HYPERSECU®

macOS User Guide for HYP2003

HyperPKI USB Token

09/09/2022

HSTE-NB0066-IND-RV1.0

HYPERSECU INFORMATION SYSTEMS INC

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Document History

Version	Release Date	Description of Changes	Document Owner	Approved By
1.0	2022-09-09	Original document	NB	JL

Getting Started

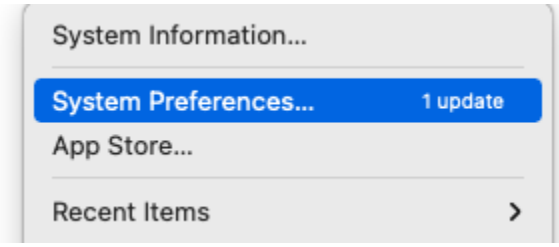
Requirements

Before installing EnterSafe PKI Manager for the HYP2003 be sure the following requirements are fulfilled:

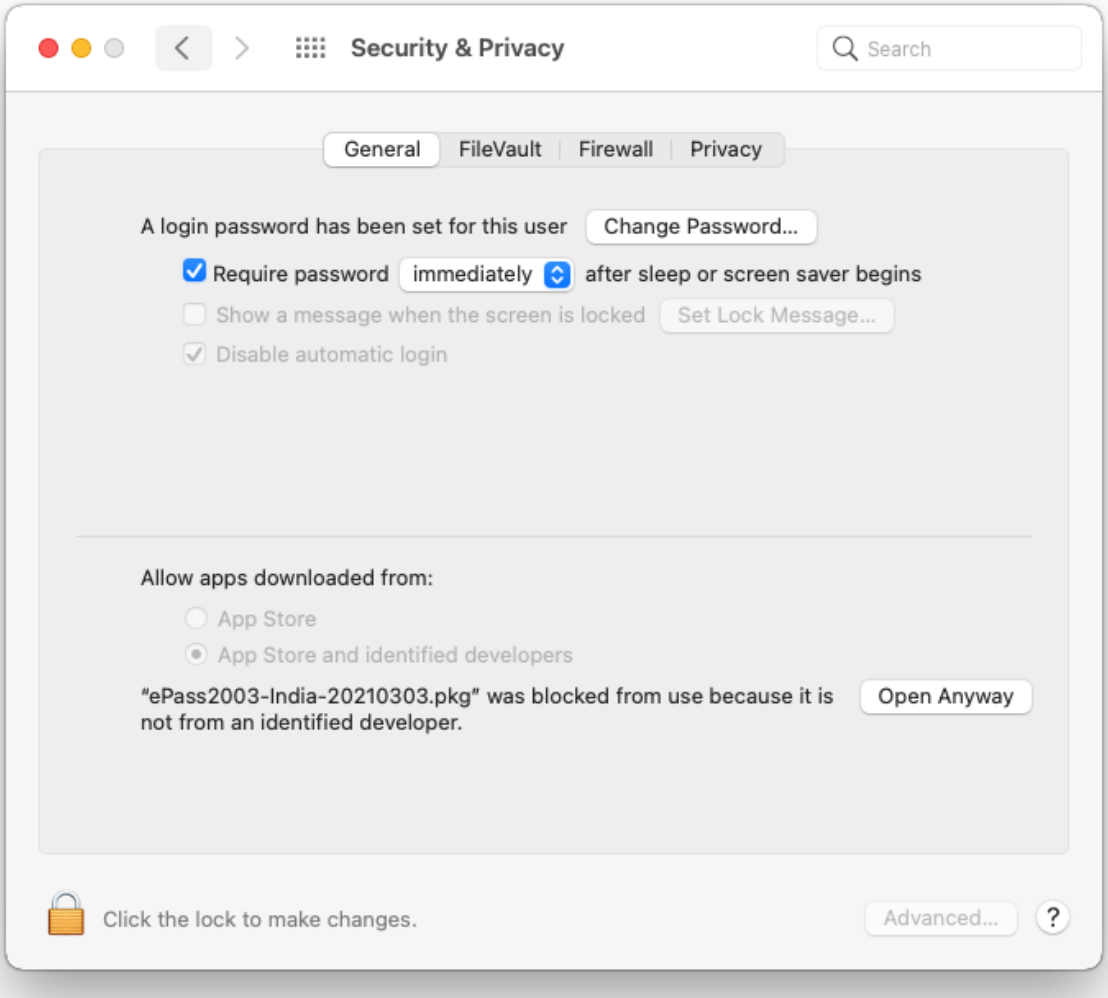
- The latest version of the HYP2003 drivers for macOS (go to hypersecu.com/updates-india to download)
- At least one available supported USB port
- HyperPKI HYP2003 USB token

Installing the HYP2003 Token Drivers

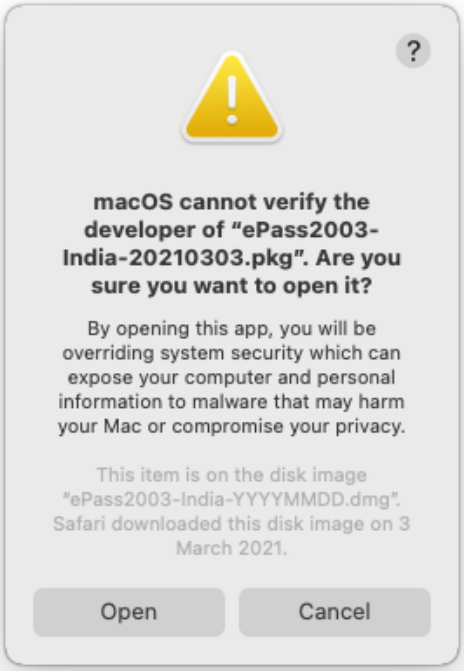
1. Extract the downloaded files, then locate `ePass2003-India.dmg`.
2. Double-click the file to open it and view the contents inside the disk image package:
    - EnterSafeAdminMgr: administrator version of EnterSafe PKI Manager
    - ePass2003-India-YYYYMMDD.pkg: installs EnterSafe PKI Manager
    - License Agreement
    - ReadMe.rtf: Readme document
    - uninstall.sh: Uninstalls Castle Mac.
3. Double-click `ePass2003-India-YYYYMMDD.pkg` to begin installation.
4. When you receive the message that the .pkg file is from an unidentified developer, click **OK** and open **System Preferences** form the Apple Menu.



5. Click **Security & Privacy**, then click on the **General** tab and click **Open Anyway**.

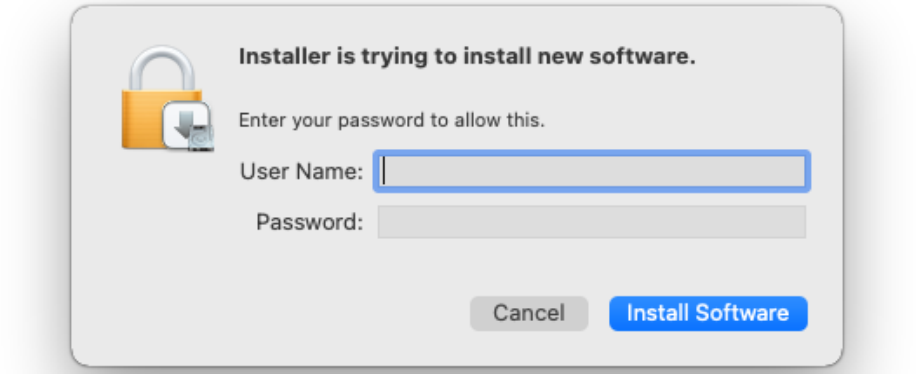


6. Click **Open** to continue with the installation process.

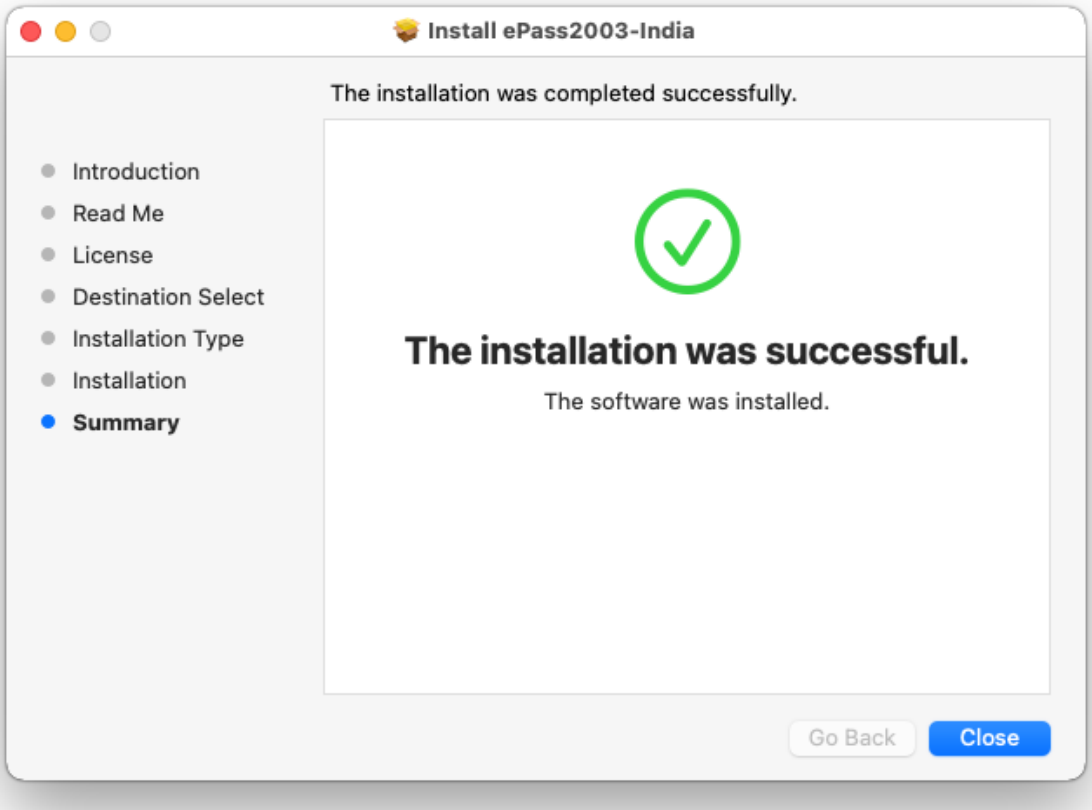


7. Click **Continue** and follow the instructions on the installation guide.
8. Click **Agree** to proceed with the installation.

9. Click **Install**, then enter your user name and password if prompted and click **Install Software**.

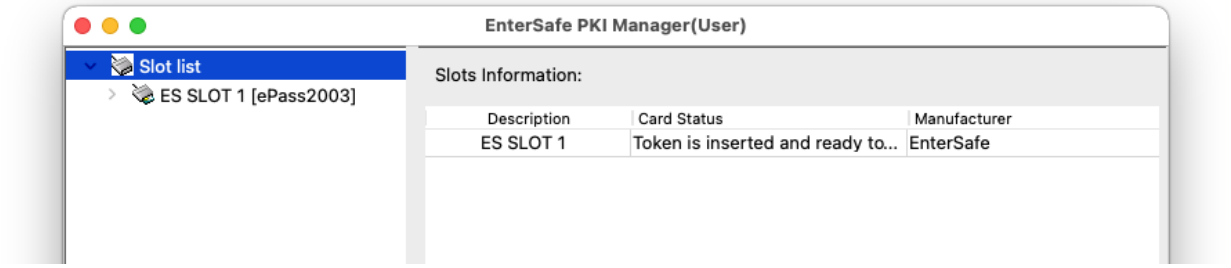


10. Click **Close** to complete the installation.



Logging In

1. Open EnterSafe PKI Manager and connect the HYP2003 token.
2. If connected correctly, the HYP2003 token will appear on the Slot list



NOTE: If the HYP2003 token's CSP version is 1.0, the Card Status will display "Token is inserted but cannot be recognized." This means the HYP2003 token's firmware needs to be updated. To do so, see https://update.epasstokens.com/Content/ePassUpdateProcess.pdf.

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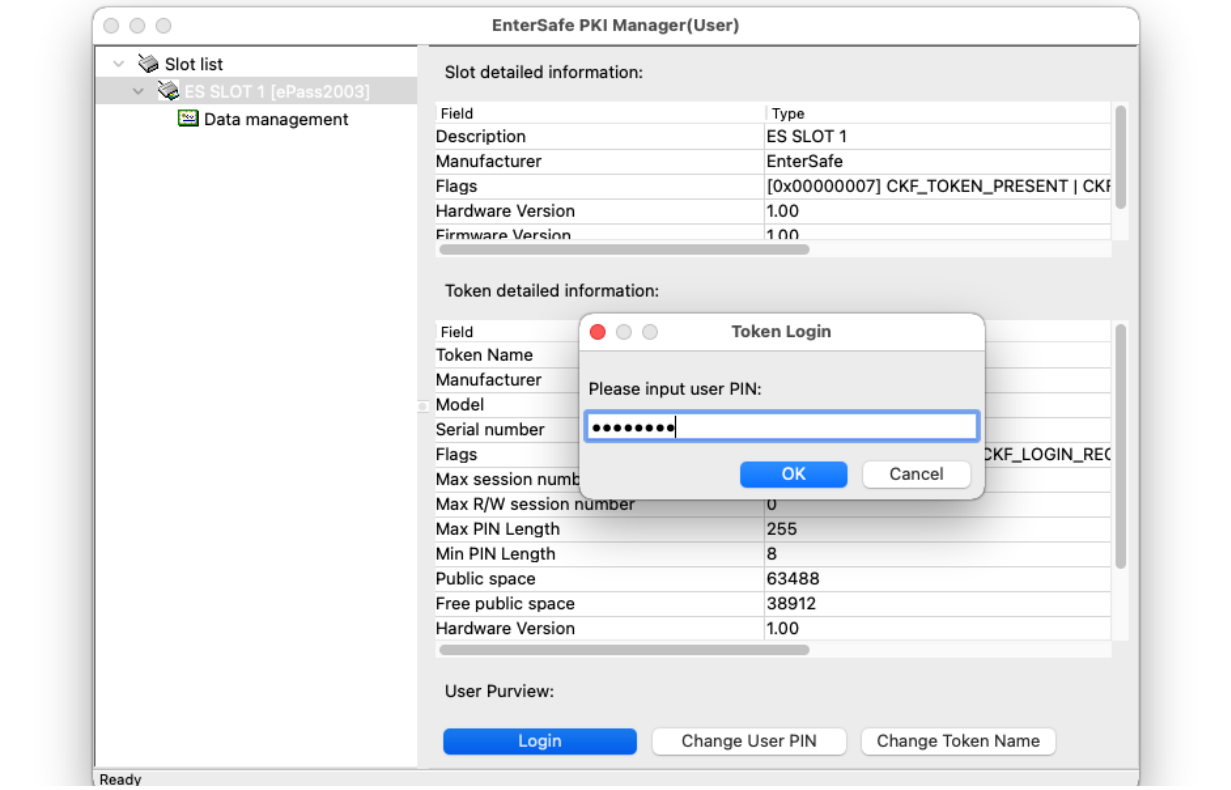
3. Select the HYP2003 you inserted, then click **Login**.
4. Enter the user PIN and click **OK**.



Certificate Trust Policies

Some Root CA Certificates must be manually set to Trust. If a certificate is not accepted, it may have expired or it may be invalid for the way it is being used. For example, some certificates may be used for establishing a secure connection to a server but not for signing a document.

The most common reason a certificate is not accepted is that system does not trust the certificate authority's root certificate. To have your computer trust a certificate authority, you must add the certificate authority to a keychain and set the certificate trust settings.

Types of Trust Policies

Certificates are widely used to secure electronic information. For example, a certificate might allow you to sign an email, encrypt a document, connect to a secure network, or identify yourself when using Messages. Each type of use is governed by a trust policy, which determines whether a certificate is valid for that use. A certificate may be valid for some uses but not for others.

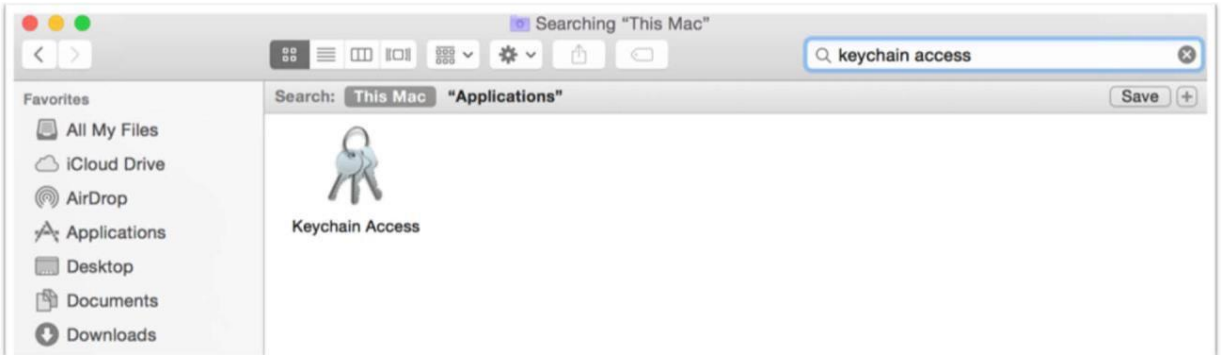
macOS uses several trust policies to determine whether a certificate is trusted. You can choose a different policy for each certificate, providing a greater amount of control over how certificates are evaluated.

Trust Policy	Description
Use System Defaults or no value specified	Use the default setting for the certificate.
Always Trust	You trust the author and want to always allow access to the server or app.
Never Trust	You don't trust the author and don't want to allow access to the server or app.
Secure Sockets Layer (SSL)	The name in a server's certificate must match its DNS host name to successfully establish a connection. The host name check is not performed for SSL client certificates. If there is an extended key usage field, it must contain an appropriate value.
Secure Mail (S/MIME)	Email uses S/MIME to security sign and encrypt messages. The user's email address must be listed in the certificate, and key usage fields must be included.
Extensible Authentication Protocol (EAP)	When you connect to a network that requires 802.1X authentication, the name in the server's certificate must match its DNS host name. Host names for client certificates are not checked. If an extended key usage field is present, it must contain an appropriate value.
IP Security (IPSec)	When certificates are used to secure IP communications (for example, in establishing a VPN connection), the name in the server's certificate must match its DNS host name. Host names for client

Trust Policy	Description
	certificates are not checked. If an extended key usage field is present, it must contain an appropriate value.
Messages Security	Certificates for messages must contain key usage settings.
Kerberos Client	This policy determines whether the certificate can be used to identify a user to a Kerberos server.
Kerberos Server	This policy determines whether a Kerberos server can use the certificate to identify itself to the system.
Code Signing	The certificate must contain key usage settings that explicitly permit it to sign code.

Set a Certificate's Trust Policy:

1. Search the **Application Keychain Access** and open it or navigate to the Utilities folder in the Applications folder and click **Open Keychain Access**.



2. Click and drag the certificate file to the Keychain Access icon or double-click the certificate file.
3. Click the keychain window, then choose a keychain and click **OK**.
4. If prompted, enter your user name and password.
5. Select the certificate, then select **File > Get Info**.
6. Click the **Trust** expandable menu to display the policies for the certificate, then select the trust policy you want to manually set.

Digital Signing

Loading the PKCS#11 Module in Mozilla Firefox

1. In the main Firefox menu, select **Settings.**
2. Click **Privacy & Security**, then navigate to Certificates and click **Security Devices**.
3. Click **Load**, then enter a name for the Module Name field.
4. In the Module filename field, enter the file path below:

```
/usr/local/lib/libcastle_v2.1.0.0.dylib
```

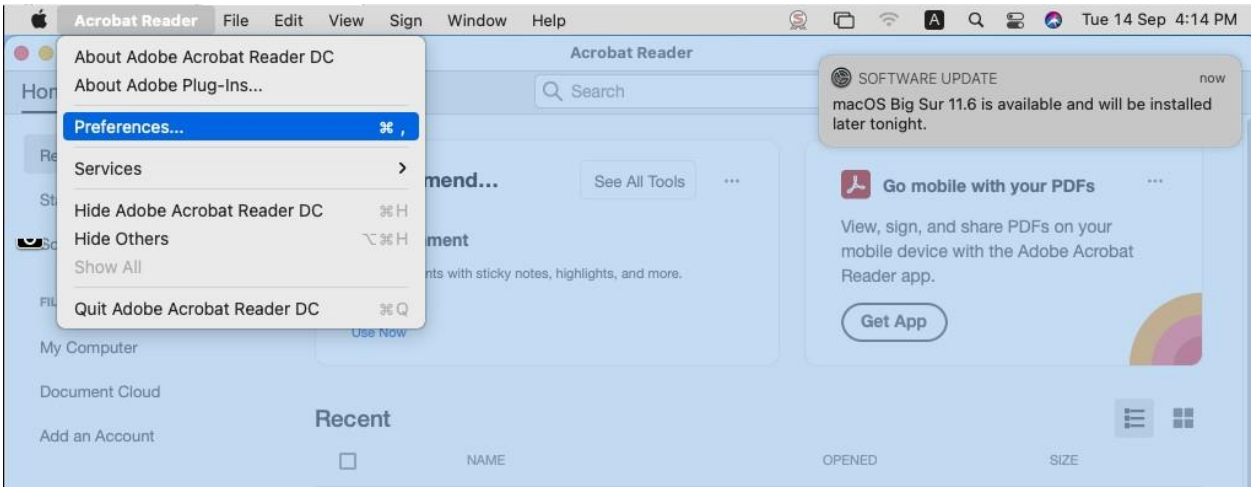
5. Click **OK** to finish loading.

NOTE: Do not use browse to locate this file. Dynamic library files are protected by the macOS system so the file path must be entered manually.

NOTE: To unload the PKCS#11, go to **Settings > Privacy & Security > Security Devices**, and click **Unload**.

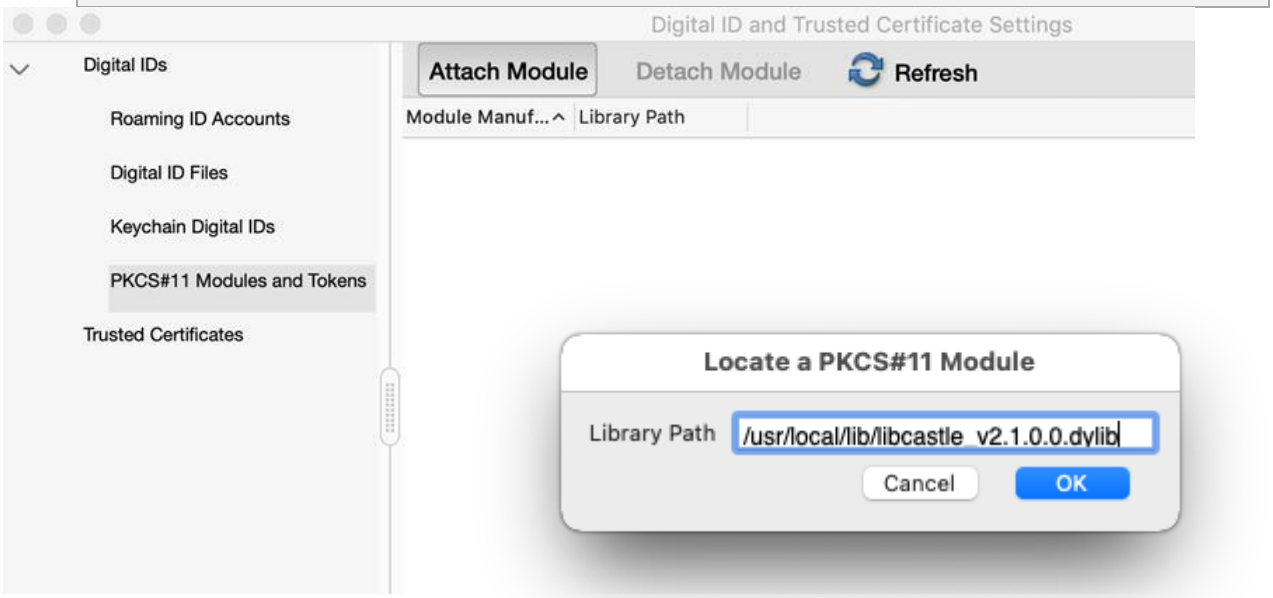
Loading the PKCS#11 Module in Acrobat Reader DC for Digital Signing

1. In Acrobat Reader DC, select **Preferences** from the Acrobat Reader menu.

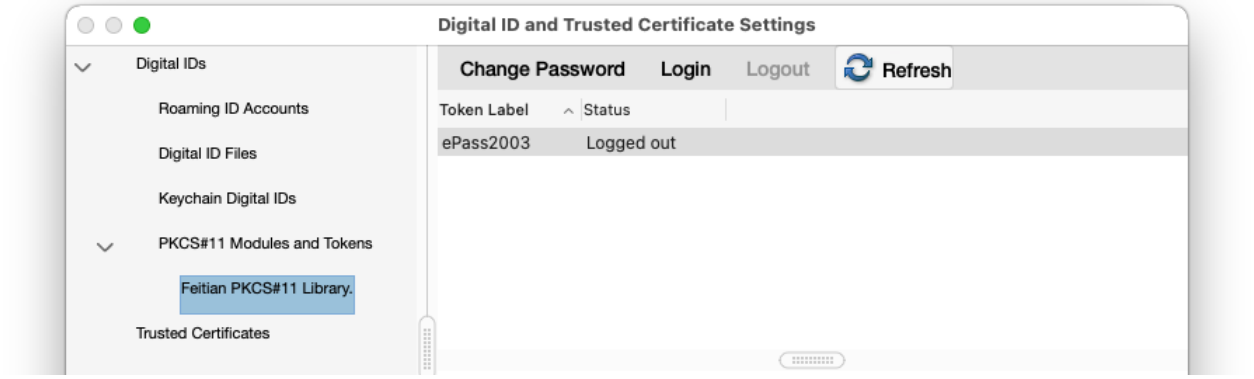


2. Select **Signatures**, then click **More** under the category **Identities & Trusted Certificates**.
3. Click **Digital IDs**, then select **PKCS#11 Modules and Tokens**.
4. Click **Attach Module** and enter the file path below:

```
/usr/local/lib/libcastle_v2.1.0.0.dylib
```



5. Click **OK** to finish loading. The token will appear under the PKCS#11 Modules and Tokens menu.
6. Select the token, then click **Login**.



7. Enter the user PIN and click **OK**.

NOTE: If the Login button is not highlighted, click **Refresh**.

Digitally Signing a PDF in Acrobat Reader DC

1. Open the PDF document you want to sign.

2. Under Tools, click **Certificates**, then click **Digitally Sign**.
3. Draw the box on the document where you would like to place the digital signature.
4. Click **Sign**, then save the document.

IMPORTANT: This package supports macOS TokenD. TokenD is dependant on Smart Card Services, so be sure PC/SC is running. To test for PC/SC services, refer to: https://ludovicrousseau.blogspot.com/2014/03/level-1-smart-card-support-on-mac-os-x.html

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