AIR FORCE PUBLIC KEY INFRASTRUCTURE SYSTEM PROGRAM OFFICE

CAC REPLACEMENT GUIDE

SECURE EMAIL USING OUTLOOK 2013-2016

Congratulations! You've just been issued the new, ***modernized*** Common Access Card (CAC).

The new, modernized CAC contains common identity standards that enable the US Warfighter's ability to interoperate with various mission partners and reduce inefficiencies around secure information exchange on the NIPRNet.

Externally, your new CAC is similar to your previous CAC. Internally, the modernized CAC contains four single-use certificates, one for each major PKI function. Beyond selecting the PIV-Auth certificate during network logon *(vs the email certificate),* your experience with the CAC will not change.

In most cases, the modernized CAC contains the following certificates:

- **Authentication (PIV):** to gain logical access to DoD unclassified networks, websites, systems, and applications
- **Signature:** to digitally sign documents, forms, and unclassified email
- **Encryption:** to encrypt/decrypt unclassified email messages
- **Card Authentication Key (CAK):** to gain physical access to US Govt controlled facilities/spaces *(enabled with Physical Access Control Systems)*

WHY IS THIS DOCUMENT IMPORTANT TO YOU?

At this time, your workstation must be manually configured to successfully recognize and use the PKI certificates on your CAC. Follow the steps on the next page to ensure proper functionality.

THIS IS A USER PROCESS; ADMINISTRATOR PRIVILEGES ARE NOT NEEDED.

BUT FIRST, Insert your new CAC into the card reader. If an error message pops up while logging into the network with your new CAC the first time, remove the CAC and reinsert it into the card reader. If the issue persists, remove your CAC and reboot the computer. Once rebooted, reinsert the CAC. If you are still unable to login, contact your local Computer Support Personnel; *do not return your CAC to the CAC Issuance Facility.*

ID SOLUTIONS

The AFPKI SPO is part of the Protect Branch, End User Services Division, Joint Base San Antonio - Lackland, TX, organizationally aligned under the Air Force Life Cycle Management Center, Enterprise IT & Cyber Infrastructure Division, EIT & Cloud Capabilities Division. [AFLCMC/HNID]

DELIVERING CYBER DEFENSE AND IDENTITY ASSURANCE SOLUTIONS TO THE AIR FORCE

https://intelshare.intelink.gov/sites/usaf-pki/

U.S. AIR FORCE

NOTE

The AFPKI SPO is aware of the inconvenience imposed upon you to complete the 3-step process outlined here. With your experience in mind, we have automated the process as much as we can and will continue to work to make the CAC replacement transition seamless.

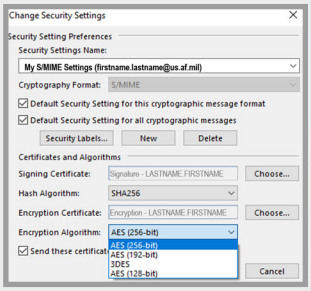
Step 1: Remove Previous PKI Certs from the Certificate Store

a. Insert your new CAC in the card reader and click the **Start** button *(Windows icon at bottom left of system tray)*
b. Click on **Control Panel** > **Internet Options**
c. Select the **Content** tab > **Certificates** button
d. Select all "old" certificates **EXCEPT** previously recovered email encryption certificates ***("CN=" in the "Friendly Name")***
e. Click the **Remove** button, then click **OK** at the warning

Step 2: Update Outlook Security Profile Settings

a. Remove your new CAC from the card reader and reinsert it
b. Open **Microsoft Outlook** then click **File** > **Options** > **Trust Center** > **Trust Center Settings**
c. At the next window, select **Email Security**
d. At the next window, in the **"Encrypted Email"** area, click the **Settings** button
e. In the **"Change Security Settings"** pop-up, click the **Delete** button until it is grayed out; click **OK**
f. Back in the **Trust Center**, click the **Settings** button
g. In the **"Change Security Settings"** pop-up, click the **Choose** button for **Encryption Certificate** and select the most current **DoD Email CA-XX** certificate; click **OK**
h. Verify the **Encryption Algorithm** shown is "**AES (256-bit)**;" if not, click the drop-down arrow, select "**AES (256-bit)**" then click **OK**
i. Still in the **"Change Security Settings"** pop-up, click the **Choose** button for **Signing Certificate** and select the most current **DoD Email CA-XX** certificate; if none are showing, click "**More Choices**" and select the correct certificate; click **OK**
j. Verify the **Hash Algorithm** shown is "**SHA256**;" if not, click the drop-down arrow, select "**SHA256**"
k. At the warning pop-up, click **OK**; enter your **PIN** if prompted
l. Once all windows are populated and all three checkboxes are checked, click **"OK."** Your workstation is now configured to use the PKI certificates on your new CAC.

Ex: Encryption Certificate



Ex: Signing Certificate

Step 3: Recover a Previous Email Encryption Key

Your new CAC contains a new Email Encryption certificate and corresponding public/private encryption key pair. Any email encrypted with your **previous encryption key** cannot be opened with the new key; therefore, to read those email messages, you must **recover the previous encryption key**. There are two methods to recover an encryption key: **AUTOMATED** *(recommended)* and **MANUAL**.

AUTOMATED KEY RECOVERY

a. Open a browser and type in one of the following URLs *(case sensitive)*
   - https://ara-5.csd.disa.mil/ara/
   - https://ara-6.csd.disa.mil/ara/
b. When prompted to choose a certificate, select your **PIV-Auth certificate**, then enter your PIN if prompted
c. At the **"Automatic Key Recovery Agent"** (AKRA) page, click **I Accept**. Note the list of all your escrowed encryption keys available for recovery. Review the list, then based on the date range, select the key that matches the timeframe of the encryption key you wish to recover.

   ***NOTE**: Key Usage must be **"Key Encipherment;"** no other certificates can be recovered*

   ***NOTE**: DO NOT RECOVER any encryption keys with a "Not Valid Before…" date within one day of your newly issued CAC*
d. Click the blue **Recover** button

STEP 3: CONTINUED

e. At the pop-up window asking for acknowledgement that you are the subscriber of the escrowed key selected, click "**I Acknowledge"** then click **OK**

The AKRA returns with a **"Download"** link and a complex, **16-character, case-sensitive password.**

DO NOT click the Download link until you've **written down** the password **EXACTLY** as shown or captured a screenshot *(copy/paste will not work).*
NOTE: *this page is only available for a few minutes.*

f. Once you've captured the password, click on the **"Download"** link, then click **Open** *(NOTE: if using Chrome, you will be prompted to Save the file to your computer prior to opening it; ensure you delete the file after successfully recovering the certificate)*

g. Click **Next** at the **"Welcome to the Certificate Import Wizard"** screen

h. Click **Next** at the "**File to Import"** prompt

i. At the **"Private Key Protection"** screen, check the **"Display Password"** checkbox, then enter the **16-character password**

j. Verify the password is correct, then click **Next**

k. At the **"Certificate Store"** prompt, select **"Automatically select the certificate store..."** then click **Next**

l. At the **"Completing the Certificate Import Wizard"** screen, click **Finish**

m. At the **"Import was successful"** pop-up, click **OK**

The recovered key is now installed in the certificate store and ready for use. When opening previously encrypted email, MS Outlook will automatically select the corresponding encryption key from the certificate store to decrypt the message.

MANUAL KEY RECOVERY

When attempting the Automated Key Recovery process, if no encryption keys appear, follow these procedures for the **Manual Key Recovery** process. ***NOTE:*** *This process is for* ***NIPRNet certificates only****.*

a. Open an Internet browser

b. Enter the following URL into the web browser:

https://intelshare.intelink.gov/sites/usaf-pki/SitePages/Manual%20Key%20Recovery%20Process.aspx

c. Download and complete the **Key Recovery Request form**, then submit the completed form to the Air Force Key Recovery Agent (AF KRA) via a digitally signed email to: afpki.registration@us.af.mil. Enter **"Manual Key Recovery"** as the subject

d. Allow 5-7 business days to process the request *(if this is an urgent request, include* ***"URGENT"*** *in the subject line and provide justification for the urgency in the body of the e-mail message)*

SIPRNET MANUAL KEY RECOVERY

To manually recover SIPRNet encryption keys, obtain the **Key Recovery Request** form from the **SIPRNet AFPKI CoP** or from your issuing Local Registration Authority (LRA). The request should include the Token ID *(i.e., 20-character number located on the back of the token).* **Use a SIPRNet workstation** and your current SIPRNet token to submit the form to the AF KRA via digitally signed, un-encrypted email to the AF KRA SIPRNet email address: USAF.JBSA.AFLCMC.MBX.AFPKI.Registration@mail.smil.mil. *(DO NOT SEND THE REQUEST ON NIPRNET).*

PKI

NEED ASSISTANCE?

For more PKI related information, visit the AFPKI Website at https://go.intelink.gov/AFPKI *(case sensitive; CAC required)*

For PKI technical support, contact the AFPKI Help Desk at 210-925-2521 (DSN 945) or e-mail: afpki.helpdesk@us.af.mil