



Office of  
Information Technology

UNIVERSITY OF COLORADO  
DENVER | ANSCHUTZ MEDICAL CAMPUS

## Setting up CU Secure VPN service

1/29/2018

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## Why we are doing this

The purpose of CU Secure is to provide an extra layer of security to your account when using VPN services to help prevent attackers from using your password information to access CU resources.

CU Secure uses something you know (your password), something you have (your computing device or phone), and somewhere you are (on or off campus), to validate that you are the approved person to access CU resources.

The following are the instructions for using CU Secure for VPN on a Windows PC and a Mac.

## Register for CU Secure

1. Install Duo Mobile to your mobile device from the Apple App store, Google Play or the Microsoft Store.



**Important!** There are multiple Duo apps. Please install the Duo Mobile app with the green logo, as shown.

2. Enroll for CU Secure by clicking on the access portal for your primary campus:

**Important!** You cannot be connected to the CU Denver or CU Anschutz trusted networks to access to these portals or they will show an error.

- a. CU Denver: <https://dc-vpn.ucdenver.edu>
- b. Anschutz Medical Campus: <https://amc-vpn.ucdenver.edu>

3. Login with your CU network username and password.

A screenshot of the "Web login" page for Denver | Anschutz. The page has a header with the CU logo and "Denver | Anschutz". Below the header, it says "Web login" and "Please sign in with your university credentials." There are two input fields: "Username or email" and "Password". Below the fields is a gold "Login" button. At the bottom, there are links for "Forgot your password?" and "Need help?".A screenshot of the "Duo Authentication" page. The header says "Duo Authentication" in large bold letters. Below the header, it says "Protect Your CU Secure Account". There are two links: "What is this?" and "Need help?". The main text explains that two-factor authentication enhances security by using a secondary device to verify identity. Below the text is a green "Start setup" button.

4. Select your preferred device type to receive the authentication request from the Duo application. We recommend using your mobile device, if possible.

### Duo Authentication

Denver | Anschutz  
[What is this?](#) [Need help?](#)

What type of device are you adding?

- Mobile phone **RECOMMENDED**
- Tablet (iPad, Nexus 7, etc.)
- Landline

**Continue**

5. If you've selected a mobile phone, input the phone number of the device and select the type of phone.

### Duo Authentication

Denver | Anschutz  
[What is this?](#) [Need help?](#)

Enter your phone number

United States

+1 [#####-#####] ✓  
ex: (201) 234-5678

You entered [#####-#####] is this the correct number?

**Back** **Continue**

### Duo Authentication

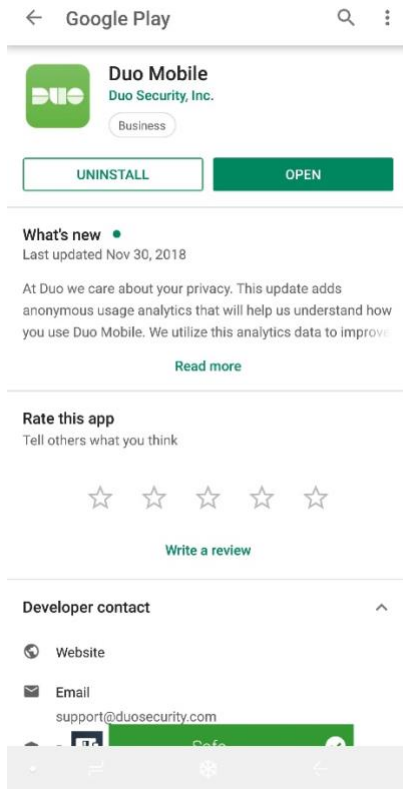
Denver | Anschutz  
[What is this?](#) [Need help?](#)

What type of phone is [#####-#####]

- iPhone
- Android
- Windows Phone
- Other (and cell phones)

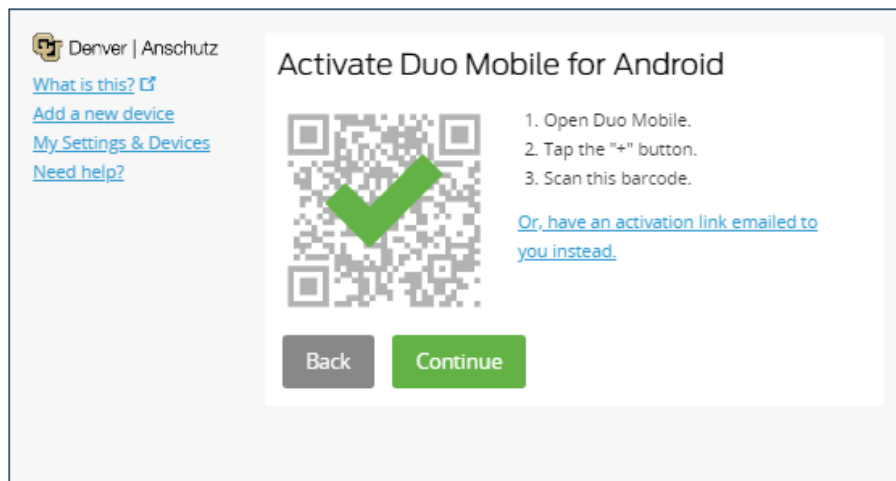
**Back** **Continue**

6. If you've chosen to authenticate using a mobile phone or tablet, install the app for your device from the iPhone App Store or Google Play for Android. Search for Duo Mobile.



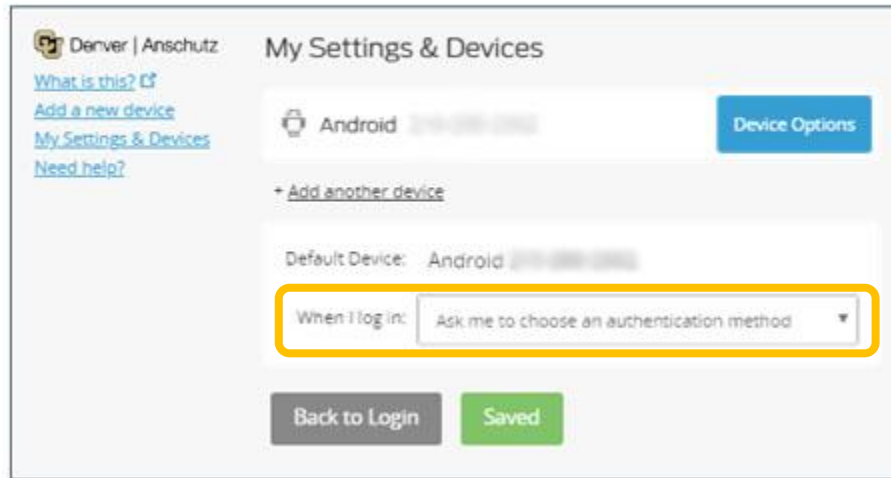
7. After installing the smart phone app, scan the barcode to activate and link to your phone.

## Duo Authentication



8. Choose your preferred authentication method and Save your preferences.

## Duo Authentication



## Installing the VPN desktop client

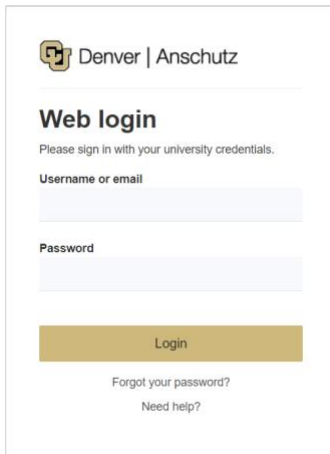
### Windows computing device

Each campus has its own VPN access portal: <https://dc-vpn.ucdenver.edu> and <https://amc-vpn.ucdenver.edu>. Using a Windows PC computing device, login in to your campuses' access portal as follows:

1. Copy and paste the access portal installation link for your campus into your preferred browser.



2. Login with your network user name and password.



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### Web login

Please sign in with your university credentials.

Username or email

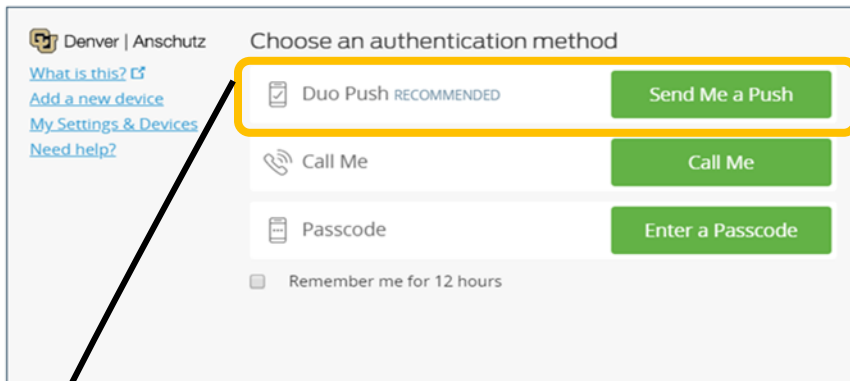
Password

Login

[Forgot your password?](#)  
[Need help?](#)

3. Select your preferred Duo authentication method.
  - a. Duo Push:

## Duo Authentication



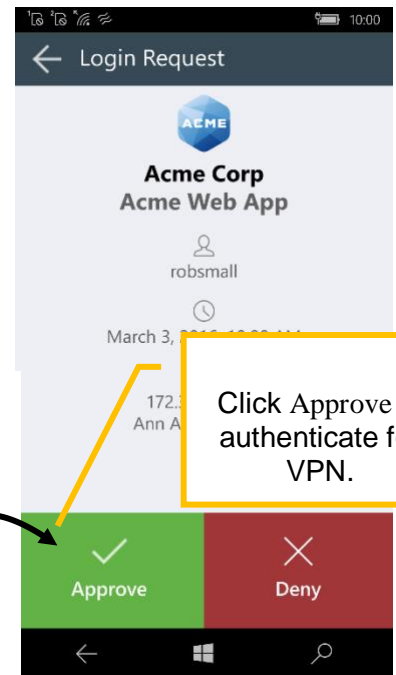
Denver | Anschutz

### Choose an authentication method

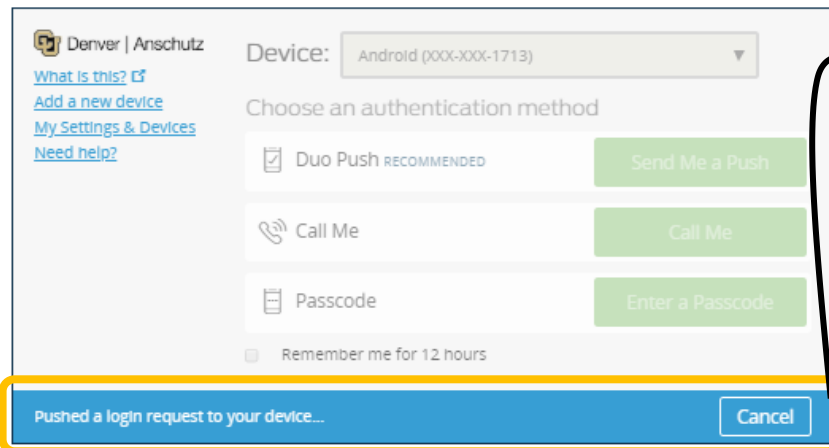
- Duo Push RECOMMENDED
- Call Me
- Passcode

Remember me for 12 hours

[What is this?](#)  
[Add a new device](#)  
[My Settings & Devices](#)  
[Need help?](#)



## Duo Authentication



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Device: Android (XXX-XXX-1713)

### Choose an authentication method

- Duo Push RECOMMENDED
- Call Me
- Passcode

Remember me for 12 hours

b. Call Me:

## Duo Authentication

Denver | Anschutz  
[What is this?](#)  
[Add a new device](#)  
[My Settings & Devices](#)  
[Need help?](#)

Device: Android (XXX-XXX-1713)

Choose an authentication method

- DUO Push RECOMMENDED Send Me a Push
- Call Me Call Me
- Passcode Enter a Passcode

Remember me for 12 hours

## Duo Authentication

Denver | Anschutz  
[What is this?](#)  
[Add a new device](#)  
[My Settings & Devices](#)  
[Need help?](#)

Device: Android (XXX-XXX-1713)

Choose an authentication method

- DUO Push RECOMMENDED Send Me a Push
- Call Me Call Me
- Passcode Enter a Passcode

Remember me for 12 hours

Dialing XXX-XXX-1713... Cancel

Duo dials your registered phone.

## Duo Authentication

Denver | Anschutz  
[What is this?](#)  
[Add a new device](#)  
[My Settings & Devices](#)  
[Need help?](#)

Device: Android (XXX-XXX-1713)

Choose an authentication method

- DUO Push RECOMMENDED Send Me a Push
- Call Me Call Me
- Passcode Enter a Passcode

Remember me for 12 hours

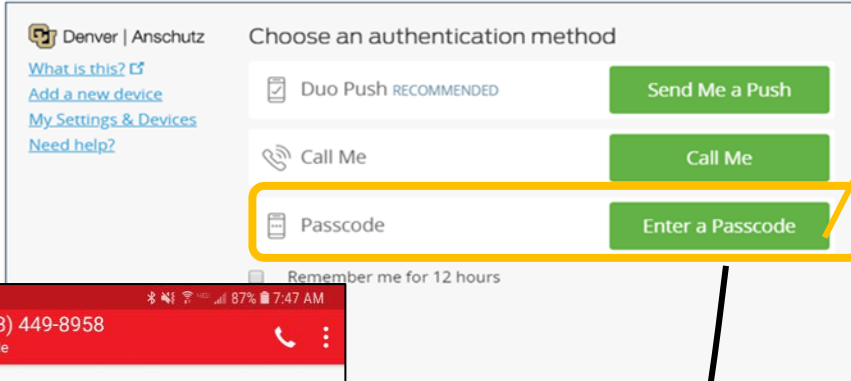
Answered. Press any key on your phone to log in. Cancel

Press any key on your phone to authenticate to VPN.

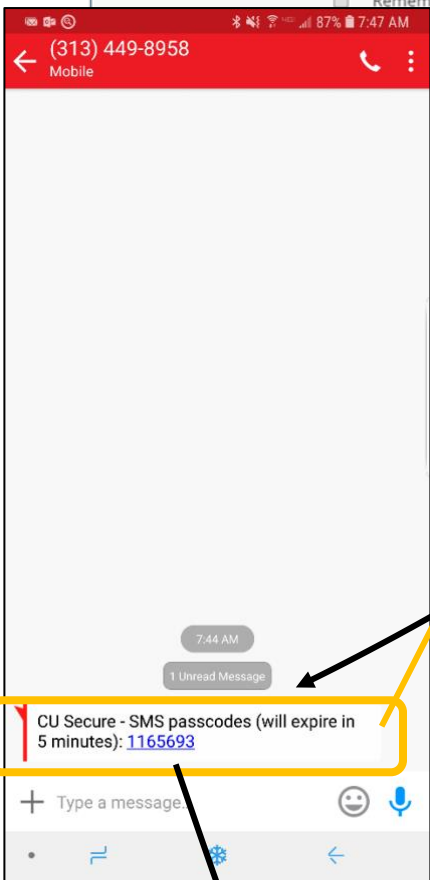


c. Passcode:

## Duo Authentication

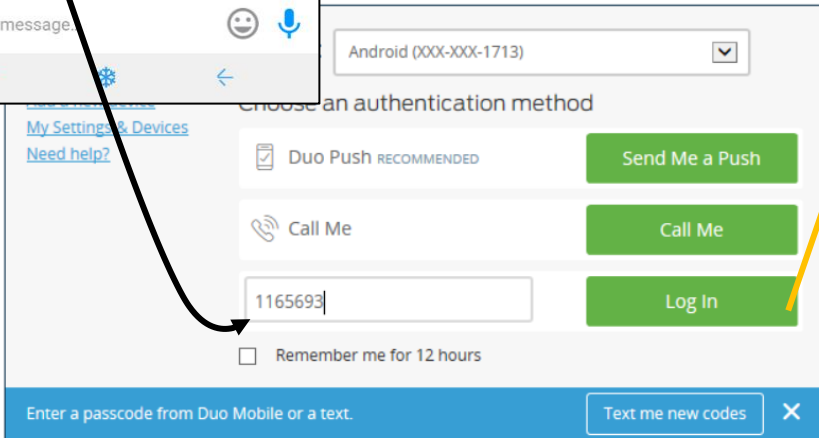


Click Enter a Passcode to authenticate via text.



7-digit code is texted to your phone.

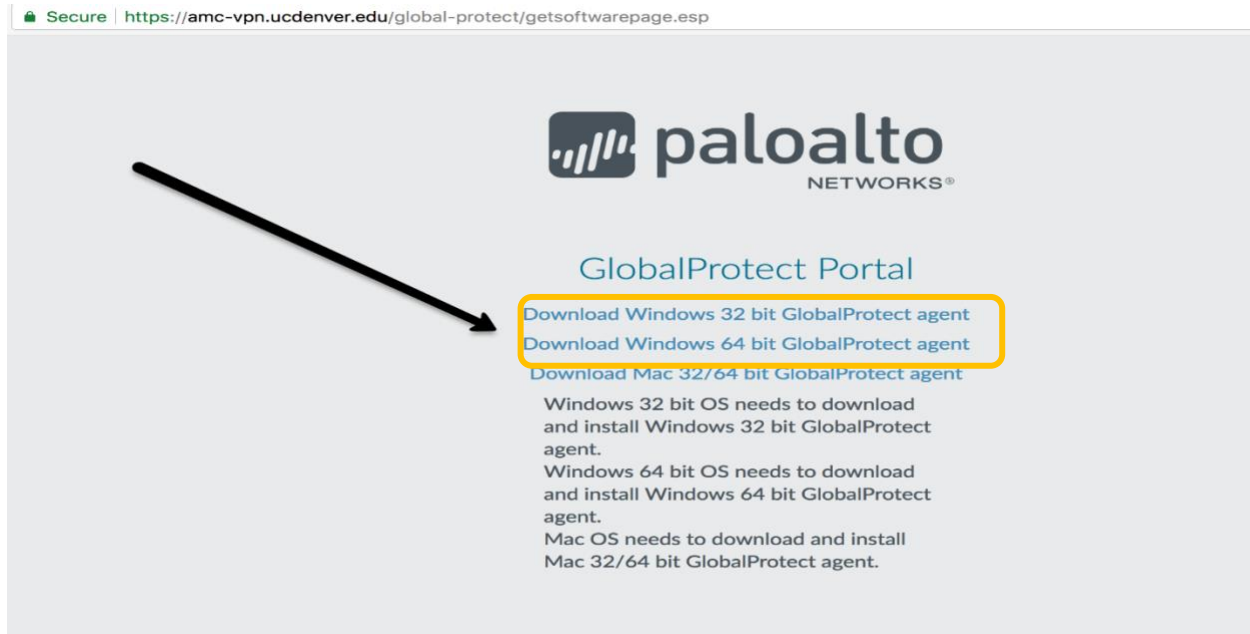
## Authentication



You have 5 minutes to enter the passcode texted to your phone and click Log In.

- Once authenticated, you will be directed to the Palo Alto website to download the GlobalProtect VPN client that is appropriate for your computer.

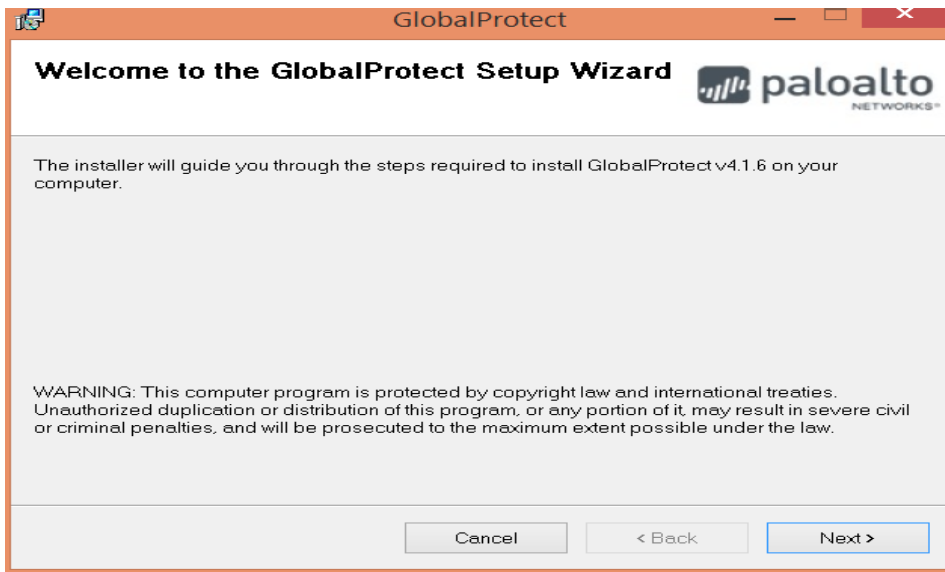
**Important!** Be sure to select the appropriate download for your Windows device! If you are not certain which agent to download, please contact the OIT Service Desk at [oit-servicedesk@ucdenver.edu](mailto:oit-servicedesk@ucdenver.edu) for assistance.



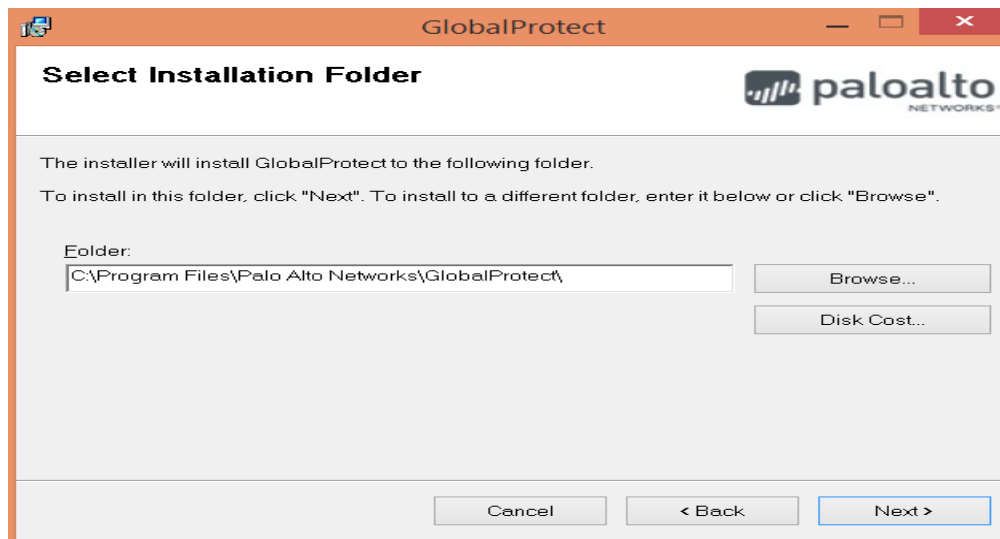
- Look for the agent download file in our browser's download window or your Downloads folder. Double-click the .MSI file to install.



6. Follow the prompts through the installation process:
  - a. In the GlobalProtect Setup Wizard screen, click Next.

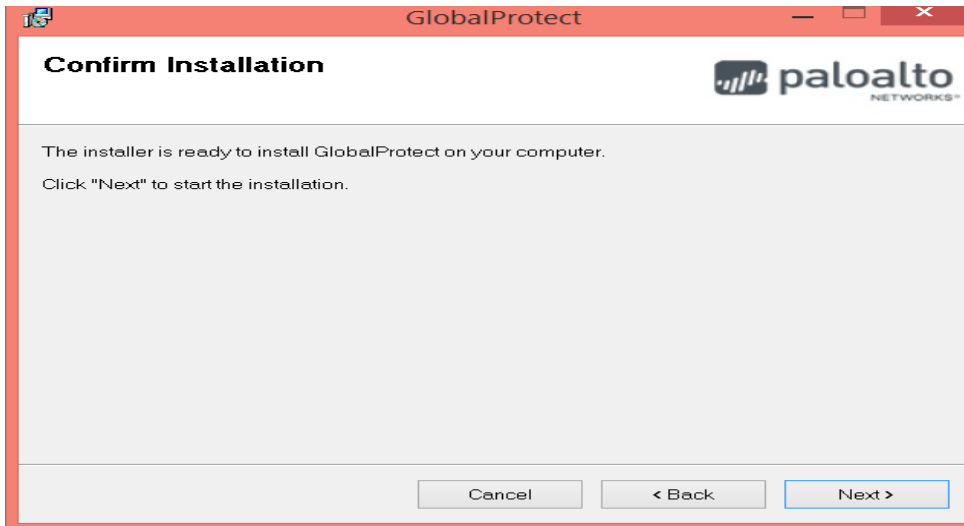


- b. Select where you would like the application to be installed. We recommend keeping the default folder location.

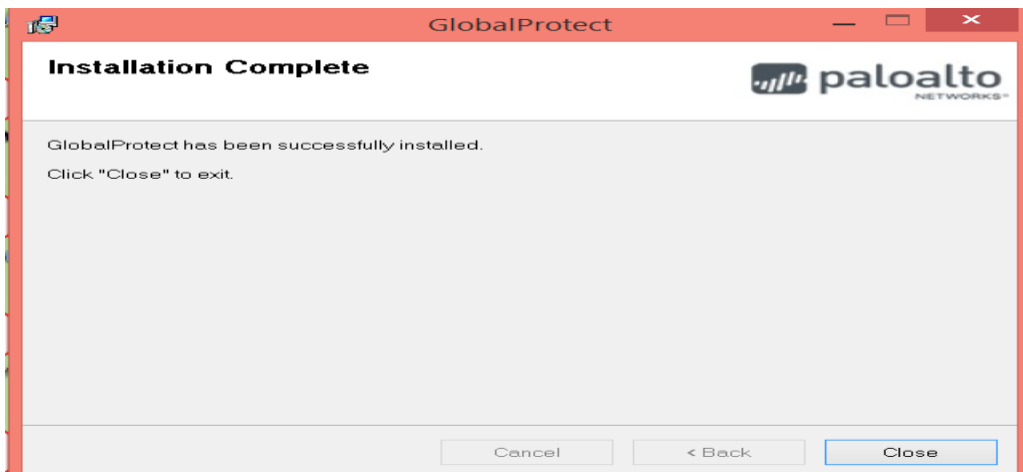


- c. Click Yes when asked if you want to install the software (pop up window-not pictured).

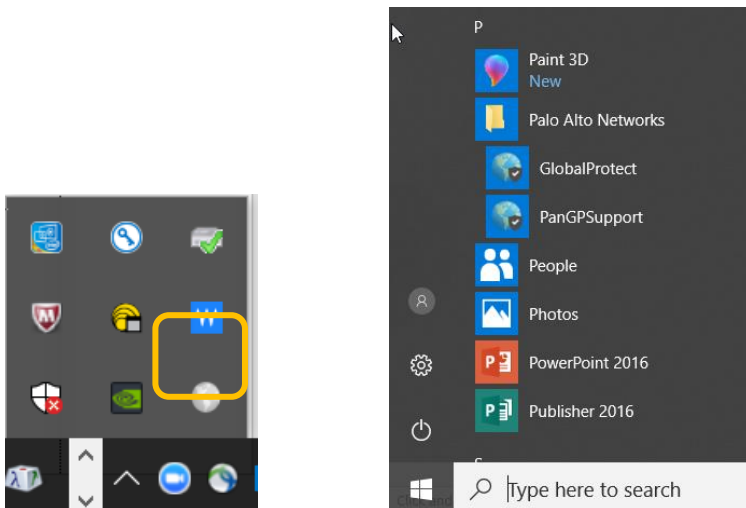
- d. Click Next to confirm the installation.



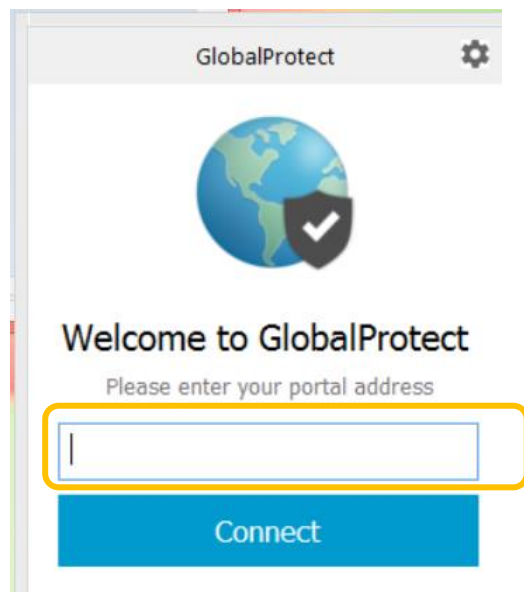
7. Close the installer following successful installation.



8. Start GlobalProtect VPN. In your task bar, find an icon that looks like a globe. You can also access GlobalProtect VPN under All Programs > Palo Alto Networks > Global Protect.



9. Enter your campus portal address – either [amc-vpn.ucdenver.edu](http://amc-vpn.ucdenver.edu) or [dc-vpn.ucdenver.edu](http://dc-vpn.ucdenver.edu) and click Connect.



10. Enter your network username and password (**NOT** your email address).

GlobalProtect Login

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## Web login

Please sign in with your university credentials.

Username or email

Password

Login

[Forgot your password?](#)

11. Select your preferred Duo authentication method.

GlobalProtect Login

## Duo Authentication

Denver | Anschutz

[What is this?](#) [Add a new device](#) [My Settings & Devices](#) [Need help?](#)

Choose an authentication method

Duo PUSH RECOMMENDED [Send Me a Push](#)

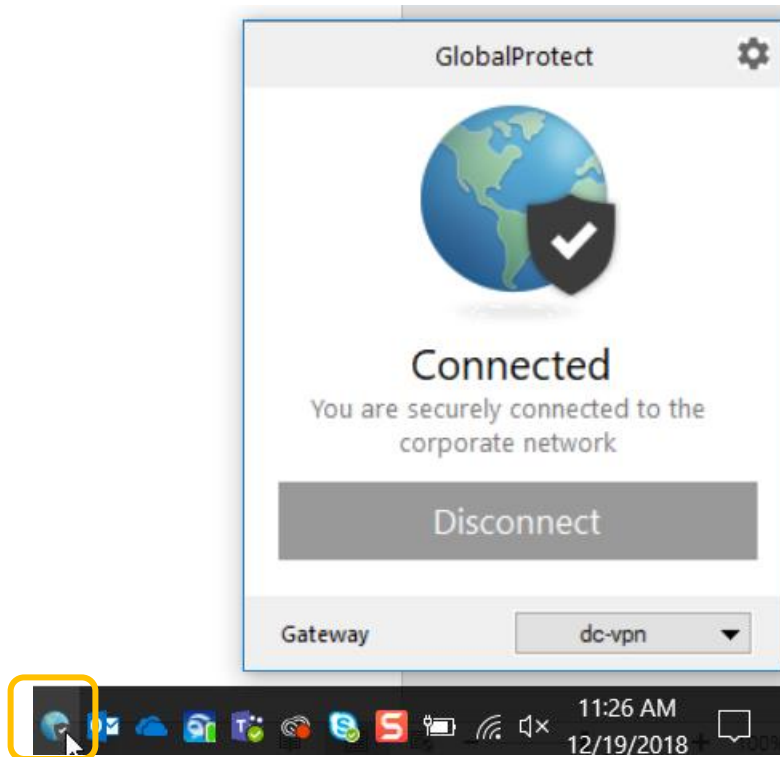
Call Me [Call Me](#)

Passcode [Enter a Passcode](#)

Remember me for 12 hours

12. Respond to your Duo Authentication.

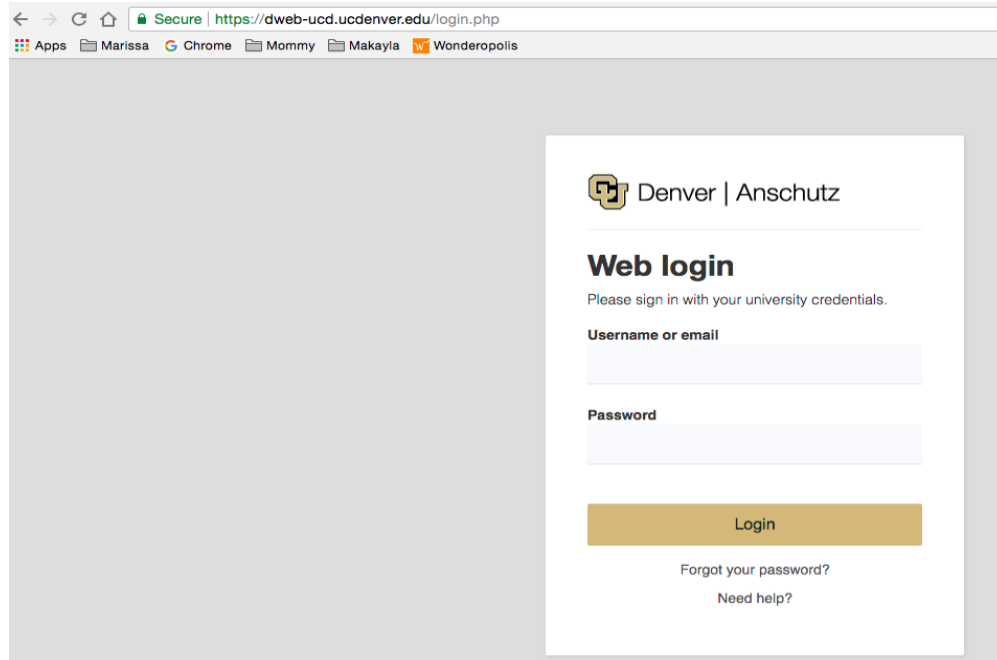
13. You are now connected to your campus's network through VPN. Right-click the GlobalProtect globe in your Windows task bar to verify connection.



## Apple computing device

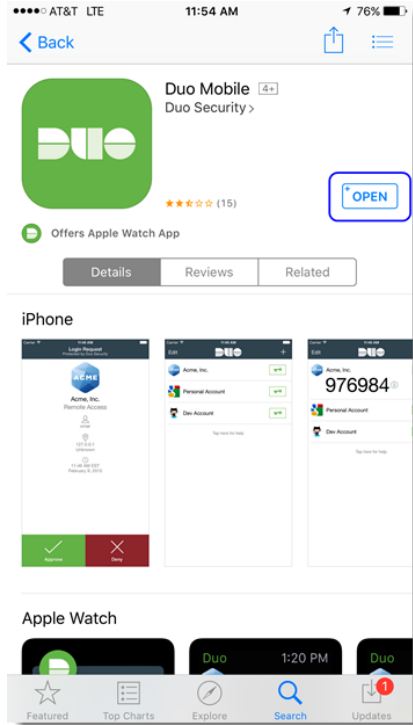
Each campus has its own VPN access portal: <https://dc-vpn.ucdenver.edu> and <https://amc-vpn.ucdenver.edu>. Using an Apple Mac computing device, login in to your campuses' access portal as follows:

1. Copy and paste the access portal installation link for your campus into your preferred browser and enter your network login credentials.

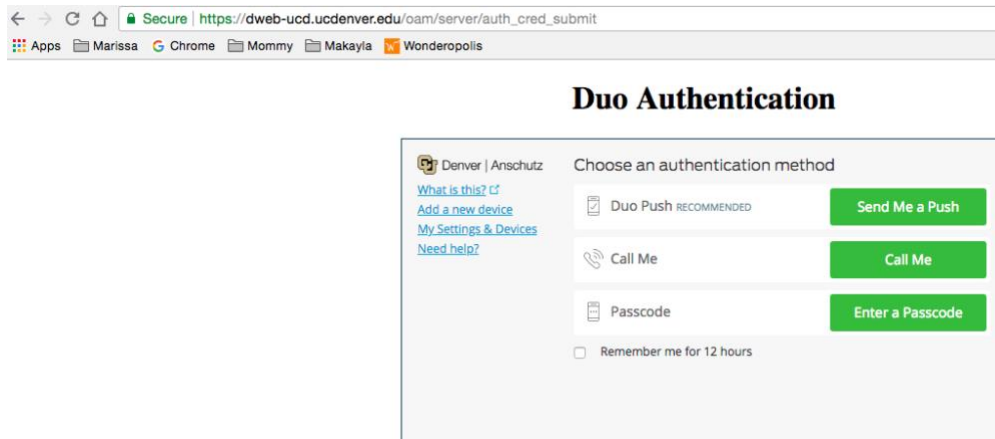




2. Install Duo Mobile on your iPhone through the App Store.



3. Select your preferred Duo authentication method. Refer to the [preferred method details](#) under the Windows PC installation section for functionality of each method.

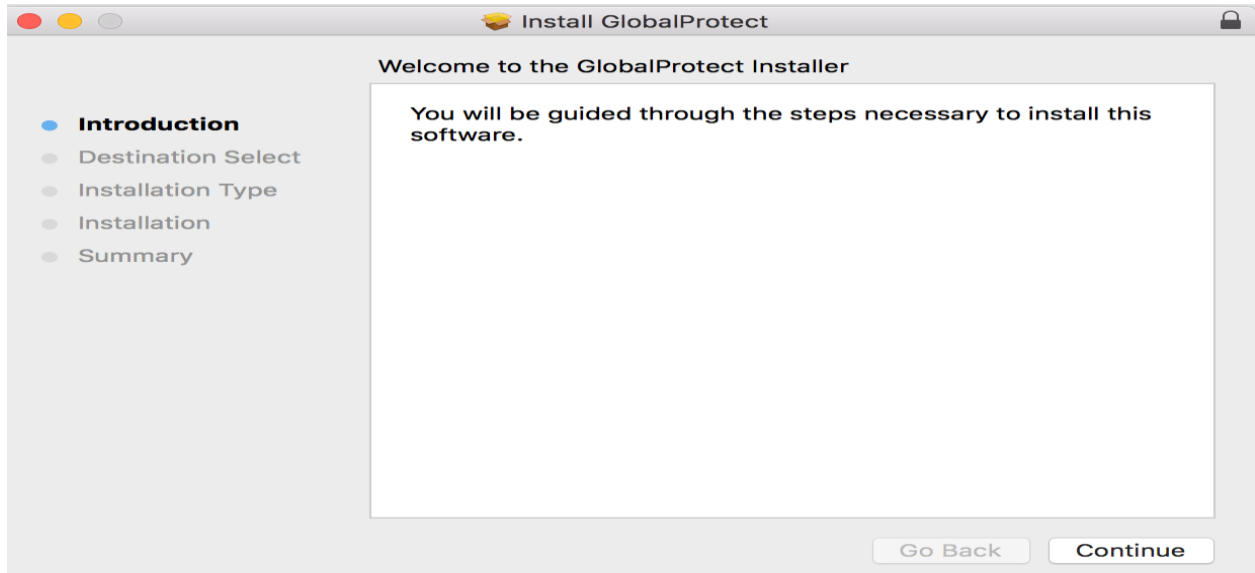


4. Once authenticated, you will be directed to the Palo Alto website to download the GlobalProtect VPN client that is appropriate for your computer.

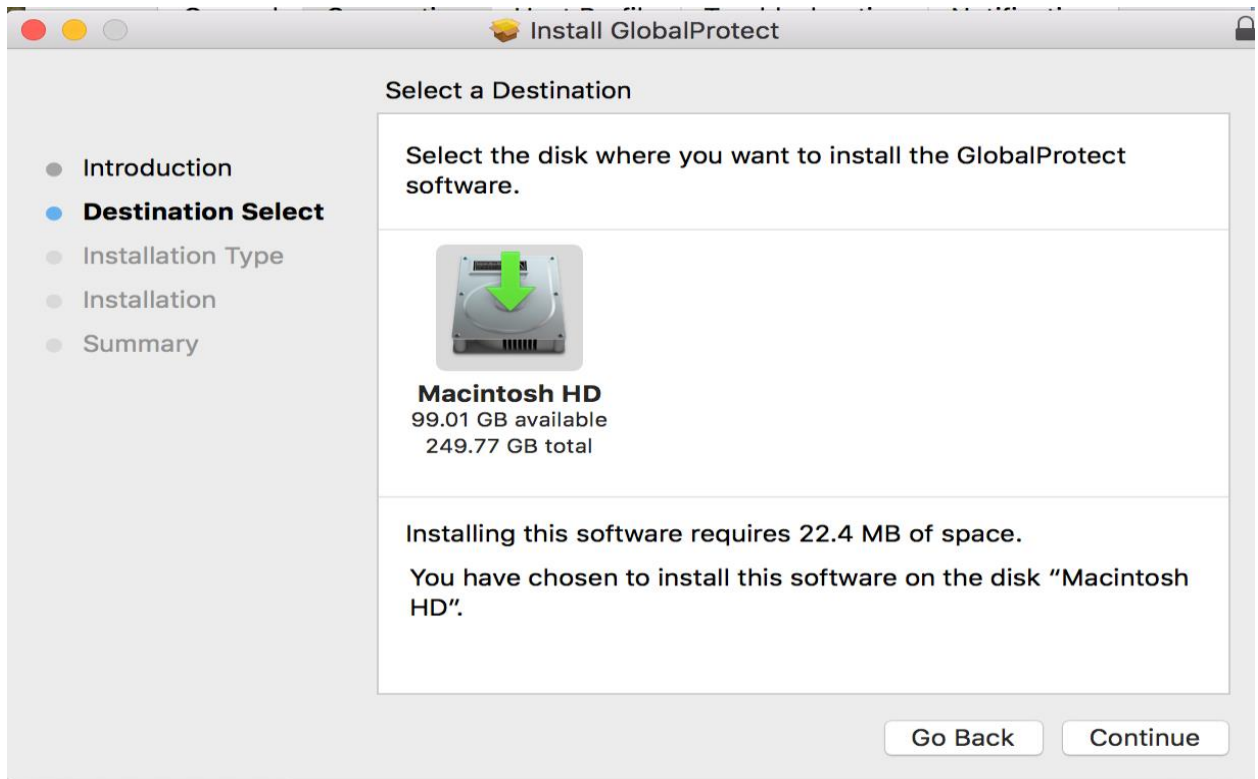
Select Download Mac32/64 bit GlobalProtect agent to install on a Mac.



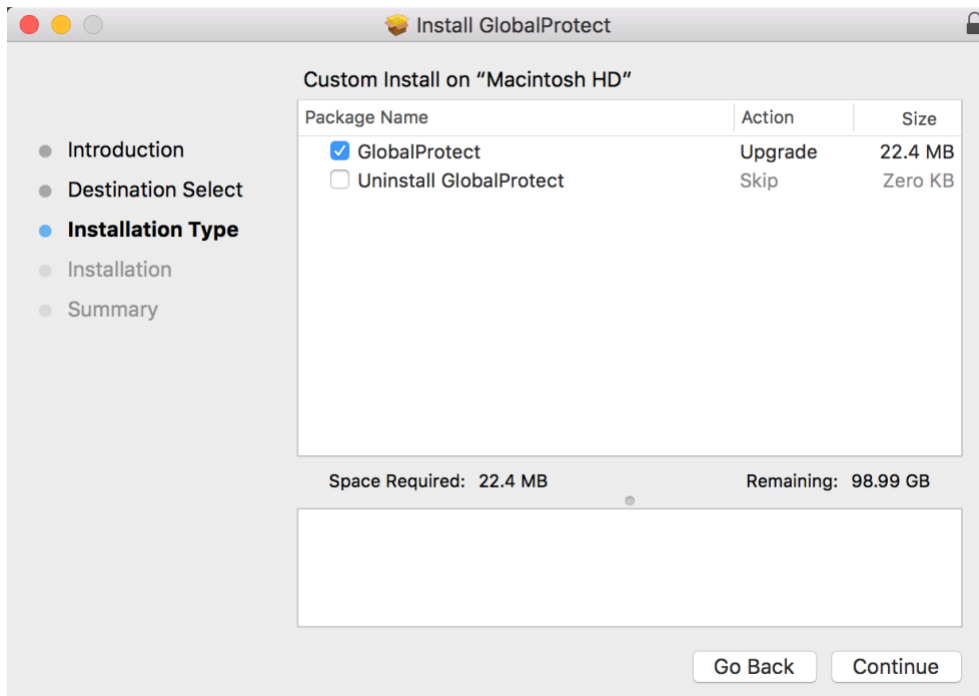
5. By default, the installer is downloaded to your *Downloads* folder. Go to Finder and double-click GlobalProtect.pkg.



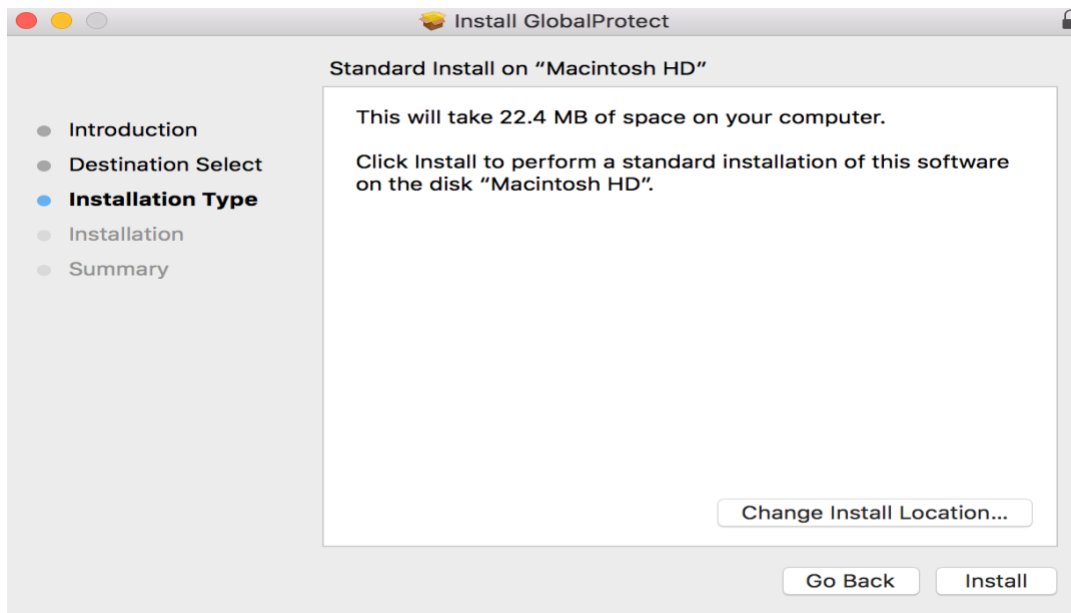
6. Select where you would like to install the software.



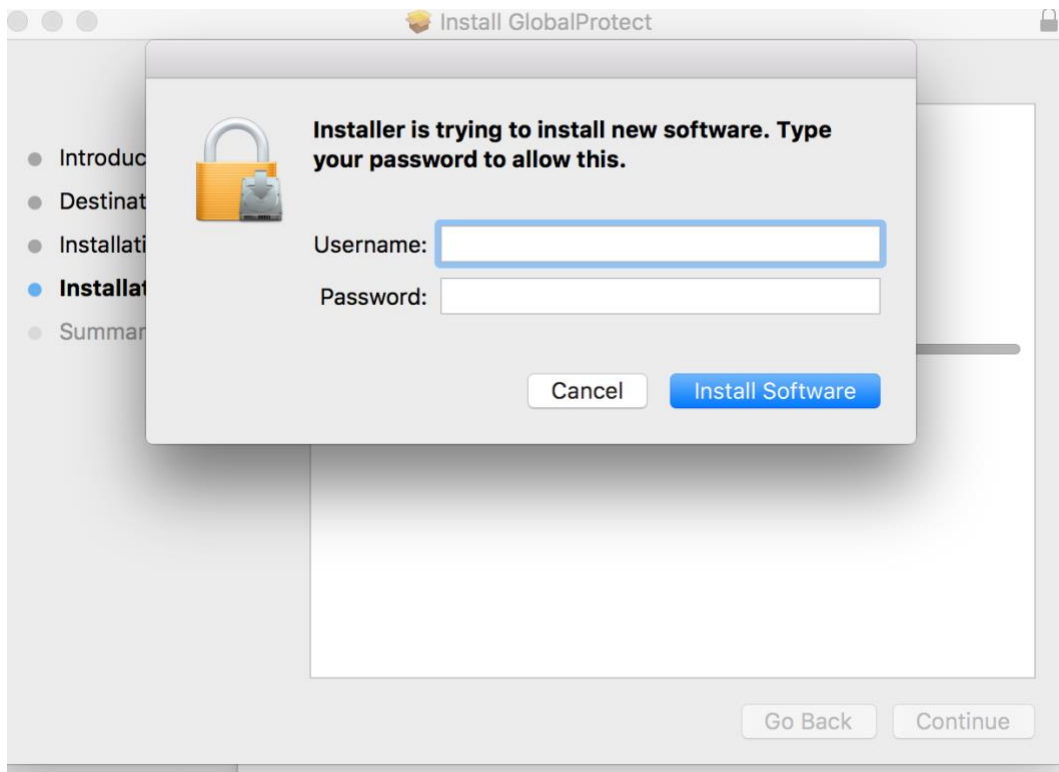
7. Check the box for GlobalProtect.



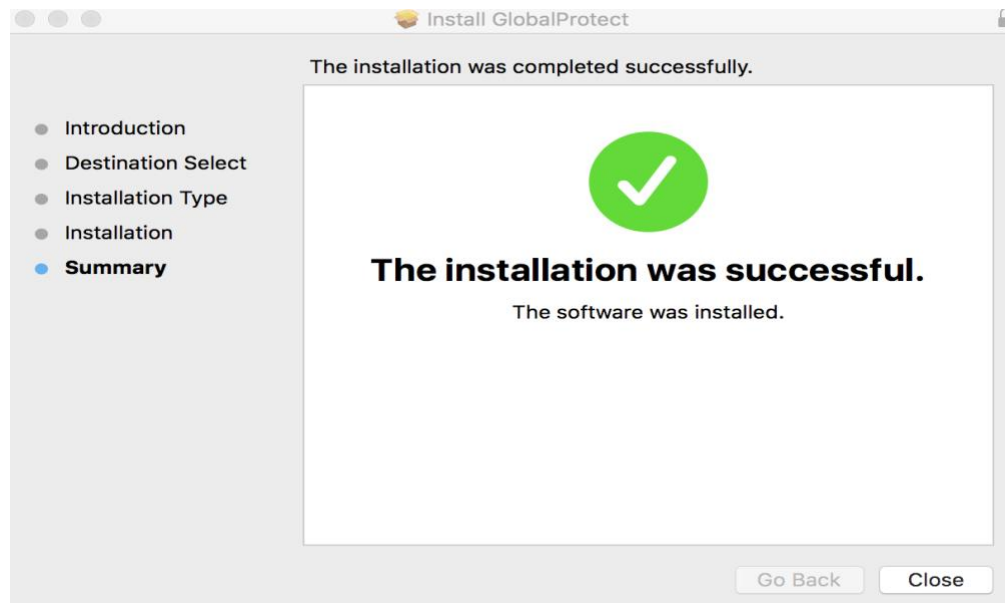
8. Click Install to begin the installation.



9. Enter your network credentials and click Install Software.



10. Close the installer.

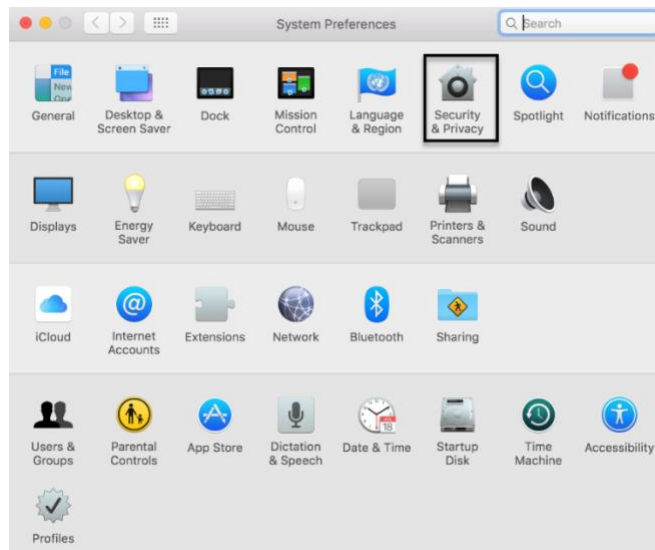


**Note:** If you are running High Sierra, you may need to complete the following steps. If not, skip to step 14.

11. Open System Preferences.



12. Click on Security and Privacy.

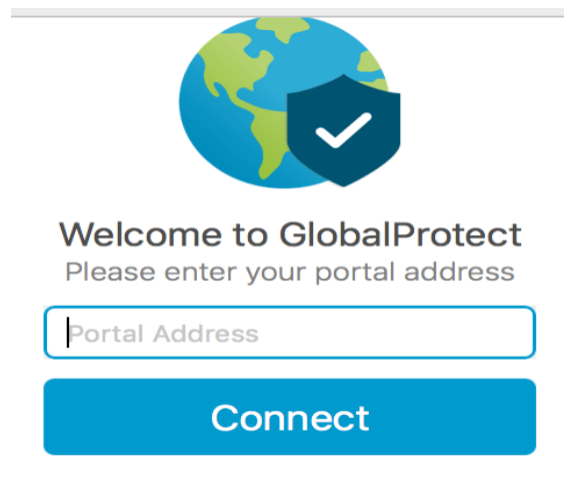


13. High Sierra may generate a message informing that PaloAlto installed software and asking whether you would like to allow. Click the box to allow the software installation.

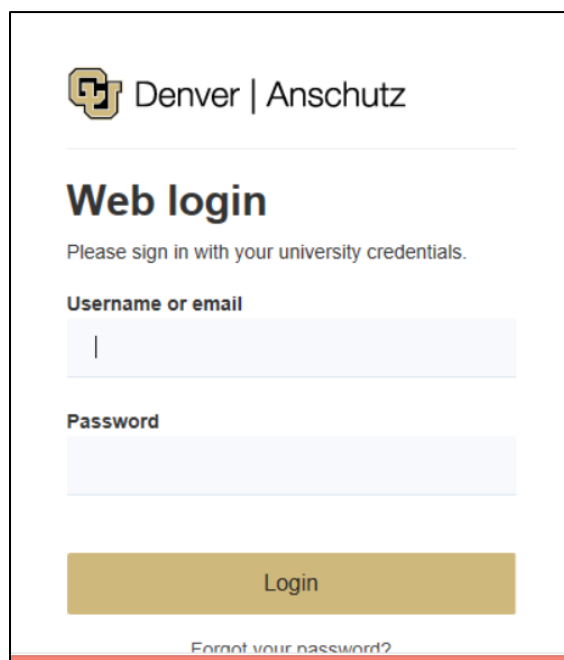
14. At the top of your Mac, you should see an icon that looks like a globe. Click on the globe.



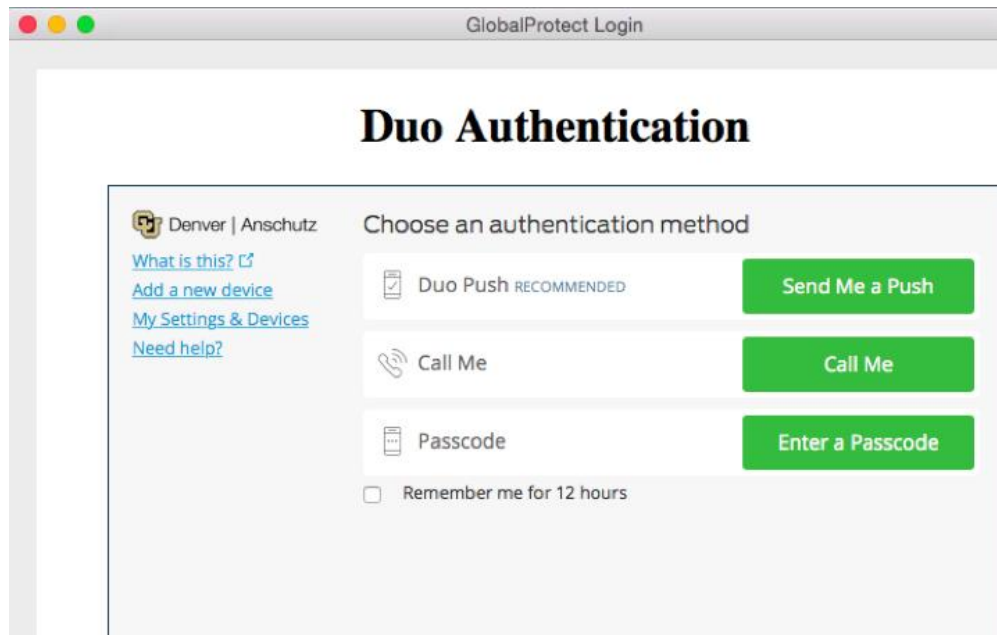
15. Enter your campus VPN access portal address: [dc-vpn.ucdenver.edu](https://dc-vpn.ucdenver.edu) or [amc-vpn.ucdenver.edu](https://amc-vpn.ucdenver.edu)



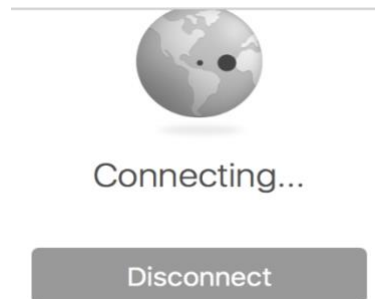
16. Log in with your network username and password.



17. Select your preferred authentication method.

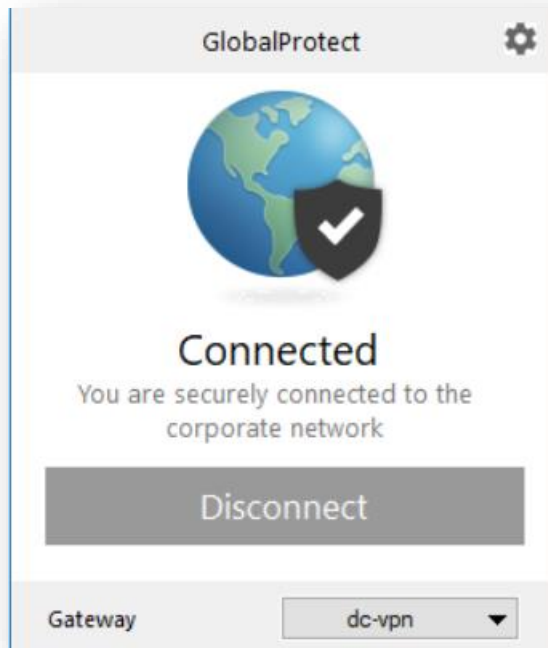


18. After completing your authentication method, you will see a Connecting screen.





19. You are now connected to your campus's network through VPN.



### Updating your Duo profile using the self-service portal

Duo provides a self-service registration portal that allows you to add and remove devices, as well as update your authentication preferences. Perform the following tasks to add a device or update your preferences.

1. Log into CU Secure by clicking on the access portal for your primary campus:
  - a. CU Denver: <https://dc-vpn.ucdenver.edu>
  - b. Anschutz Medical Campus: <https://amc-vpn.ucdenver.edu>

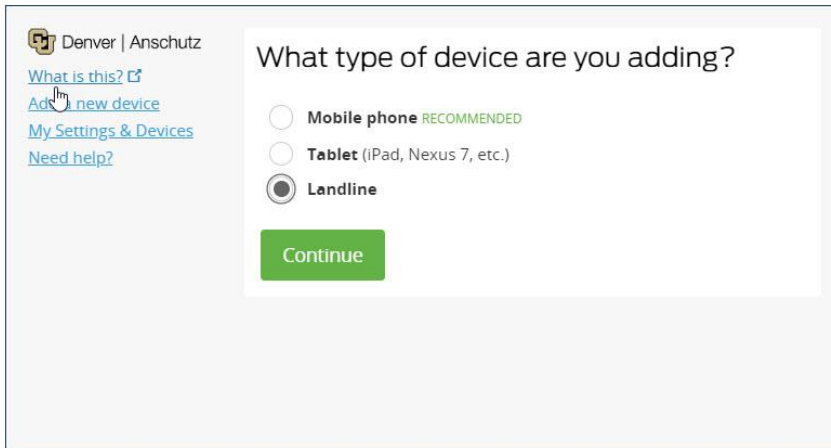
2. Login with your network username and password.

The screenshot shows the 'Web login' page for Denver | Anschutz. At the top left is the university logo and name. Below it is the heading 'Web login' and a sub-heading 'Please sign in with your university credentials.' There are two input fields: 'Username or email' and 'Password'. Below the password field is a gold 'Login' button. At the bottom, there is a link for 'Forgot your password?'.

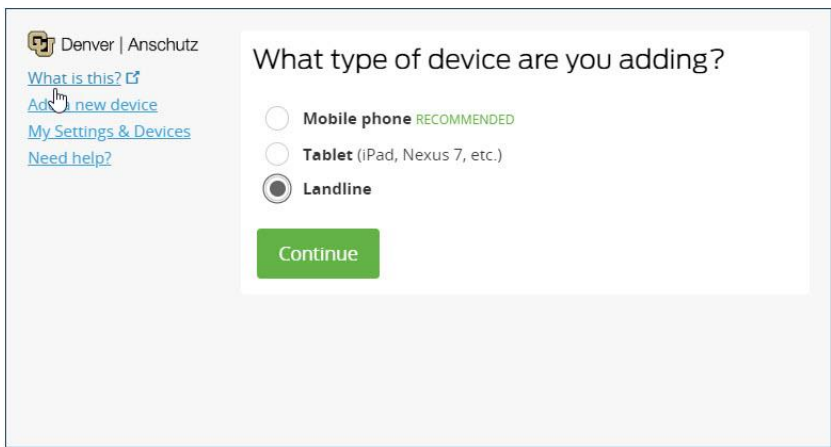
3. Click Add a new device or My Settings & Devices in the left-hand navigation.

The screenshot shows the device management page. On the left is a navigation menu with links: 'What is this?', 'Add a new device', 'My Settings & Devices', and 'Need help?'. The 'Add a new device' and 'My Settings & Devices' links are circled in red. The main content area shows a 'Device:' dropdown menu set to 'Android (XXX-XXX-1713)'. Below this is the heading 'Choose an authentication method' with three options: 'Duo Push RECOMMENDED' (with a 'Send Me a Push' button), 'Call Me' (with a 'Call Me' button), and 'Passcode' (with an 'Enter a Passcode' button).

4. Authenticate using your preferred method.



5. Select the type of device you are adding from the available options and click Continue. In this example, we are adding a work phone.



6. Enter the phone you would like to add and click Continue.

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[What is this?](#) [Add a new device](#) [My Settings & Devices](#) [Need help?](#)

### Enter your phone number

United States

+1 3037244825 ✓

Example: (201) 234-5678

Extension:

You entered (303) 724-4825. This number already exists, replace it?

Back Continue

**Note:** You can enter an international number by selecting a different country from the country drop-down.

7. Your new number is added.

## Duo Authentication

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[What is this?](#) [Add a new device](#) [My Settings & Devices](#) [Need help?](#)

### My Settings & Devices

Android 303-842-1713 Device Options

Landline 303-724-4825 Device Options

+ Add another device

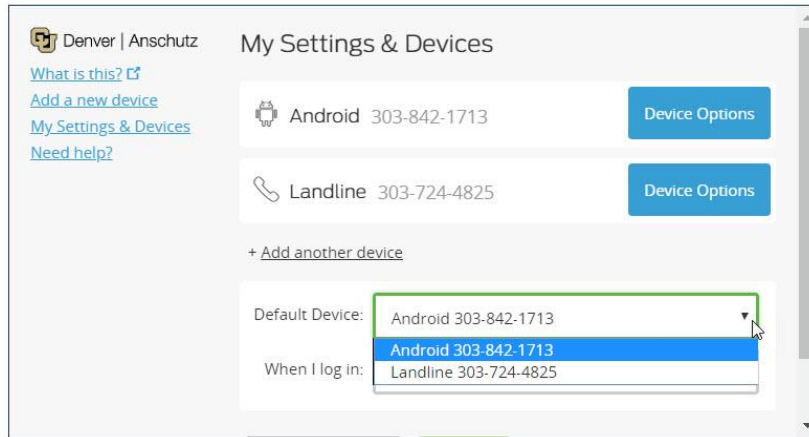
Default Device: Android 303-842-1713

When I log in: Ask me to choose an authentication method

**Note:** You can set defaults for your preferences for your devices and login method.

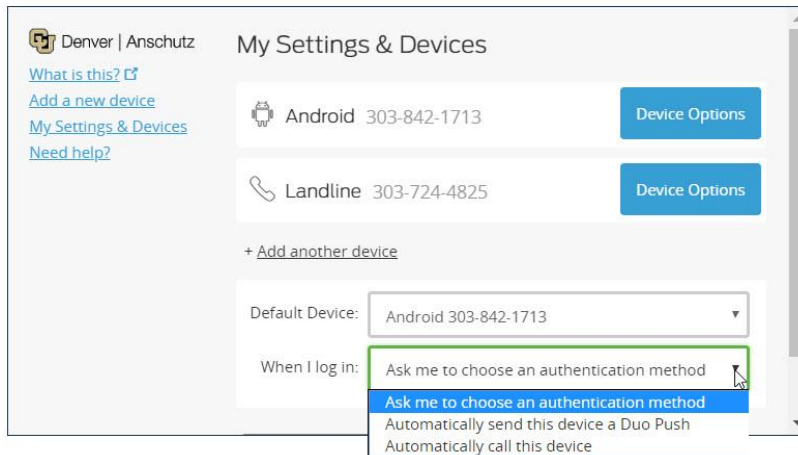
- a) Select your default device.

## Duo Authentication



- b) Select your default contact method.

## Duo Authentication



## Troubleshooting tips

### VPN Access Portal

**Q: Do I need to reinstall the VPN access portal client each time I connect to VPN?**

No. With the exception of periodic software updates, you will not need to reinstall the client.

**Q: Do we have a VPN access portal for each campus?**

Yes, each campus has its own VPN portal. These are [dc-vpn.ucdenver.edu](https://dc-vpn.ucdenver.edu) and [amc-vpn.ucdenver.edu](https://amc-vpn.ucdenver.edu)

**Q: From where can I connect to VPN access portal?**

You can connect from any remote location that is not on the campuses' trusted or wired networks. These include guest wireless, your home office, Starbucks, the mountains, the beach, etc.

**Q: Can I connect to VPN from the campuses' wired networks?**

No. You must be disconnected from the campuses' trusted networks.

**Q: I can't connect to <https://dc-vpn.ucdenver.edu> and <https://amc-vpn.ucdenver.edu> from the Guest wireless network.**

- a) If you are connecting on campus, ensure that you are fully disconnected from the trusted networks. Disconnect from your docking station to remove the wired connection, disconnect from CU Anschutz or CU Denver wireless, connect to CU Anschutz Guest or CU Denver Guest, and then try connecting to the appropriate client for your campus.
- b) If you are connecting off-campus, try clearing your browser cache or go to a site you haven't connected to before to ensure you are on the Guest wireless. You will see the Guest wireless "Accept" page prior to connection.

### GlobalProtect Desktop Client

**Q: My VPN client says GlobalProtect and is not CU branded. Is this malware?**

No. GlobalProtect is the branding for our campuses' new VPN client from software vendor PaloAlto. GlobalProtect is safe to use.

**Q: Is there a GlobalProtect client for Linux users?**

Yes. Download the Linux client from [https://www1.ucdenver.edu/docs/default-source/offices-oit-documents/vpn-client-software/global-protect-4-1-7-0-7-signed.apk?sfvrsn=851496b8\\_2&download=true](https://www1.ucdenver.edu/docs/default-source/offices-oit-documents/vpn-client-software/global-protect-4-1-7-0-7-signed.apk?sfvrsn=851496b8_2&download=true).

**Important!** *The Linux process is different from Windows and Mac. Linux users must contact the OIT Service Desk for a passcode with which to connect. Linux documentation will be posted on OIT's Service Impacting Projects tab for CU Secure at <https://www1.ucdenver.edu/offices/office-of-information-technology/news/article/office-of-information-technology/cu-secure-our-campus-multi-level-initiative-to-make-your-data-more-secure!>*

**Q: Will the Cisco AnyConnect client go away or can I use this instead of GlobalProtect?**

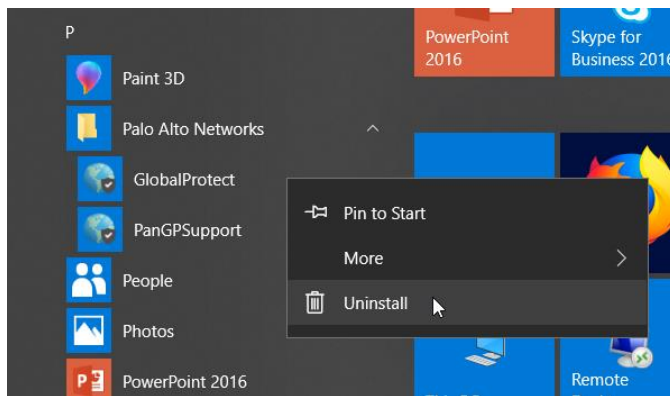
Yes. The Cisco AnyConnect client will be discontinued eight weeks after go-live on March 29. You must begin using the new process after March 29.

**Q: Can I connect to [amc-anywhere.ucdenver.edu](http://amc-anywhere.ucdenver.edu) or [auraria-anywhere.ucdenver.edu](http://auraria-anywhere.ucdenver.edu) with the GlobalProtect client?**

No. Please use the new clients [dc-vpn.ucdenver.edu](http://dc-vpn.ucdenver.edu) and [amc-vpn.ucdenver.edu](http://amc-vpn.ucdenver.edu).

**Q: I can't connect to VPN using my installed version of GlobalProtect.**

Under Programs, right-click on Palo Alto Networks > GlobalProtect > Uninstall. Uninstall and reinstall the agent.



## Duo Registration and Mobile Client

**Q: Is there a mobile client for all devices?**

Yes. Duo Mobile exists for Android, Apple and Windows devices.

**Q: Do I have to use a mobile device to authenticate to Duo?**

No. You may also register a landline phone, like your office or home phone, and Duo will call you on that device to authenticate.

**Q: Can I register my work or home email to authenticate to Duo?**

No. Duo requires a landline phone or mobile device (smart phone or tablet) to perform multifactor authentication.

**Q: I am accessing from China and am unable to connect.**

China has a regulatory restriction on VPN clients that are not approved by the Chinese government. Please check with your provider to determine if their firewall allows VPN.

## General Connection Troubleshooting Tips

**Q: I am connected to the guest wireless network, but can't connect to <https://dc-vpn.ucdenver.edu> and <https://amc-vpn.ucdenver.edu>.**

- a) Verify that your browser brought up the guest wireless acceptance page and that you have clicked Accept.
- b) Try clearing your browser cache to clear out past connections.

**Q: I am accessing from off campus and am unable to connect to VPN.**

- a) Check that you are connected to a wireless network or hotspot.
- b) Verify that the location from which you are connecting allows access to VPN clients.

**Q: Does clicking on the “remember me for 12 hours” check box on the Duo window work?**

No. Clicking on “remember me for 12 hours” does not work due to limitations in system.

**Q: Will the multifactor authentication I use to access my personal information via the CU Resources tab in UCD Access change to the new process?**

Not at this time. Please continue to authenticate within UCD Access using the current process. In the future, OIT will implement the current process on our portal access and at that time, the current process may change for accessing your personal information.