



How to Get 16 Digit UPN from CAC Card

How to export a PIV Certificate

User Guide



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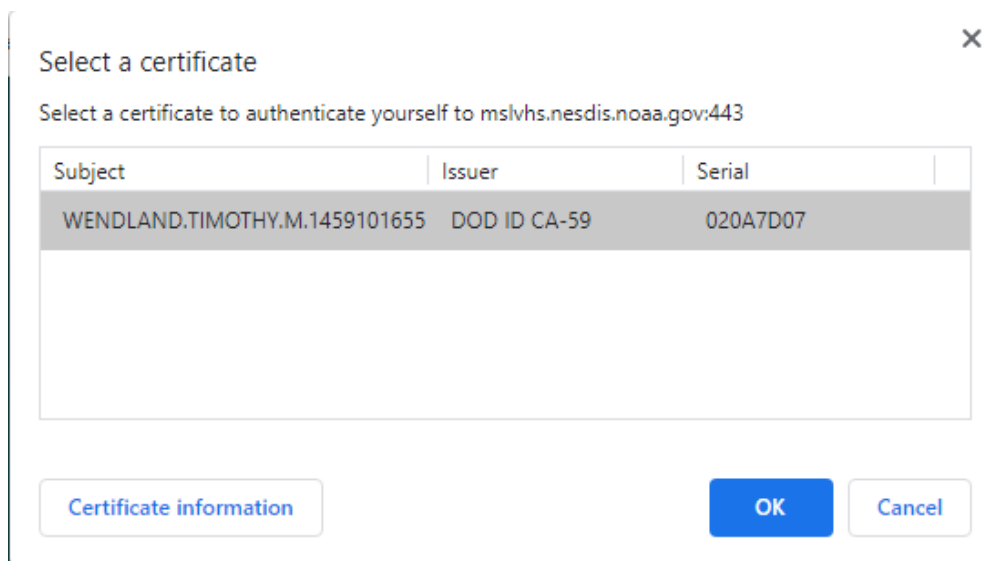
## 1. Why this Guide?

1. This guide is designed to help all GeoCloud Service Developers and Administrators VPN access to export their CAC's or PIV certificates. There are two categories of cards that may be used. A NOAA CAC or a NASA PIV card.
  - Users with a NOAA CAC card need to follow instruction items 2 and 3.
  - Users with a NASA PIV card need to follow instruction item 4 to extract your PIV certificate.

## 2. How to Export your CAC Certificate

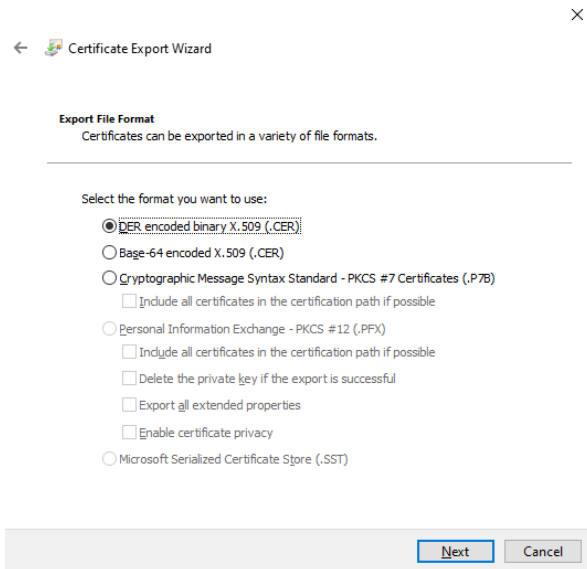
This section will show you how to export your CAC certificate.

1. Insert CAC card in card reader or laptop
2. Use your internet browser to obtain and download the certificate?
  - For "Microsoft Edge" go to "System > Privacy, search, and services > Security > Manage certificates"
  - or for "Internet Explorer" go to "Internet Options > Content > Certificates > Personal"



4. In the "Certificates Window", select your certificate where it says DOD ID CA-<#>.
  - Make sure that when you click on it in the window below it says Certificate Intended purposes: Smart Card Logon, Client Authentication
5. Click the "Export" button.

6. The Certificate Export Wizard window will open, select Next and continue to select Next until you reach Export File Format. On Export File Format make sure the file format is DER, Select browse and then where you want to save the file lastly name the file name.upn.der (it will save with .cer on the end) and click Next, before selecting Finish.



7. Email the saved certificate to [admin.geocloud@noaa.gov](mailto:admin.geocloud@noaa.gov)
  - You may need to change the file extension to .txt to bypass the email client from removing the attachment(i.e. save file as .txt)

### 3. How to Get your UPN

Your certificate will now be wherever you saved it.

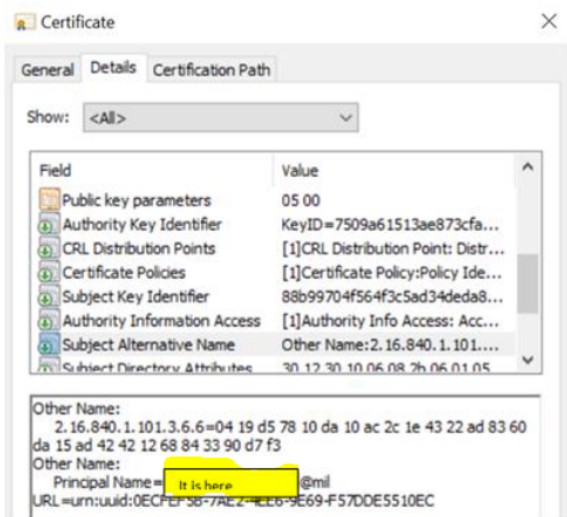
1. Double click your certificate to open it



2. Select the Details Tab

3. Scroll down to Subject Alternative Name and click it

-In the window below you will see Principal Name = <16 digit #>@mil The 16 digit # is the UPN

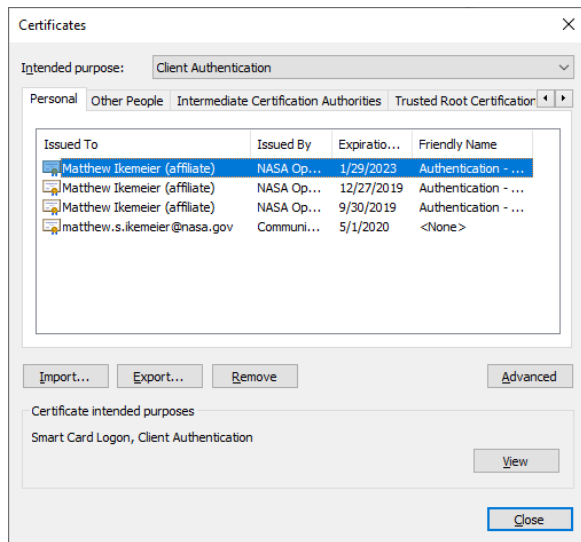


## 4. Exporting PIV Certificate For VPN Access

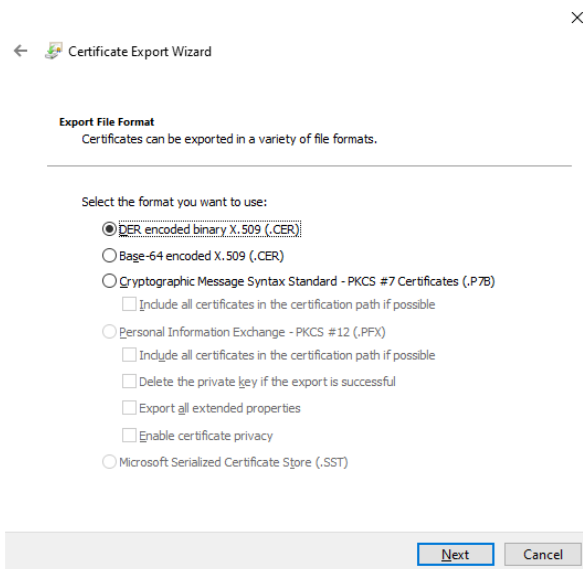
1. This section will show you how to export your PIV Certificate for VPN Access.

2. Use your internet browser to obtain and download the certificate?

- For "Microsoft Edge" go to "System > Privacy, search, and services > Security > Manage certificates"
- or for "Internet Explorer" go to "Internet Options > Content > Certificates > Personal"



3. Export this certificate using the Export Wizard
  - Select the DER encoded binary X.509 option



4. Email the saved certificate along with your **AUID** to:  
**admin.geocloud@noaa.gov**
  - You may need to change the file extension to .txt to bypass the email client from removing the attachment(i.e. save file as .txt)

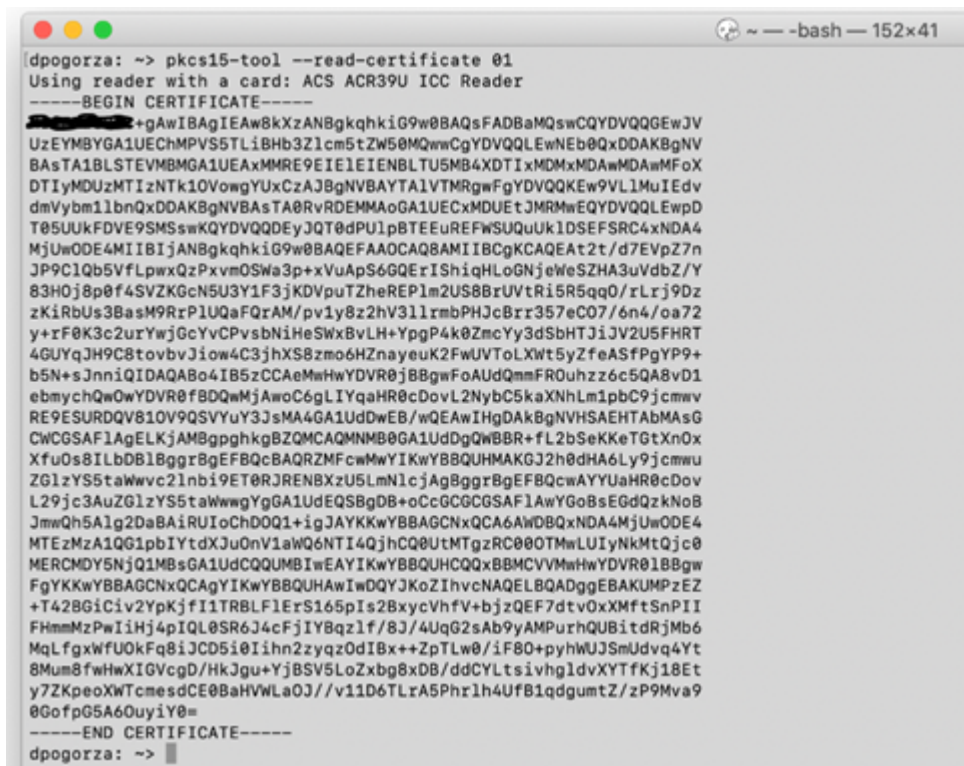
## 5. How to Export your Certificate when using MacOS

1. For Mac OS Users who need to export their certificate follow the steps below.

2. Click the Launchpad icon in the Dock, type Terminal in the search field, then click Terminal to open a terminal.
3. Run the following in the terminal and provide the cert to the GeoCloud Admin team:

```
> pkcs15-tool --read-certificate 01
```

-The Output from the above command looks like the following:



```
dpogorza: ~ - bash - 152x41
dpogorza: ~ -> pkcs15-tool --read-certificate 01
Using reader with a card: ACS ACR39U ICC Reader
-----BEGIN CERTIFICATE-----
[REDACTED]+gAwIBAgIEAw8KXzANBgkqhkiG9w0BAQsFAADBAQswCQYDVQQGEwJV
UzEYMBYGA1UEChMPVS5TLiBHB3Zlcm5tZW50MQwwCgYDVQQLEwNEb0QxDDAKBgNV
BAAsTA1BLSTEVM8MGA1UEAxMMRE9EIE1EIE1ENBLTU5MB4XDTIxMDMxMDAwMDAwMFoX
DTIyMDUzMjIzNTk1OVowYUxkZjA3BgNVBAYTA1VTMRgwFgYDVQQKEw9VLE1uIEdu
dmVybml1bnQxDDAKBgNVBAsTA0RvRDEEMMAoGA1UECjMDUEtJMRMwEQYDVQQLZw9D
T05UUKFDVE9SMScwKQYDVQDEyJQT0dPULpBTEEuREFWsuQUk1DSEFSRC4xNDA4
MjUwODE4MIIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAt2t/d7EVpZ7n
JP9C1Qb5VfLpwxQzPxvmOSWa3p+XVuApS6GQErIShiqHLoGNjeWeSZHA3uVdbZ/Y
83H0j8p0f4SVZKcN5U3Y1F3jKDVpuTzheREPlm2US8BrUVtRi5R5qq0/rLrj9Dz
zKiRbUs3BasM9RrPlUQaFQrAM/pv1y8z2hV31lrmBPHJcBrr357eC07/6n4/oa72
y+rF0K3c2urYwJGcYvCPvsbNiHeSWxBvLH+YpgP4k0ZmcYy3dSbHTJiJV2U5FHRT
4GUyQJH9C8tovbvJiow4C3jhXS8zmo6HZnayeUk2FwUVToLXWt5yZfeASfPgYP9+
b5N+sJnniQIDAQABo4IB5zCCAeMhwYDVR0jBBgwFoAUAUdQmFR0uhzz6c5QA8vD1
ebmychQwOwYDVR0fBDQwMjAwoC6gLIYqaHR0cDovL2Nybc5kaXNhLm1pbC9jcmwv
RE9ESURDQV81OV9QSVYyY3JsMA4GA1UdDwEB/wQEAwIHgDAKBgNVHSAEHTABMA5G
CWCgsAF1AgELKjAMBggpghkgBZQMCAQMNMBOGA1UdDgQwBBR+fL2bSeKKeTgtXnOx
Xfu0s8ILbDB1BggrBgEFBQcBAQRZMFcwMwYIKwYBBQUHMAKJ2h0dHA6Ly9jcmwv
ZG1zYS5taWwvc2lnbi9ET0RJRjREN8XzU5LmNlcjAgBggrBgEFBQcwAYYUaHR0cDov
L29jc3AuZG1zYS5taWwvYgGA1UdEQSBgDB+oCcGC0GCSAF1AwGoBsEGDQzkn0B
JmwQh5A1g2DaBAiRUIoChDOQ1+igJAYKKwYBBAGCNxQCA6AwDBQxNDA4MjUwODE4
MTEzMzA1QGIpbIYtdXJuOnV1aWQ6NTI4QjhCQ0UmtMTgZRC00OTMwLUIyNkMtQjc0
MERCMDY5NjQ1MBsGA1UdCQQUMBIwEAYIKwYBBQUHCCQx8BMCVVMwHwYDVR01BBgw
FgYKKwYBBAGCNxQCAgYIKwYBBQUHAWIwDQYJKoZIhvcNAQELBQADggEBAKUMPzEZ
+T428Giciv2YpKjfi1TRBLf1ErS165pIs2BxycVhfV+bjzQEF7dtvOxXmfTsnPII
FHmmZpWiiHj4pIQL0SR6J4cfJiY8qz1f/8J/4UqG2sAb9yAMPurhQUBitdRjMb6
MqLfgxWfUOKFq8iJC05i0Iihn2zyqzOdIBx++ZpTLw0/iF80+pyhWUJSmUdvq4Yt
8Mum8fwHwXIGVcgD/HkJgu+YjBSV5LoZxbg8xDB/ddCYLtsivhglvXYTfKj18Et
y7ZKpeoXWtmesdCE0BaHVWLaOJ//v11D6TLrA5Phrlh4UfB1qdgumtZ/zP9Mva9
0GofpG5A60uyiy0=
-----END CERTIFICATE-----
dpogorza: ~ ->
```

4. Send the certificate to **admin.geocloud@noaa.gov**

For problems or concerns please contact **admin.geocloud@noaa.gov**