



Trusting the DoD PKI and ECA PKI manually in MacOS

Trusting the DoD and ECA PKIs: an explanation

In order for Microsoft Edge (and many other applications) to properly use certificates from the DoD's ECA PKI, you need to tell your computer to "Trust" the DoD ECA PKI. In order for your computer to Trust the DoD PKI (and the certificates on most DoD web-enabled applications) you need to tell your computer to Trust them, also. The US DoD has two PKIs: DoD PKI is their internal PKI; DoD ECA PKI is the PKI for people outside of the DoD [External Certification Authority] who need to communicate with the DoD [i.e. you].

This document will walk you through manually Installing and Trusting the DoD PKIs on a Mac Operating System. There is no software that can install these automatically, so you will need to manually install and trust each certificate.

ECA and DoD Certificates

1: Please go to <https://www.cyber.mil/pki-pke/document-library> to begin the process.

Click on the two files shown to begin the downloads.

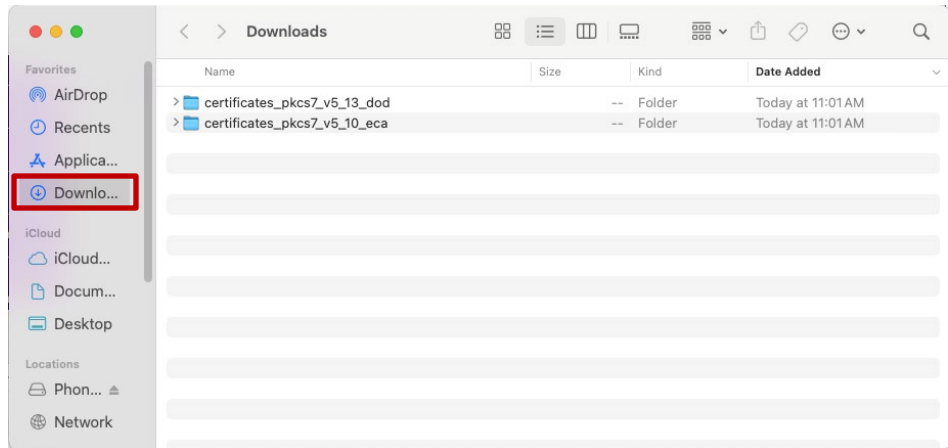
Download:

- PKI CA Certificate Bundles: PKCS#7 for DoD PKI Only – Version 5.XX
- PKI CA Certificate Bundles: PKCS#7 for ECA PKI Only – Version 5.XX
- The versions that were current at the time this PDF was made were 5.10 (for ECA Certificates) and 5.13 (for DOD Certificates); these versions are updated to higher versions quite often; select whatever version number is higher than 5.10 and 5.13.

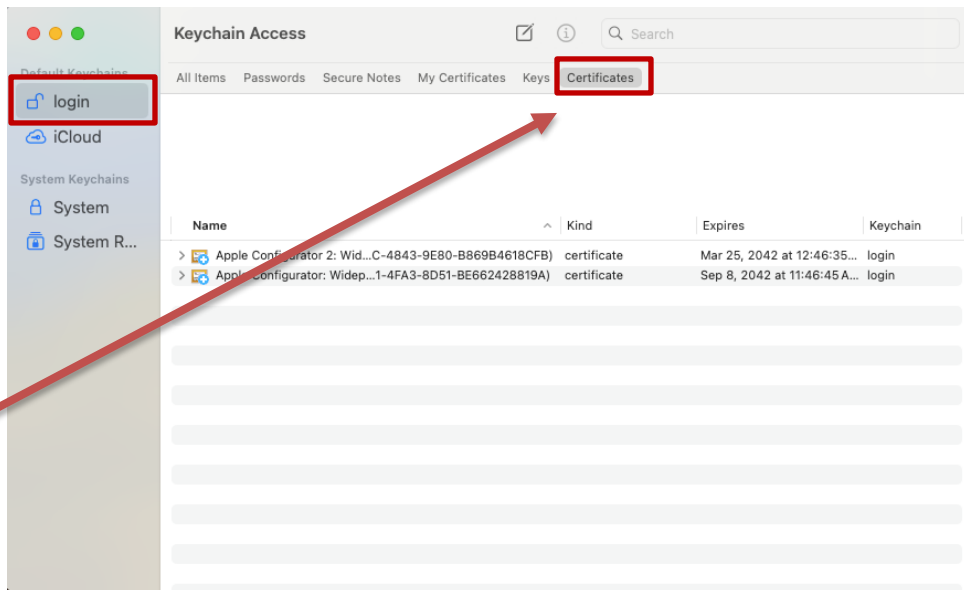
TITLE	SIZE	UPDATED
NIST SP 800-63-3	--	24 Feb 2019
NIST SP 800-78-4, Cryptographic Algorithms and Key Sizes for PIV	--	21 Feb 2019
OMB Memorandum 04-04, E-Authentication Guidance for Federal Agencies	--	21 Feb 2019
OMB Memorandum 11-11, Continued Implementation of HSPD-12	--	21 Feb 2019
OMB's Requirements for Accepting Externally-Issued Identity Credentials Memorandum	--	21 Feb 2019
ORC ECA Support	--	01 Mar 2019
PKI CA Certificate Bundles: PKCS#7 for DoD PKI Only - Version 5.13	428 KB	03 Nov 2023
PKI CA Certificate Bundles: PKCS#7 for ECA PKI Only - Version 5.10	304 KB	11 Jun 2024
PKI CA Certificate Bundles: PKCS#7 for JTC PKI Only - Version 5.15	86.45 KB	02 Aug 2024

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2: Open Finder, and then select Downloads on the left-hand side.



3: Select the search function in the top right of your computer and search for Keychain Access.



4: Within Keychain Access, select "Login" in the top left and then select "Certificates" in the top right.

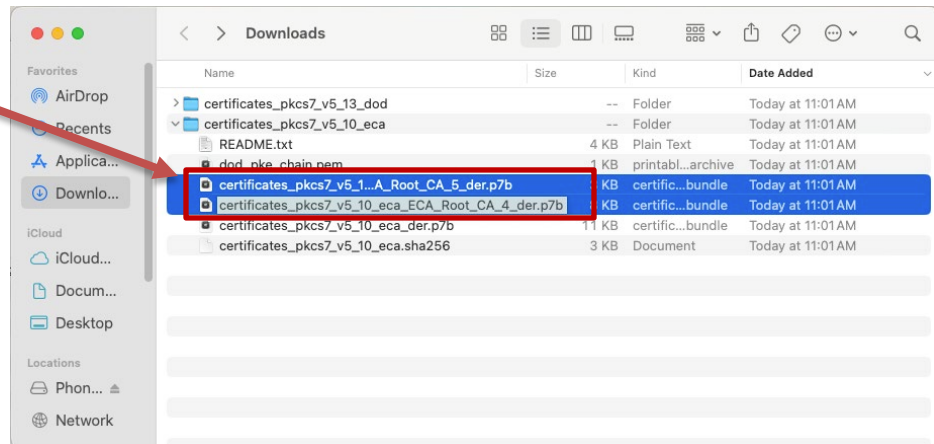
5: Configure your desktop to show the Keychain Access window on one half of your screen and the Downloads folder on the other half of your screen. Splitting the screen between both windows. You will be dragging files from one screen to the other and will need to see both screens at the same time.



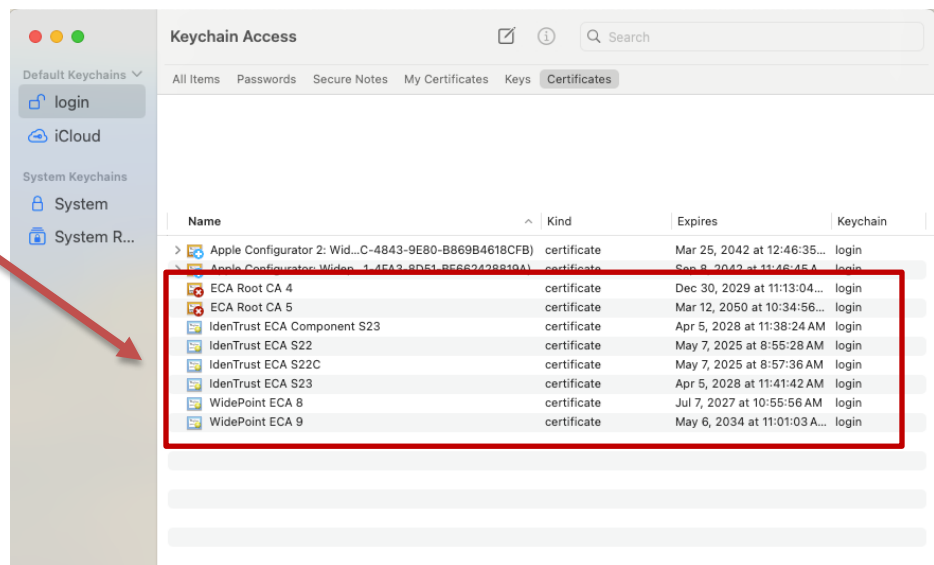
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6: From within the downloads folder, open the **certificates_pkcs7_v5_10_eca** folder and select both files shown:

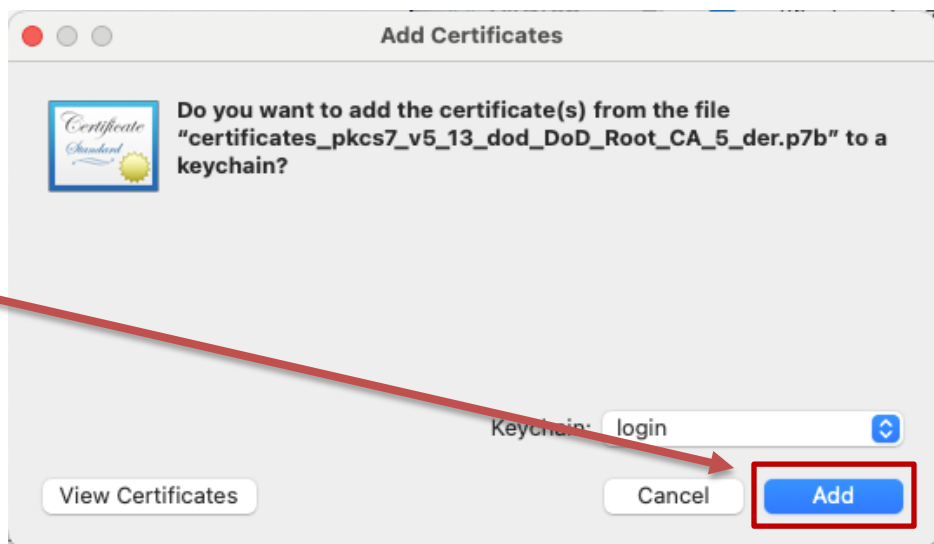
- Certificates_pkcs7_v5_10_eca_ECA_Root_CA_4_der.p7b
- Certificates_pkcs7_v5_10_eca_ECA_Root_CA_5_der.p7b



7: Drag both files over to the Keychain Access screen and drop them in the white space. You will see multiple files appear in the Keychain Access screen.



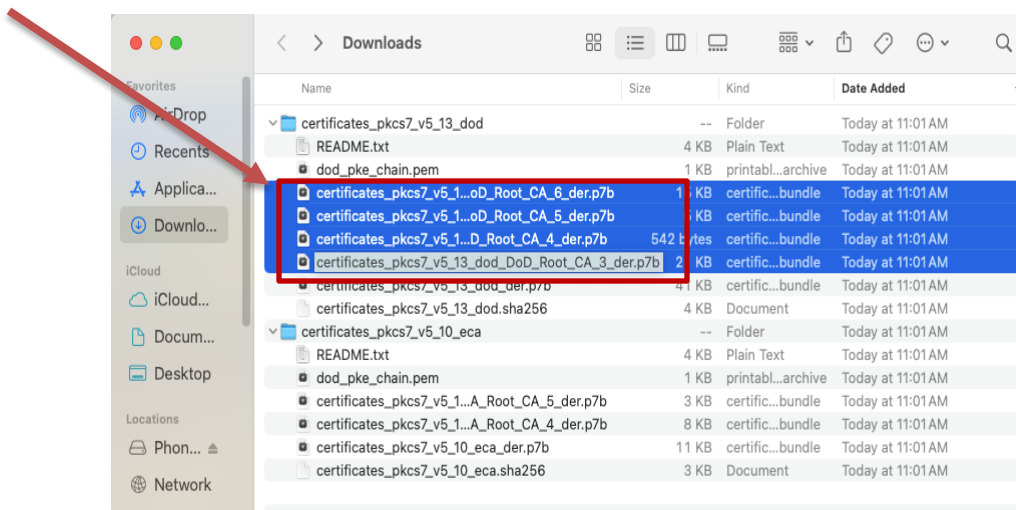
8: If any “Add Certificates” screens like this appear after dragging the certificates into Keychain Access please select “Add” for all of them.



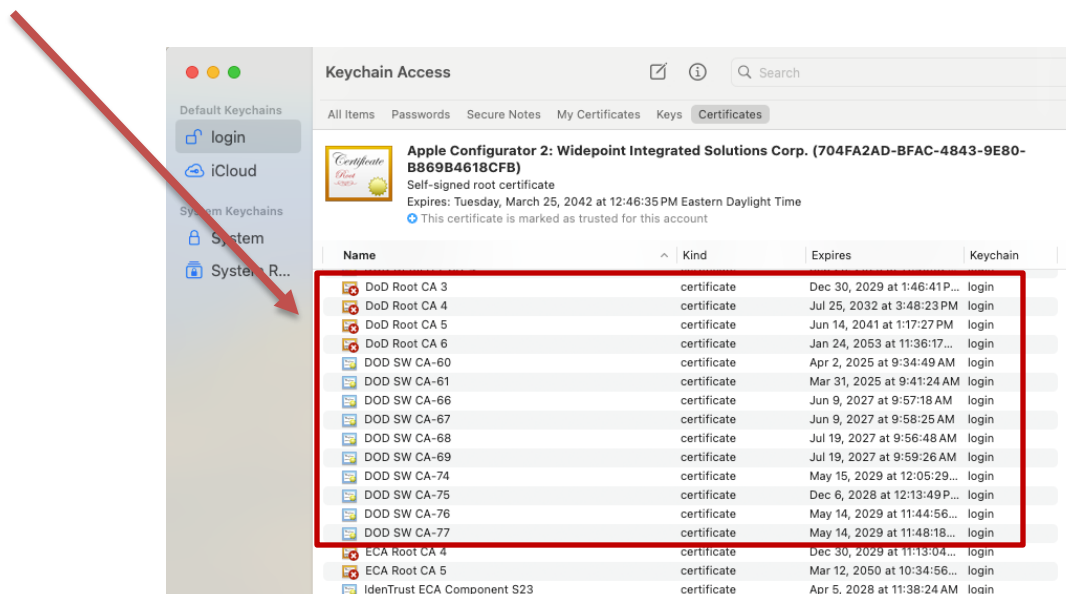
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9: From within the downloads folder, open the **certificates_pkcs7_v5_13_dod** folder and select the four files shown:

- Certificates_pkcs7_v5_13_dod_DoD_Root_CA_3_der.p7b
- Certificates_pkcs7_v5_13_dod_DoD_Root_CA_4_der.p7b
- Certificates_pkcs7_v5_13_dod_DoD_Root_CA_5_der.p7b
- Certificates_pkcs7_v5_13_dod_DoD_Root_CA_6_der.p7b

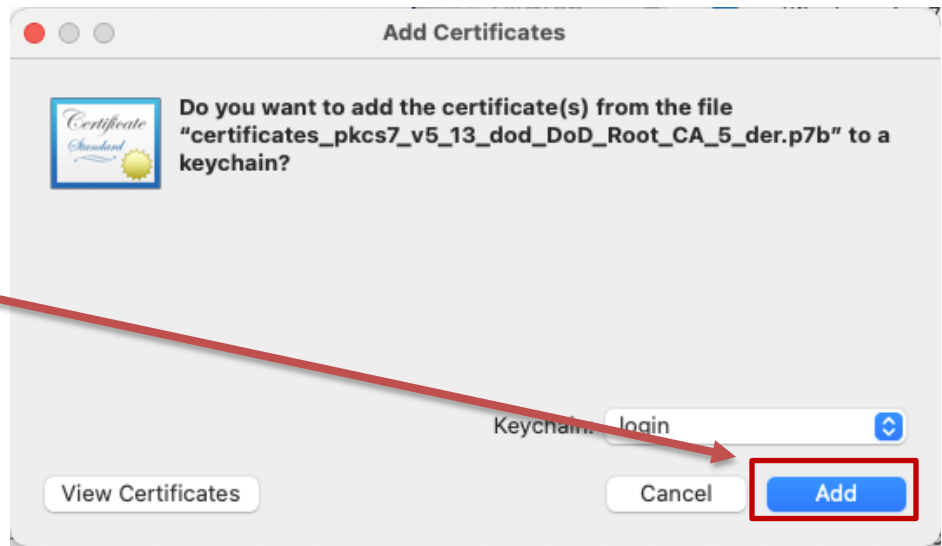


10: Drag all four files over to the Keychain Access screen and drop them in the white space. You will see multiple files appear in the Keychain Access screen.



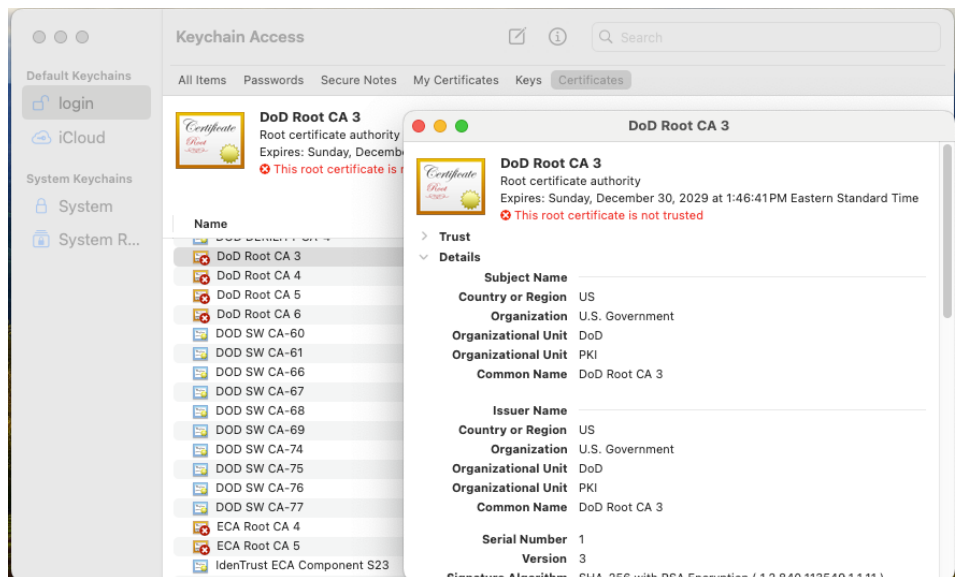
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11: If any “Add Certificates” screens like this appear after dragging the certificates into Keychain Access please select “Add” for all of them.



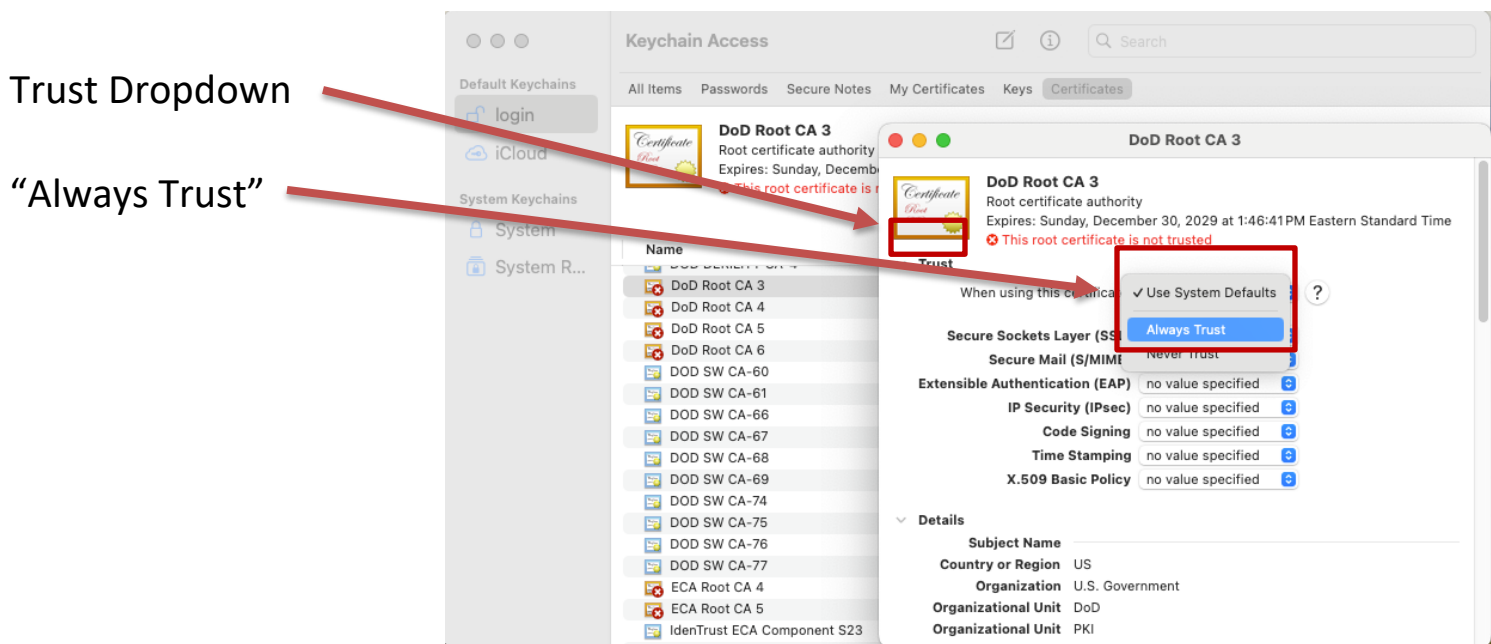
12: From within Keychain Access, double click each certificate listed with a red X next to their name. You will see a window pop up with certificate details.

- DoD Root CA 3
- DoD Root CA 4
- DoD Root CA 5
- DoD Root CA 6
- ECA Root CA 4
- ECA Root CA 5



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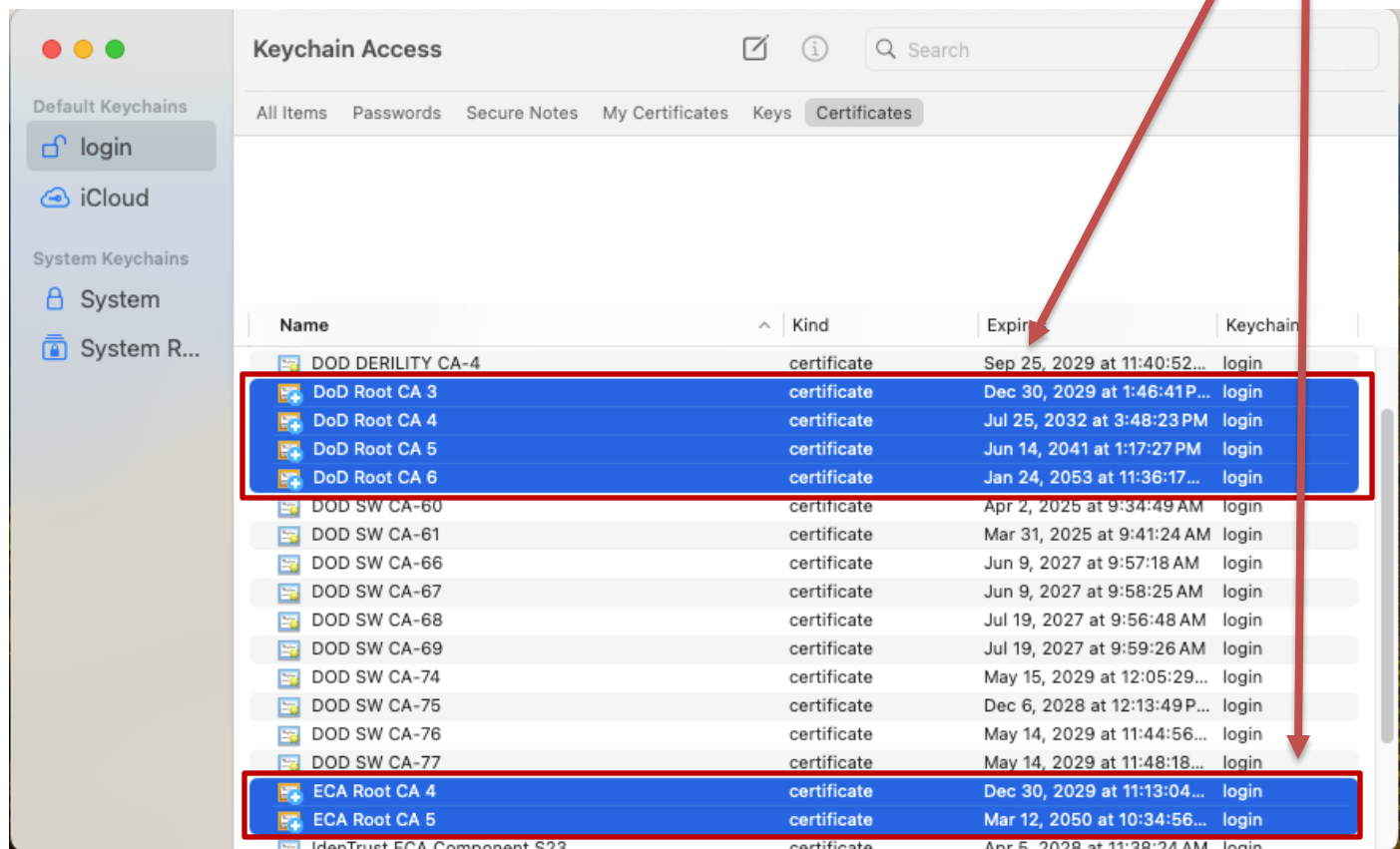
13: Select the “Trust” drop down within the popup window. Then change the “When using this certificate” from “Use System Defaults” to “Always Trust”.



14: After changing the above selection, close the certificate details popup window. When closing the window, it will ask you for your Keychain Password (This is most likely your computer password). It will ask you for this password after closing the popup window for each certificate.

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15: After changing the Trust settings for each certificate, you will see that the red X has changed to a blue plus icon for each certificate as seen below.



That ends the process of manually installing ECA and DoD Trust Chain Certificates.

If you need further guidance, please contact wcsc.helpdesk@widepoint.com.