

## Setting up <a>Setting up</a> Firefox to use your CAC on your Windows computer

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Last Revision / review: 09 September 2019

These tweaks are required to utilize your CAC.

If you don't follow these instructions, Firefox(FF) will not know the CAC reader exists enabling you to access CAC secured websites.

This guide requires you to install ActivClient (FF will not work with the built in Windows 7, 8 / 8.1, or 10 smart card software)

ActivClient download locations:

https://militarycac.com/activclient.htm

The most up to date version of this presentation can be found at: <u>https://militarycac.com/files/FirefoxCACSetup.pdf</u> or <u>https://militarycac.com/files/Tech\_Note\_Firefox\_CAC\_Authentication.pdf</u>

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## Download Firefox from the Mozilla website



https://www.mozilla.org/en-US/firefox

## Open Firefox, click the 3 parallel lines, then *Options*



# Scroll to the very bottom of the options page and click the *Security* <u>Devices...</u> (button)

#### Certificates

When a server requests your personal certificate

- <u>Select one automatically</u>
- <u>A</u>sk you every time
- <u>Q</u>uery OCSP responder servers to confirm the current validity of certificates

|   | View <u>C</u> ertificates |  |
|---|---------------------------|--|
|   | Security <u>D</u> evices  |  |
|   | 1                         |  |
| / |                           |  |

### Click the *Load* (button)

| Security Modules and Devices   | Details | Value | Log I <u>n</u>          |
|--------------------------------|---------|-------|-------------------------|
| ✓ NSS Internal PKCS #11 Module |         |       | Les Out                 |
| Generic Crypto Services        |         |       |                         |
| Software Security Device       |         |       | Change <u>P</u> assword |
| ✓ Builtin Roots Module         |         |       | Load                    |
| NSS Builtin Objects            |         |       | Fond                    |
|                                |         |       | Inload                  |
|                                |         |       | Enable FIPS             |
|                                |         |       |                         |

#### Type: "CAC Reader" in <u>Module Name:</u>

| 😻 Load PKCS#11 De        | evice                | _ 🗆 🗙      |
|--------------------------|----------------------|------------|
| Enter the information fo | or the module you wa | nt to add. |
| Module Name: CAC F       | Reader               |            |
| Module <u>f</u> ilenama  |                      | Browse     |
|                          | ОК                   | Cancel     |
| /                        |                      |            |

#### Click <u>Browse</u>... then navigate to locations listed below the image, then click OK

| 🕑 Load PKCS#            | #11 Device        |                       |
|-------------------------|-------------------|-----------------------|
| Enter the inform        | ation for the mod | dule you want to add. |
| Module Name:            | CAC Reader        |                       |
| Module <u>f</u> ilename |                   | Browse                |
|                         |                   | OK Cancel             |
|                         |                   |                       |

- ActivClient 7.1.0.x computers, navigate to: C:\Program Files\HID Global\ActivClient\acpkcs211.dll
- OpenSC computer will find the file located at: C:\windows\system32\opensc-pkcs11.dll
- Coolkey computer will find the "libcoolkeypk11.dll" file located at: C:\Program Files(x86)\Mozilla Firefox\

NOTE (ActivClient users): Some people / computers may receive: "**Unable to add module**." Some ideas that helped others:

1. Navigate to the .dll location, then remove everything BEFORE *acpkcs211.dll* (basically leaving it by itself).

2. Run Firefox as an Administrator.

If these tips don't work for you, go back to using Internet Explorer for anything CAC related, you will save yourself a LOT of time and frustration.

## You should now see CAC Reader in the left column. Select OK to close this window

| •   | Device Ma | nager | - 🗆 🗙                                |
|---|-----------|-------|--------------------------------------|
| Security Modules and Devices<br>ANSS Internal PKCS #11 Module<br>Generic Crypto Services<br>Software Security Device<br>ACAC Reader | Details   | Value | Log In<br>Log Out<br>Change Password |
| Broadcom Corp Contacted SmartC<br>Builtin Roots Module<br>Builtin Object Token  |           |       | Unload<br>Enable <u>F</u> IPS        |
|   |           |       |                                      |
|   |           |       | ОК                                   |

NOTE: Some Air Force users have had to select *Enable <u>F</u>IPS* (button) to access the Air Force Portal

### Click on View Certificates... (button)

#### Certificates

When a server requests your personal certificate

- <u>Select one automatically</u>
- <u>A</u>sk you every time
- <u>Q</u>uery OCSP responder servers to confirm the current validity of certificates



## You will be prompted to enter your CAC PIN. Enter it an select OK



## Click on the Your Certificates (tab), you should see your 4 CAC certificates listed, Click OK

| Certificate Manager |                |                     |                   |                |     |
|---------------------|----------------|---------------------|-------------------|----------------|-----|
|                     |                |                     |                   |                |     |
| Your Certifica      | ites Peop      | ole Server          | s Authorities     | 5              |     |
| You have certific   | ates from thes | e organizations     | that identify you |                |     |
| Certificate Nar     | ne Se          | curity Device       | Serial Num        | ber Expires On | E.  |
| ✓ U.S. Governm      | ient           |                     |                   |                |     |
| DANBERRY            | /.MICH Acti    | vID ActivClient     | 0 15:8C:FF        | Sunday, 20 Ma  | rch |
| DANBERRY            | /.MICH Acti    | vID ActivClient     | 0 0B:A5:8A        | Sunday, 20 Ma  | rch |
| DANBERRY            | /.MICH Acti    | vID ActivClient     | 0 17:C4:FB        | Sunday, 20 Ma  | rch |
| DANBERRY            | /.MICH Acti    | vID ActivClient     | 0 15:8D:04        | Sunday, 20 Ma  | rch |
|                     |                |                     |                   |                |     |
|                     |                |                     |                   |                |     |
|                     |                |                     |                   |                |     |
|                     |                |                     |                   |                |     |
| <u>V</u> iew        | <u>B</u> ackup | Bac <u>k</u> up All | I <u>m</u> port   | <u>D</u> elete |     |
|                     |                |                     |                   |                |     |
|                     |                |                     |                   |                | ОК  |

### To successfully access DoD websites, you <u>MUST install</u> the Department of Defense (DoD) certificates

## Download links for the InstallRoot file(s) can be found on:

https://militarycac.com/dodcerts.htm

It will not harm your computer to run this file more than once

If after installation of DoD certs you see "There is a problem with this website's security certificate" or see red certificate errors, follow this guide: <u>https://militarycac.com/files/dodrootca2.pdf</u>

### Additional Guidance

- Close Firefox and restart it. Verify functionality by accessing a CAC restricted website like (<u>https://www.dmdc.osd.mil/milconnect</u>) and selecting the CAC option for logging in.
- You will be prompted with a message the Connection is Untrusted the first time you go to a new DoD website
- Examples are found on the next slide.
- Firefox will ask you each and every time you go to visit a new or different DoD website to Confirm the Security Exception (aka, the certificate).

### Select I Understand the Risks, then Add Exception...



#### This Connection is Untrusted

You have asked Firefox to connect securely to **web.mail.mil**, but we can't confirm that your connection is secure.

Normally, when you try to connect securely, sites will present trusted identification to prove that you are going to the right place. However, this site's identity can't be verified.

#### What Should I Do?

If you usually connect to this site without problems, this error could mean that someone is trying to impersonate the site, and you shouldn't continue.

Get me out of here!

Technical Details

#### I Understand the Risks

If you understand what's going on, you can tell Firefox to start trusting this site's identification. **Even if** you trust the site, this error could mean that someone is tampering with your connection.

Don't add an exception unless you know there's a good reason why this site doesn't use trusted identification.

#### Add Exception...

## Select *Confirm Security Exception* (button), your site should now open

| You are about to override how Firefox identifies this site.         Legitimate banks, stores, and other public sites will not ask you to do this.         Server         Location:       https://web.mail.mil/         Certificate Status         This site attempts to identify itself with invalid information.       View         Unknown Identity         Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Permanently store this exception         Cancel   | dd Security Exception  | () E X                  |  |  |  |  |
|--|--|-------------------------|--|--|--|--|
| Server Location: https://web.mail.mil/ Get Certificate Certificate Status This site attempts to identify itself with invalid information. Unknown Identity Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.  Permanently store this exception Confirm Security Exception Cancel   | You are about to override how Firefox identifies this site.<br>Legitimate banks, stores, and other public sites will not a | sk you to do this.      |  |  |  |  |
| Location:       https://web.mail.mil/       Get Certificate         Certificate Status       This site attempts to identify itself with invalid information.       View         Unknown Identity       Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Permanently store this exception       Centific Security Exception       Cancel  | Server   |                         |  |  |  |  |
| Certificate Status         This site attempts to identify itself with invalid information.         Unknown Identity         Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Permanently store this exception         Confirm Security Exception    Cancel   | Location: https://web.mail.mil/  | <u>G</u> et Certificate |  |  |  |  |
| This site attempts to identify itself with invalid information.       View         Unknown Identity       Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.       Image: Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.       Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Certificate is not trusted, because it hasn't been verified by a recognized authority to the security store this exception       Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Certificate is not trusted, because it hasn't been verified by a recognized authority to the security Exception       Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.         Image: Certificate is not trusted, because it hasn't been verified by a recognized authority to the secure signature.       Certificate is not trusted, because it hasn't been verified by a recognized authority to the secure signature. | Certificate Status   |                         |  |  |  |  |
| Unknown Identity Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.  Permanently store this exception Confirm Security Exception Cancel   | This site attempts to identify itself with invalid information.  | <u>V</u> iew            |  |  |  |  |
| Certificate is not trusted, because it hasn't been verified by a recognized authority<br>using a secure signature.<br>Permanently store this exception<br>Confirm Security Exception<br>Cancel   | Unknown Identity   |                         |  |  |  |  |
| Permanently store this exception     Confirm Security Exception     Cancel   | Certificate is not trusted, because it hasn't been verified by a recognized authority using a secure signature.            |                         |  |  |  |  |
| Permanently store this exception     Confirm Security Exception     Cancel   |  |                         |  |  |  |  |
| Permanently store this exception     Confirm Security Exception     Cancel   |  |                         |  |  |  |  |
| Confirm Security Exception Cancel  | Permanently store this exception   |                         |  |  |  |  |
|  | Confirm Security Except  | ion Cancel              |  |  |  |  |
|  |  |                         |  |  |  |  |
|  |  |                         |  |  |  |  |

## Once confirmed you should see the website you are trying to access.

#### YOU ARE ACCESSING A U.S. GOVERNMENT (USG) INFORMATION SYSTEM (IS) THAT IS PROVIDED FOR USG-AUTHORIZED USE ONLY.

By using this IS (which includes any device attached to this IS), you consent to the following conditions:

- The USG routinely intercepts and monitors communications on this IS for purposes including, but not limited to, penetration testing, COMSEC monitoring, network operations and defense, personnel misconduct (PM), law enforcement (LE), and counterintelligence (CI) investigations.
- At any time, the USG may inspect and seize data stored on this IS.
- Communications using, or data stored on, this IS are not private, are subject to routine monitoring, interception, and search, and may be disclosed or used for any USG-authorized purpose.
- This IS includes security measures (e.g., authentication and access controls) to protect USG interests--not for your personal benefit or privacy.
- Notwithstanding the above, using this IS does not constitute consent to PM, LE or CI investigative searching or monitoring of the content of privileged communications, or work product, related to personal representation or services by attorneys, psychotherapists, or clergy, and their assistants. Such communications and work product are private and confidential. See User Agreement for details.

#### OK

**NOTE:** If you have problems accessing Mail.mil (the ability to encrypt emails will NOT work in Firefox, you **MUST** use Internet Explorer).

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If you still have questions, visit: https://militarycac.com/questions.htm