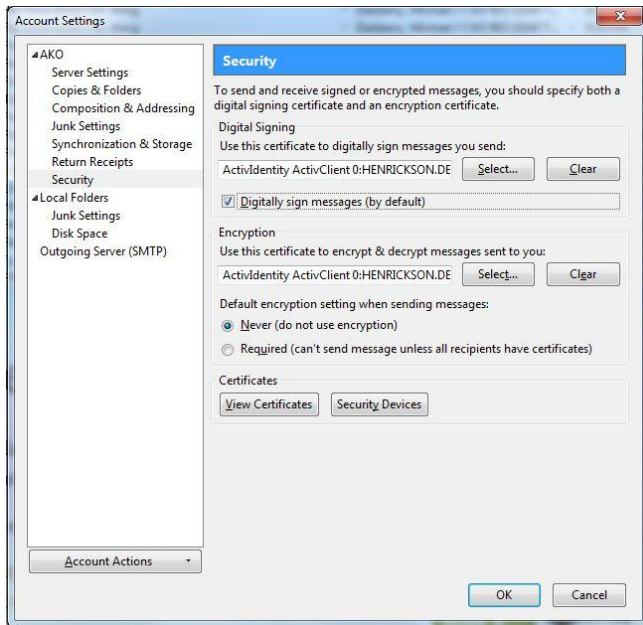
22. You will have two choices. One is for digitally signing your email and the other is for encrypting your email. Select the U.S. Government Signature Certificate for your signature.





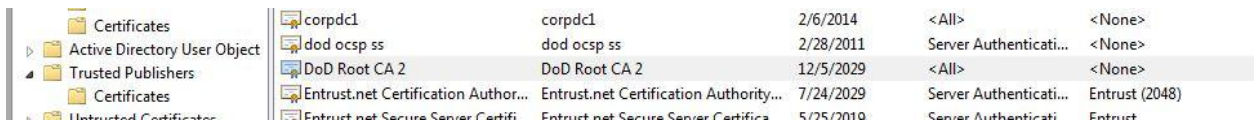
23. It will prompt you to use the key for both signing and for encryption. Select No.



24. Repeat the procedure to setup your encryption key.
25. If you want to always digitally sign your emails place a check box next to “Digitally sign messages (by default).”



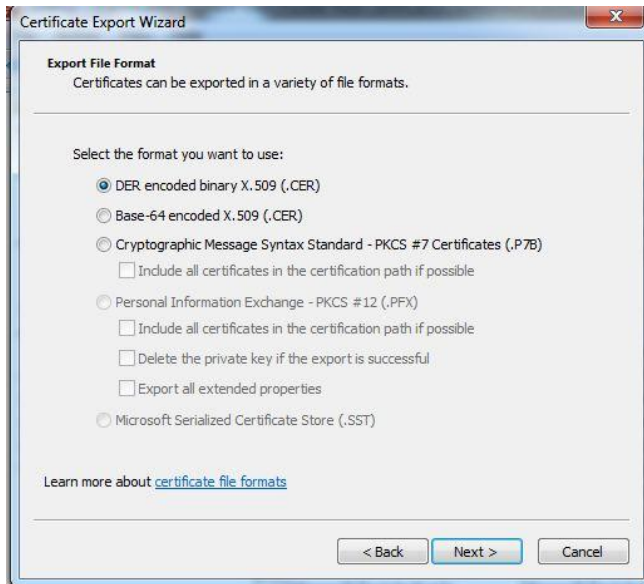
26. Open Certificate Manager by clicking the Start button , typing certmgr.msc into the Search box, and then pressing ENTER.  If you are prompted for an administrator password or confirmation, type the password or provide confirmation.
27. Browse to Trusted Root Certification Authorities > Certificates > DoD Root CA 2.



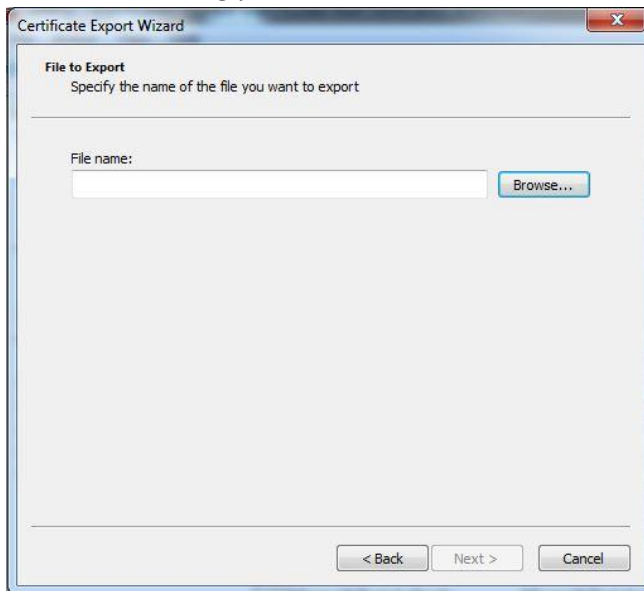
28. Right click on “DoD Root CA 2” and select All Tasks > Export. Then select Next.

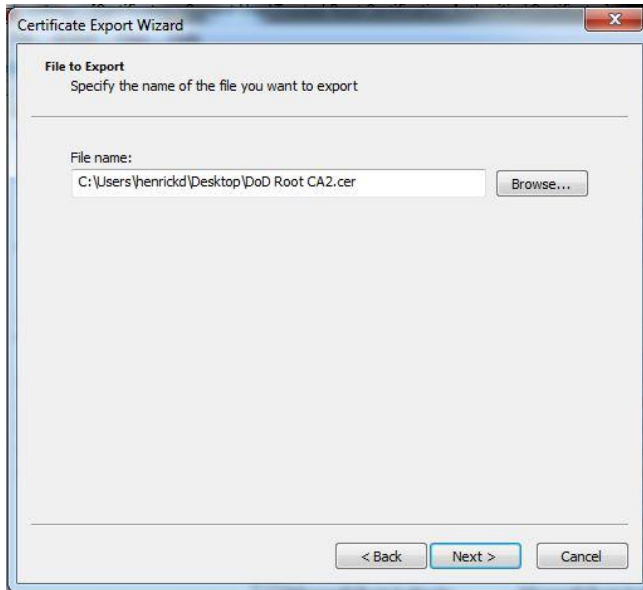


29. Select “DER encoded binary X.509 (.CER)” and click the Next button.

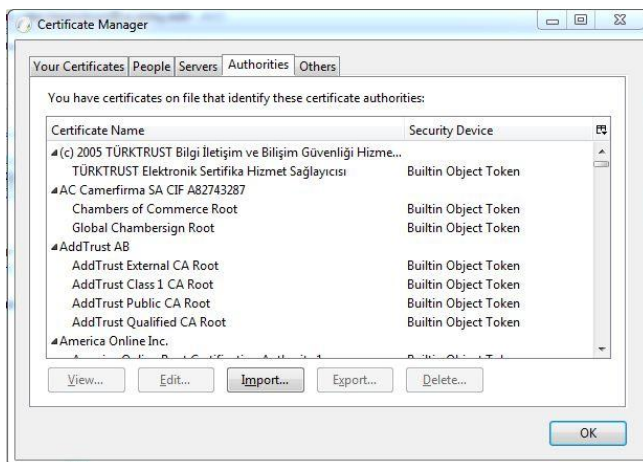


30. Name it something you will remember and save it to a location you will remember.

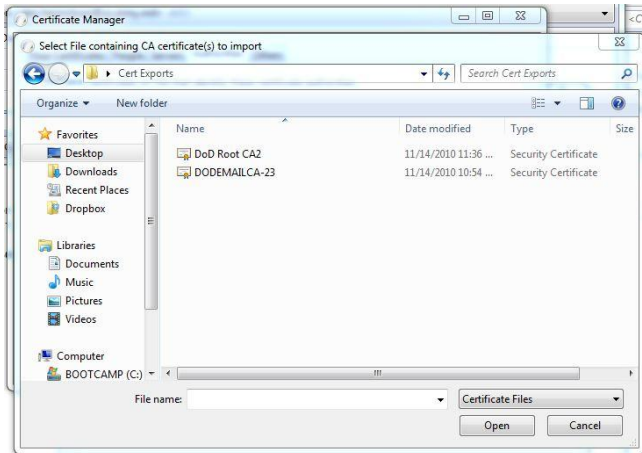




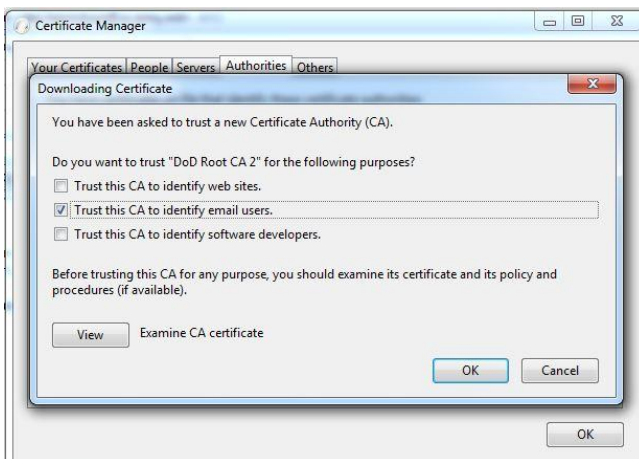
31. Browse to Intermediate Certification Authorities > Certificates > DOD EMAIL CA-23.
32. Right click on "DOD EMAIL CA-23" and select All Tasks > Export. Then select Next.
33. Follow the same steps used to export the "DoD Root CA2" certificate.
34. From within Thunderbird click on Tools > Options > View Certificates. If it prompts you enter your CAC pin.
35. Select the Authorities tab.



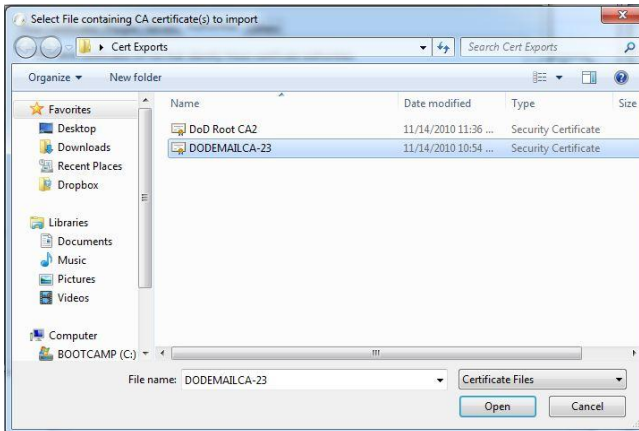
36. Select Import and browse to where you saved the exported certificates.



37. Select "DoD Root CA2" and select Open. Select "Trust this CA to identify email users" and select OK.



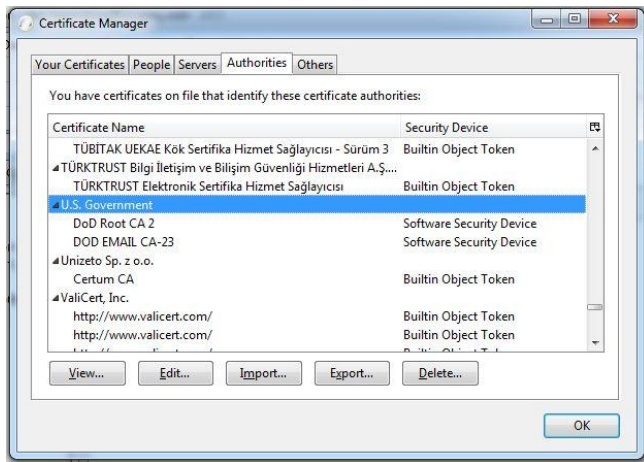
38. Select Import again, select "DODEMAIL CA-23 and Open.



39. Select “Trust this CA to identify email users” and select OK.



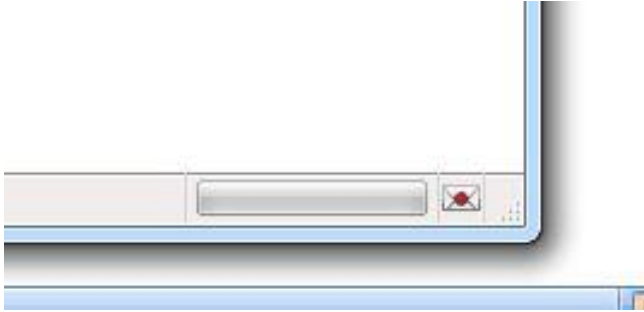
40. Verify that both certificates are installed. Browse to U.S. Government and you should see both certificates. Click OK.



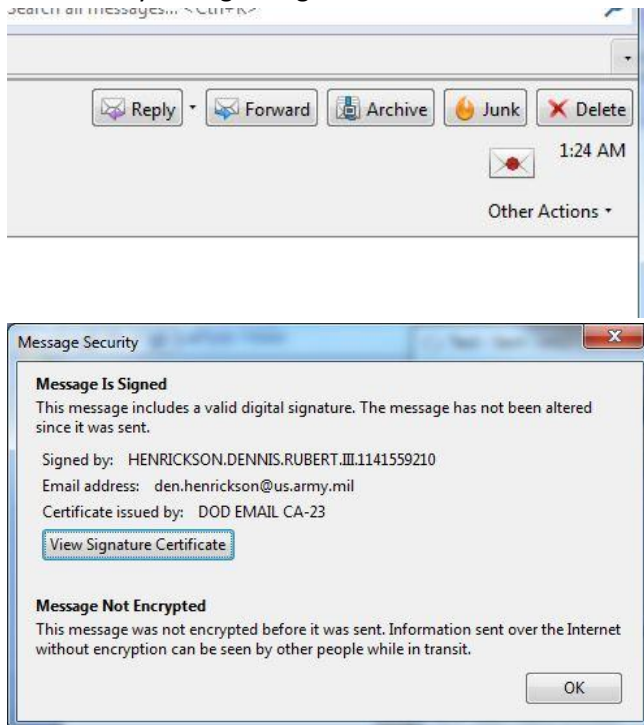
41. Close all open configuration screens and go to the main Thunderbird screen.

42. Test your email with a certificate by selecting “Write” to create a new email message. Compose an email like you normally would. Before you send it click towards the right (black triangle) of the Security padlock to open the signature setting. Select “Digitally Sign This Message.” In the lower right hand corner of your composition window you should now see an envelope with a red dot in the center. Click the Send button. Enter your CAC pin if it prompts you.





43. Check your sent messages and open the email you just composed and sent. In the upper right hand corner you should see a red envelope with a red seal on it. Click on the envelope and you should see your digital signature.



44. Verify with the person that you sent the digitally signed test email to that they received it with your digital signature.