

## Welcome to the National Institutes of Health (NIH) 2021 Summer Internship Program!

To ensure you can successfully work on your research projects remotely, NIH is offering a customized virtual desktop that allows you to securely access NIH resources, such as your email, web browsers, web conferencing tools, file-storage and file-sharing tools, Microsoft 365 applications, and scientific applications—all from your personal computer. *Think of it as an NIH computer you can access from your own computer!*

## Device Requirements

A personal Windows or Mac computer **and** an iOS or Android mobile device (smartphone or tablet)

## How NIH's Virtual Desktop Works

### Step

1

Download the Authenticator app on your mobile device and register for multi-factor authentication (MFA) using the app. You'll use MFA to log into the virtual desktop.

### Step

2

Download and install the VMware Horizon Client on your personal computer's operating system.

### Step

3

Open the VMware Horizon Client and go to **[vdi.nih.gov](https://vdi.nih.gov)**.

### Step

4

Log in using your username, password, and a one-time password code displayed in the Authenticator app.

### Step

5

Once the virtual desktop loads, launch the application(s) you need to begin working on your project.

***For more detailed guidance, see the step-by-step instructions.***

## What I Can Access With NIH's Virtual Desktop

- » **Adobe Reader**
- » **Email** (Outlook)
- » **File-Storage and File-Sharing Tools** (Box, Microsoft Stream, OneDrive, SharePoint Online)
- » **Microsoft 365 Applications** (Access, Excel, PowerPoint, Publisher, Word)
- » **The NIH Library**
- » **Scientific Tools and Applications** (Biowulf, MATLAB, Anaconda, Python, etc.)
- » **Web Browsers** (Chrome, Firefox, Internet Explorer, Microsoft Edge)
- » **Web Conferencing Tools** (Microsoft Teams, Skype for Business, Webex, Zoom for Government)

For a full list of applications and resources, see the Standard Applications and Resources Available on NIH's Virtual Desktop handout.

## What I Can Do With NIH's Virtual Desktop

- » Access NIH email
- » Access and analyze scientific data
- » Access NIH's supercomputer, Biowulf
- » Analyze data, develop algorithms, and create models
- » Visit the NIH Library to read scientific manuscripts and take courses
- » And, more!

## IT Support & Additional Resources

For assistance, contact the NIH IT Service Desk:

(301) 496-4357 (local) | (866) 319-4357 (toll free) | (301) 496-8294 (TTY) | [itservicedesk.nih.gov](https://itservicedesk.nih.gov)

## Need Additional Software?

Please contact your daily mentor or Principal Investigator (PI) to request additional software. Your mentor/PI will authorize and coordinate software requests with the NIH IT Service Desk.

# How to Register for Multi-Factor Authentication (MFA) Using the Microsoft Authenticator App

The National Institutes of Health (NIH) requires summer interns to use multi-factor authentication (MFA) to access NIH resources. Using MFA increases the security of personal and confidential information provided in NIH's systems.

**An NIH staff member in your IC will set up an appointment to guide you through the MFA registration process via a video meeting.** MFA registration is only required once.

## Device Requirements

- A personal Windows or Mac computer
- A mobile device (smartphone or tablet)

## Prior to the Video Meeting

1. Make sure you have your:
  - a. Personal computer;
  - b. Mobile device; and
  - c. NIH username and password
2. Using your mobile device, go to the app store and download the **Microsoft Authenticator** app.

## What to Expect During the Video Meeting

An NIH staff member will initiate a video meeting with you using Webex, Microsoft Teams, or another meeting tool. During the meeting, the NIH staff member will guide you through the entire process on how to register for MFA.

## What's Next?

After you register for MFA, you will need to download the VMware Horizon Client software to access NIH's Virtual Desktop. (Note: You will use MFA on your mobile device to log into NIH's Virtual Desktop.)

Refer to the *How to Download and Log Into NIH's Virtual Desktop Instructions* for step-by-step instructions. There are different instructions provided depending on what type of computer you have (Windows or Mac).

## IT Support

For assistance, contact the NIH IT Service Desk.

(301) 496-4357 (local)  
(866) 319-4357 (toll free)  
(301) 496-8294 (TTY)  
[itservicedesk.nih.gov](https://itservicedesk.nih.gov)

# How to Download and Log Into NIH's Virtual Desktop: Windows Instructions

These step-by-step instructions show you how to download and securely access NIH's Virtual Desktop from a personal Windows computer.

## Device Requirements

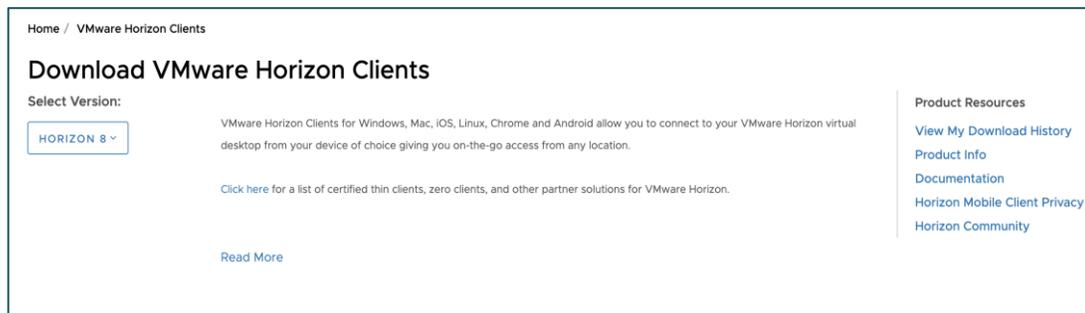
- A personal Windows computer
- A mobile device (smartphone or tablet)

## Important Notes

- Make sure you register for multi-factor authentication (MFA) using the Authenticator app on your mobile device prior to following the instructions below. If you haven't registered, refer to the *How to Register for Multi-Factor Authentication (MFA) Using the Authenticator App Instructions*.
- These instructions switch back and forth between your personal computer and mobile device. Please pay careful attention.

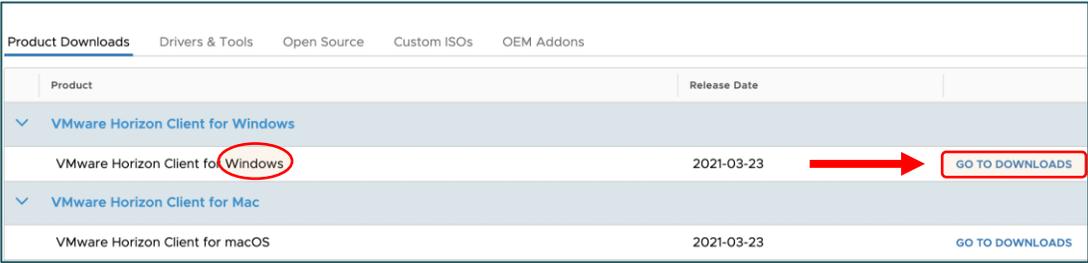
## Downloading NIH's Virtual Desktop: Step-By-Step Instructions

1. On your personal computer, go to the [Download VMware Horizon Clients page](#) to download NIH's Virtual Desktop.



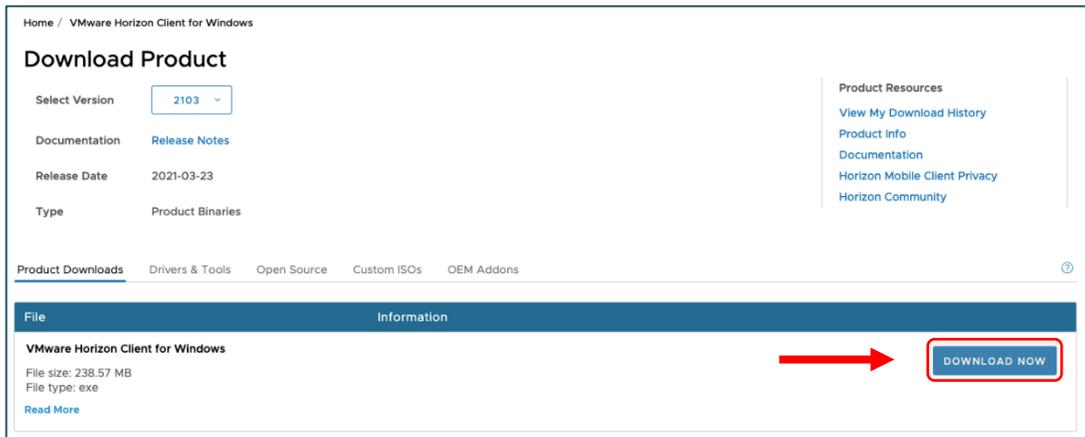
2. Under **Product Downloads**, there will be a list of operating systems (e.g., Windows, macOS, Chrome).

Next to your operating system, click the corresponding **Go To Downloads** link in the column next to the release date.

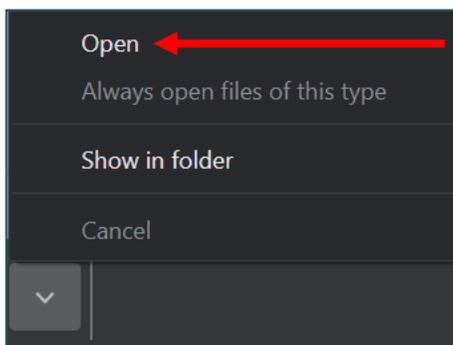
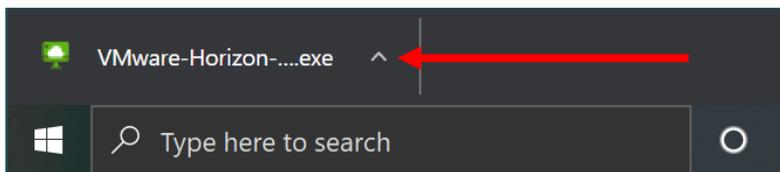


Product	Release Date	
VMware Horizon Client for Windows	2021-03-23	<a href="#">GO TO DOWNLOADS</a>
VMware Horizon Client for Mac	2021-03-23	<a href="#">GO TO DOWNLOADS</a>

- After clicking **Go To Downloads** for Windows, the link will take you to a new page titled, **Download Product**. On this page, you will click the blue button that says **Download Now** in the bottom right corner.

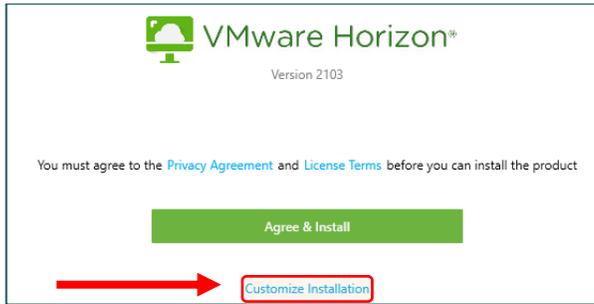


- The product will download on the bottom right of your windowpane. After it downloads, click on the arrow. Click **Open** at the top to run the VMware Horizon Client software.

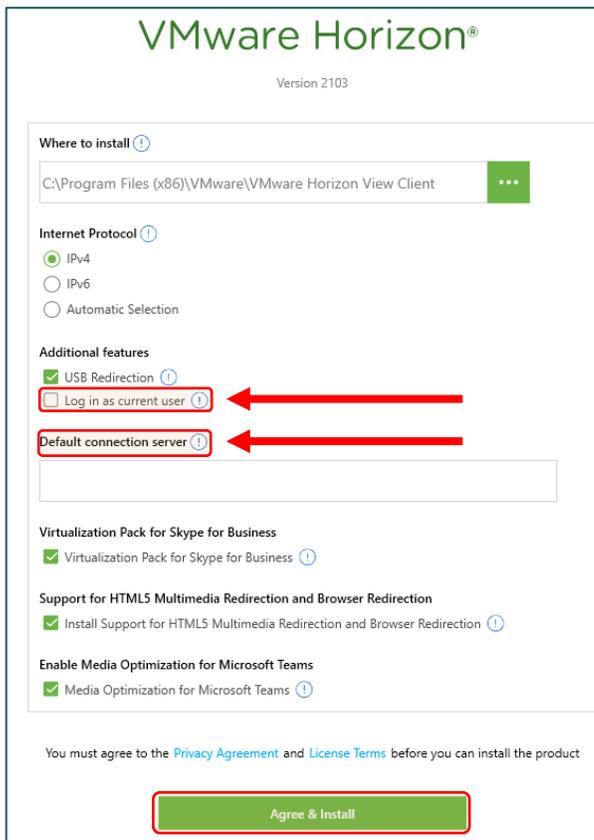


- You may need to verify that you are the administrator of your personal computer by entering your personal computer's username and password (i.e., the username and password you used to log into your personal computer).
- When prompted **Do you wish for the application to make modifications to your device**, click **Yes**. The VMware Horizon Client will then load.

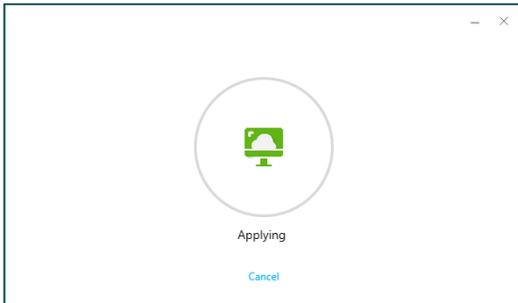
- When the new window pops up, click **Customize Installation** link.



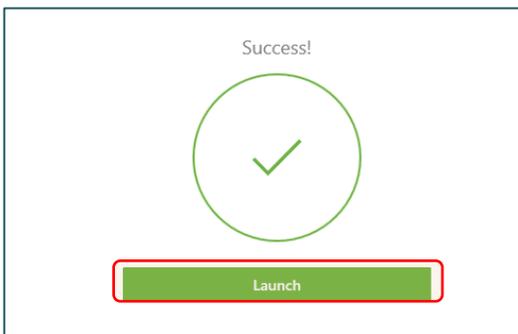
- From there, make sure **Log in as current user** is unchecked and the **Default connections server** section is left blank. After doing this, click the green **Agree & Install** button.



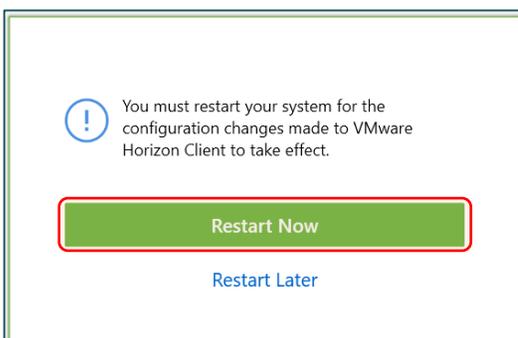
8. The VMware Horizon Client will apply these changes as seen below.



9. After the window loads, click the green **Launch** button.



10. You will be prompted to restart your computer. Click the green **Restart Now** button.

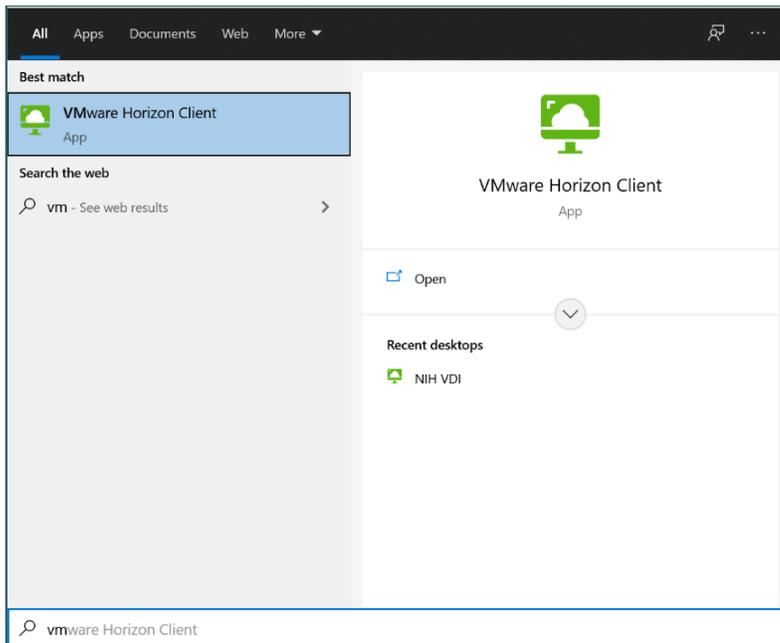


11. After your computer restarts, you will have successfully downloaded the VMware Horizon Client software to access NIH's Virtual Desktop!

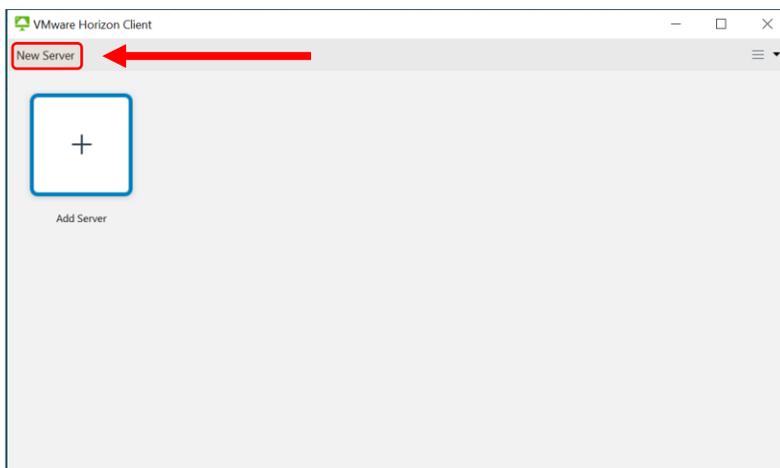
## Logging Into NIH's Virtual Desktop: Step-By-Step Instructions

Once you have successfully downloaded the VMware Horizon Client software, you will use both your personal computer and your mobile device to log into NIH's Virtual Desktop.

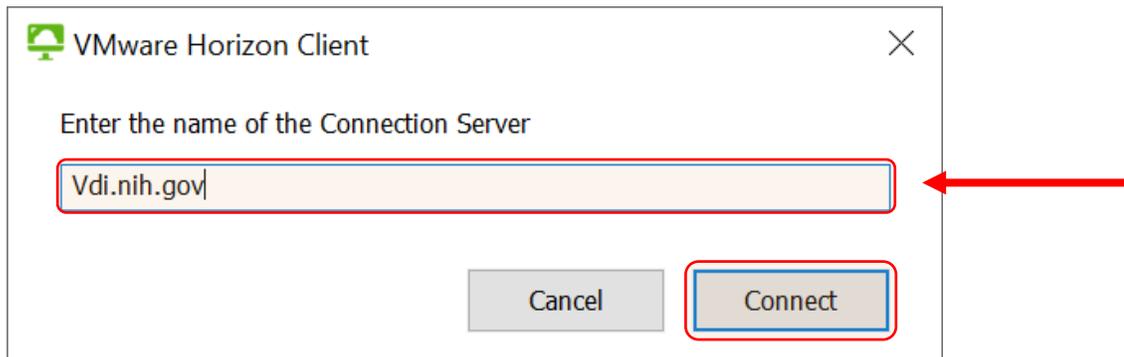
1. Click on the VMware Horizon Client application to launch the platform on your computer.



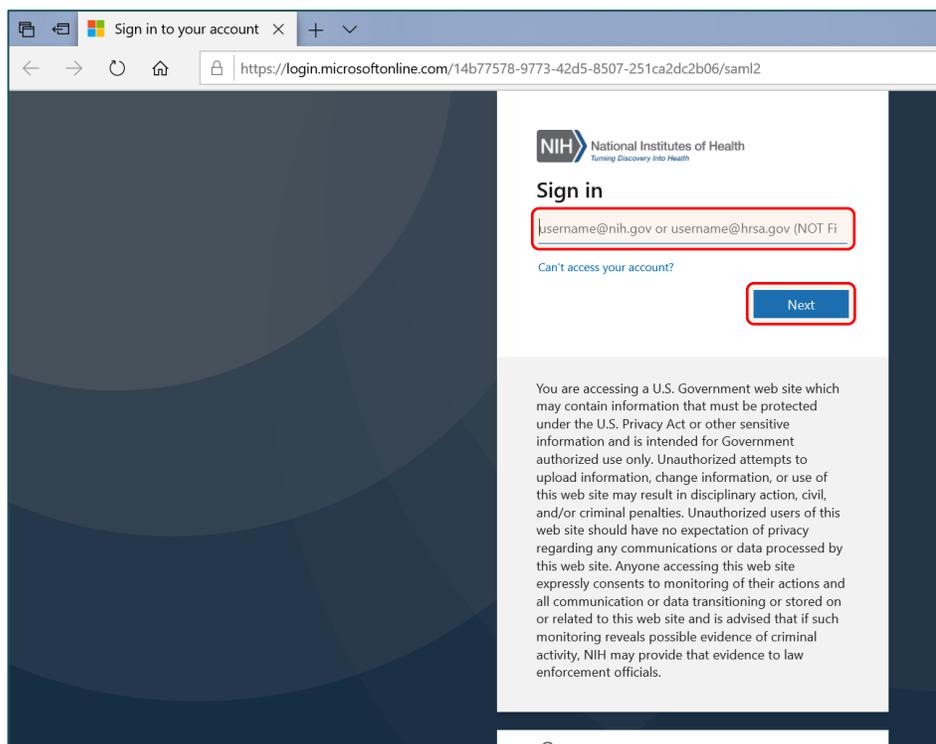
2. Once the application opens, you will be prompted to add a new server. In the top left corner, click **New Server**.



3. A new window that says **Enter the name of the Connection Server** will pop up. Enter **vdi.nih.gov** in the box, then click the **Connect** button.

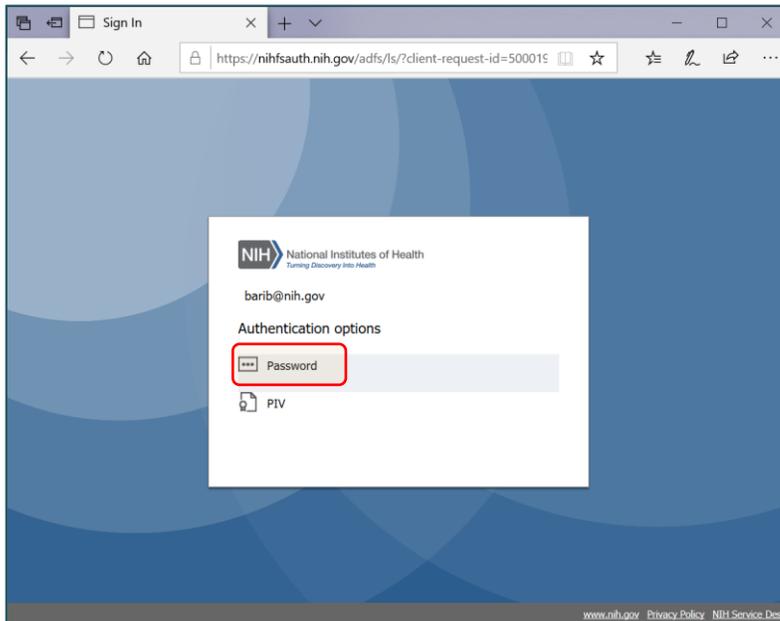


4. After clicking the Connect button, a new internet browser window will open. Enter the NIH username provided to you during onboarding, then click the **Next** button.

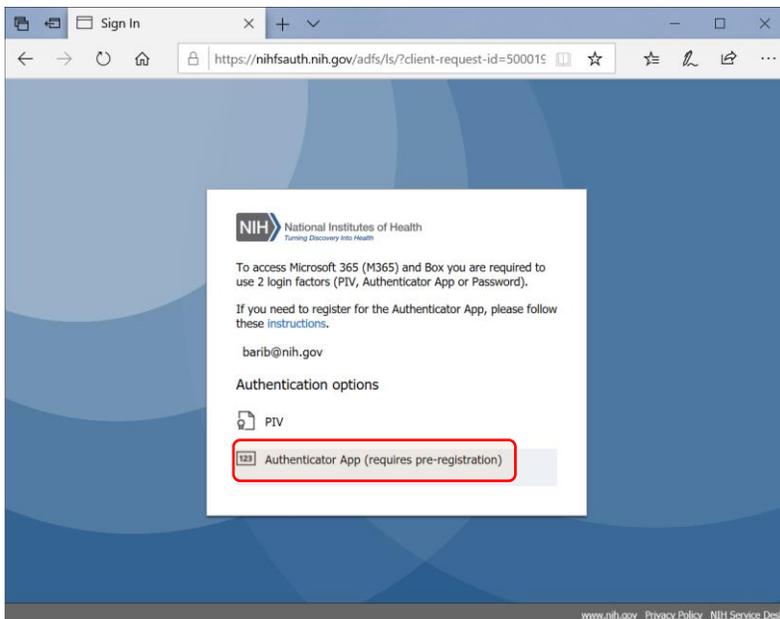


Note: When entering your username, add the **@nih.gov** (example: jadoe@nih.gov).

5. You will be prompted to choose your login method. Choose **Password**, and enter the password provided to you during onboarding. On the next screen, you will be prompted to use multi-factor authentication.



6. You will be prompted to choose your secondary login method. Choose **Authenticator App (requires pre-registration)**.



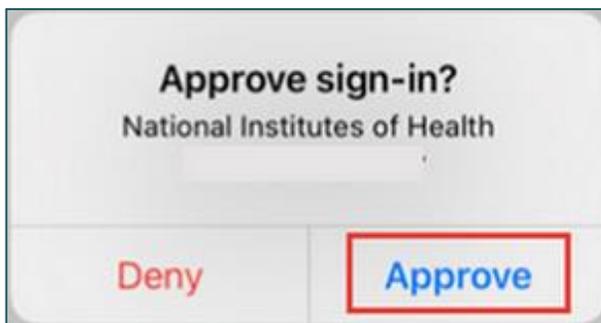
7. You will now need your mobile device. Open the Authenticator app that was installed earlier.

8. Depending on the default authentication method that was set up during the registration process, you will be prompted to either:
  - a. Approve the push notification sent to your mobile device, or
  - b. Enter the one-time passcode (OTP) displayed on your mobile device

*Note: Both the push notification and the OTP time out after 30 seconds. Please have your Authenticator app open.*

### Push Notification

If you set your default method to push notification, look for the prompt in the Authenticator app on your mobile device to approve access.

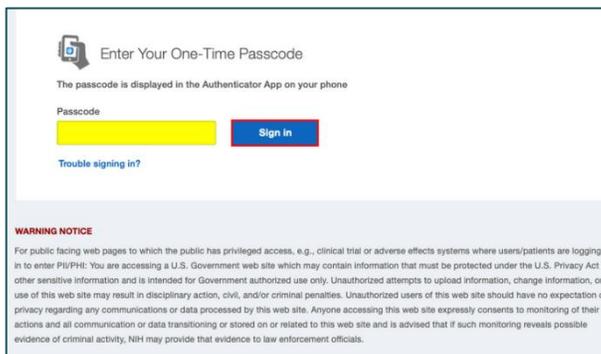


**Note:** If the push notification on your mobile device times out, you are rerouted to a timeout screen that prompts you to click and try again. Once rerouted to the main screen, please refresh your browser, and try again.

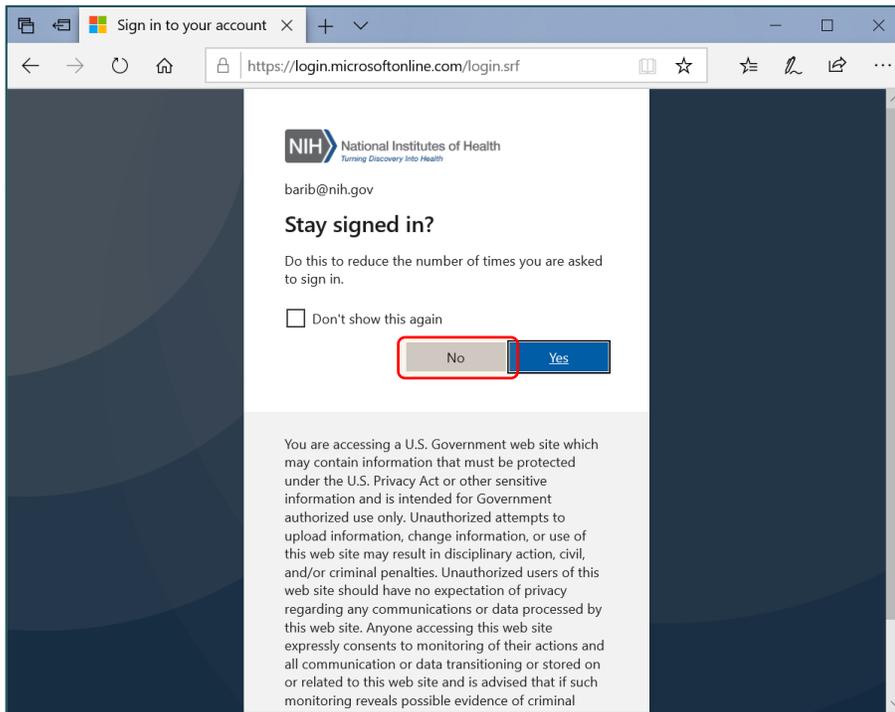


### One-Time Passcode (OTP)

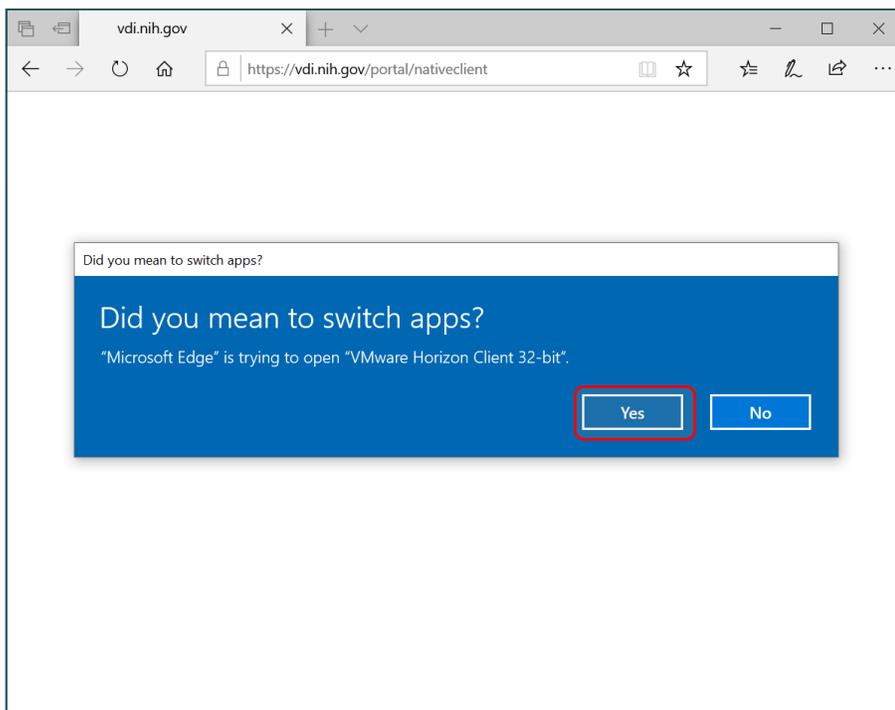
If you set your default method to one-time passcode, look for the six-digit code in the Authenticator app on your mobile device and enter it in the **Passcode** field displayed on your computer. Then click the blue **Sign In** button.



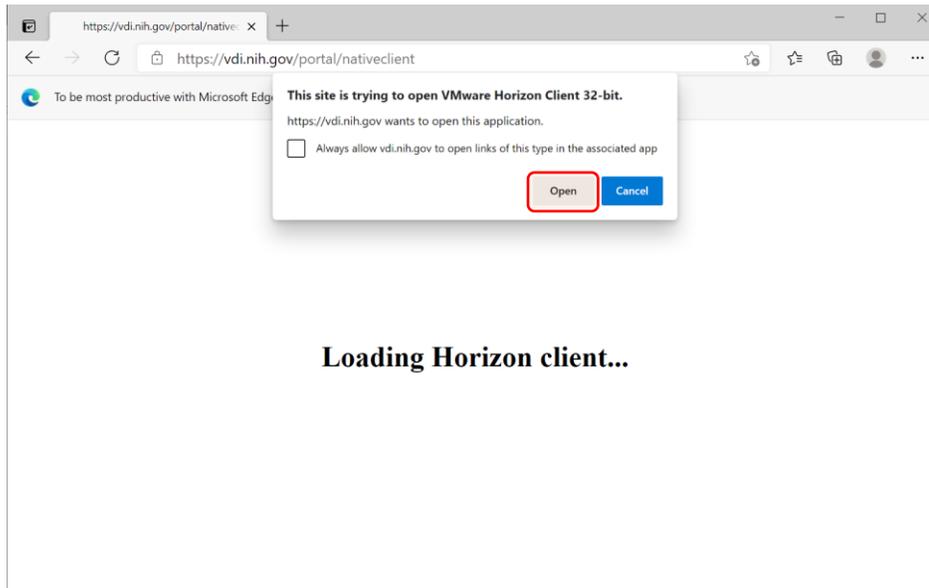
9. You will be prompted to reduce the number of times you are asked to sign in. Due to security restrictions, you will not be able to stay signed in. Click the grey **No** button.



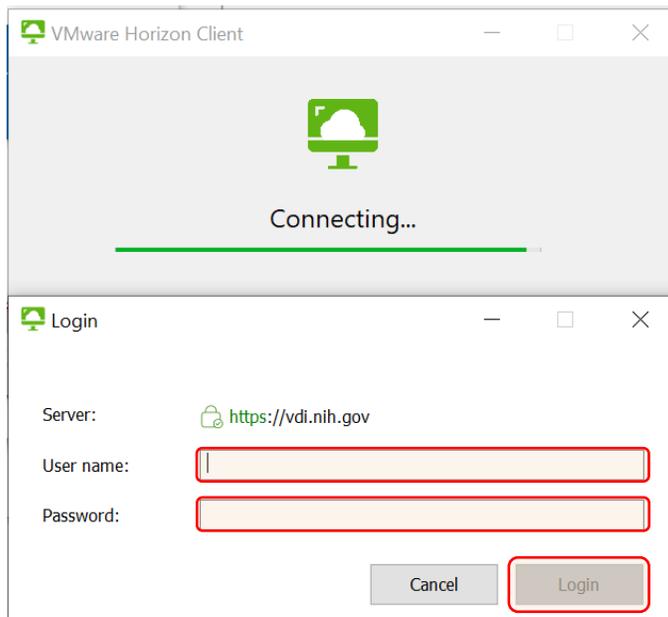
10. After successfully authenticating, you will be prompted to switch back to the VMWare Horizon Client application. Click **Yes**.



If you see the screen below, click **Open**.

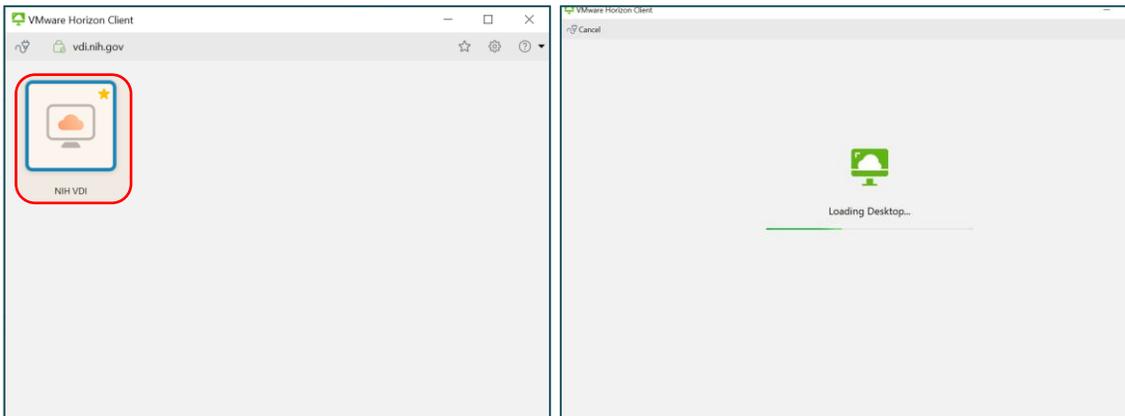


11. You will be prompted to log in using your NIH username and password. Enter your username and password into the corresponding areas and click **Login**.

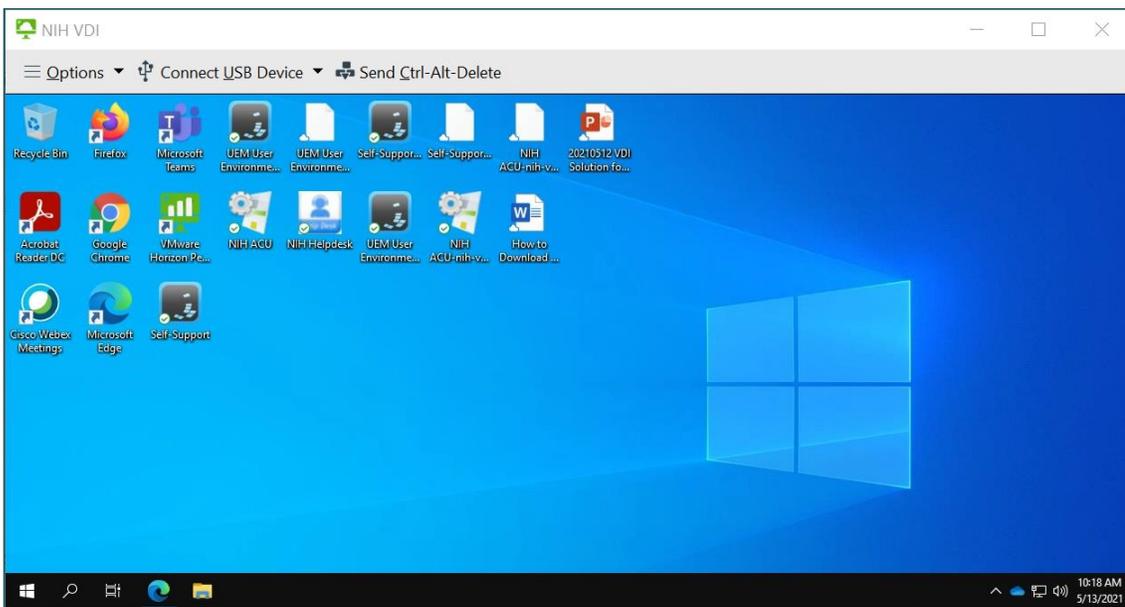


Note: When entering your username, enter it as **nih\username** or **username@nih.gov** (example: enter nih\jdoe or jdoe@nih.gov).

12. After successfully logging in, click the **NIH VDI icon** below to launch your virtual desktop. The desktop will then begin loading.



13. When your virtual desktop loads, you will be automatically logged into a Windows 10 desktop as shown below.



14. You are now ready to use NIH's Virtual Desktop to complete your day-to-day activities!

## IT Support

For assistance, contact the NIH IT Service Desk.

(301) 496-4357 (local)  
(866) 319-4357 (toll free)  
(301) 496-8294 (TTY)  
[itservicedesk.nih.gov](https://itservicedesk.nih.gov)

# How to Download and Log Into NIH's Virtual Desktop: Mac Instructions

These step-by-step instructions show you how to download and securely access NIH's Virtual Desktop from a personal Mac computer.

## Device Requirements

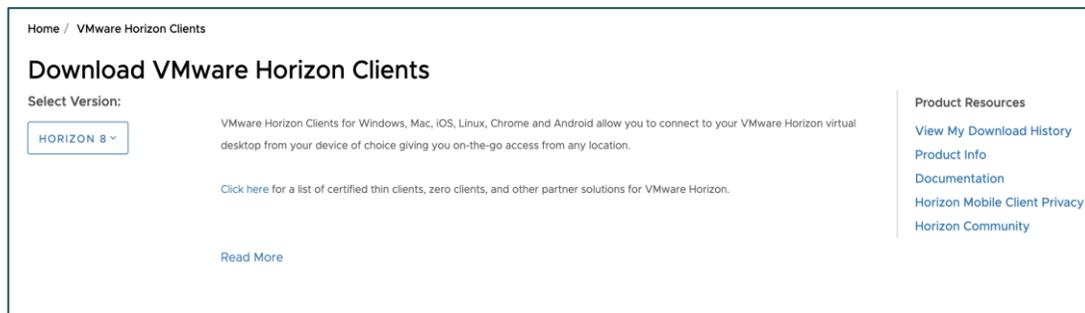
- A personal Mac computer
- A mobile device (smartphone or tablet)

## Important Notes

- Make sure you register for multi-factor authentication (MFA) using the Authenticator app on your mobile device prior to following the instructions below. If you haven't registered, refer to the *How to Register for Multi-Factor Authentication (MFA) Using the Authenticator App Instructions*.
- These instructions switch back and forth between your personal computer and mobile device. Please pay careful attention.

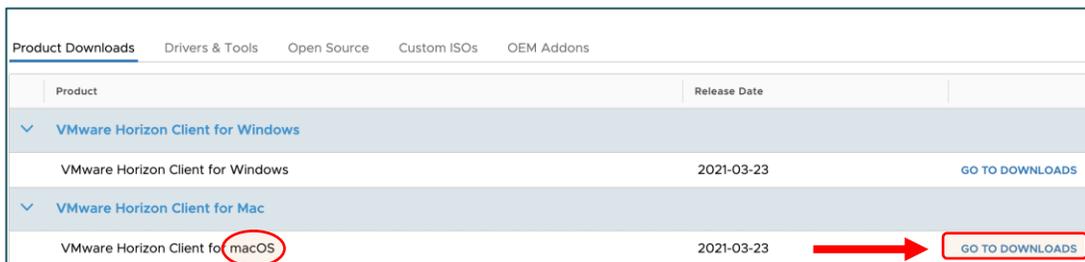
## Downloading NIH's Virtual Desktop: Step-By-Step Instructions

1. On your personal computer, go to the [Download VMware Horizon Clients page](#) to download NIH's Virtual Desktop.



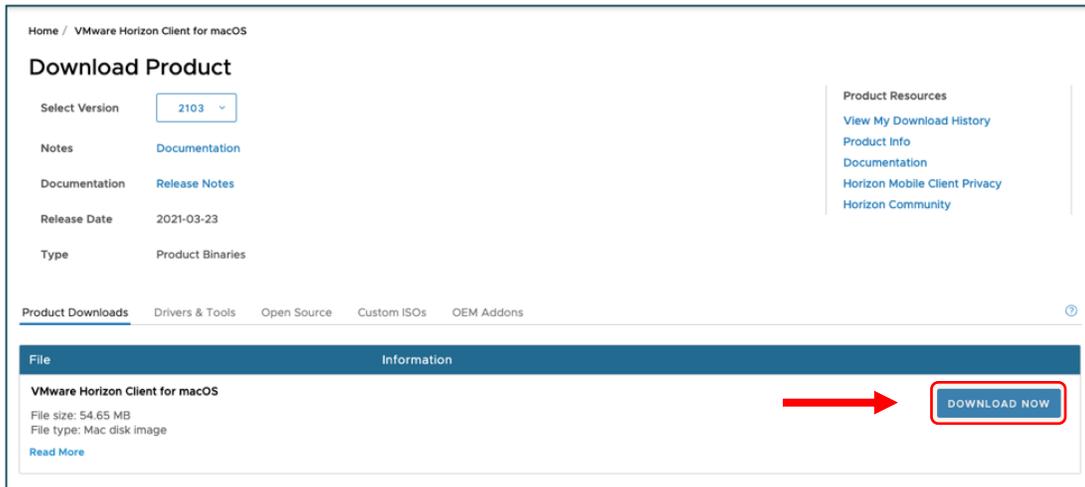
2. Under **Product Downloads**, there will be a list of operating systems (e.g., Windows, macOS, Chrome).

Next to your operating system, click the corresponding **Go To Downloads** link in the column next to the release date.

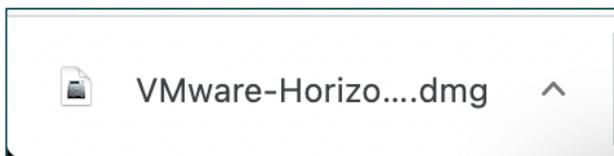


Product	Release Date	
<a href="#">VMware Horizon Client for Windows</a> VMware Horizon Client for Windows	2021-03-23	<a href="#">GO TO DOWNLOADS</a>
<a href="#">VMware Horizon Client for Mac</a> VMware Horizon Client for macOS	2021-03-23	<a href="#">GO TO DOWNLOADS</a>

3. After clicking **Go To Downloads** for macOS, the link will take you to a new page titled, **Download Product**. On this page, you will click the blue button that says **Download Now** in the bottom right corner.



4. The product will download on the bottom right of your windowpane. After it downloads, right click to open, and run the VMware Horizon Client software.



After opening the downloaded software and agreeing to the terms, you will have to drag the **VMware Horizon Client** icon to the **Applications** folder.



5. You have successfully downloaded the VMware Horizon Client software to access NIH's Virtual Desktop!

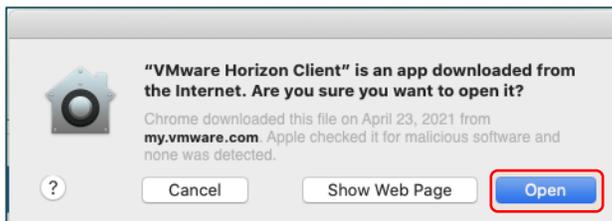
## Logging Into NIH's Virtual Desktop: Step-By-Step Instructions

Once you have successfully downloaded the VMware Horizon Client software, you will use both your personal computer and your mobile device to log into NIH's Virtual Desktop.

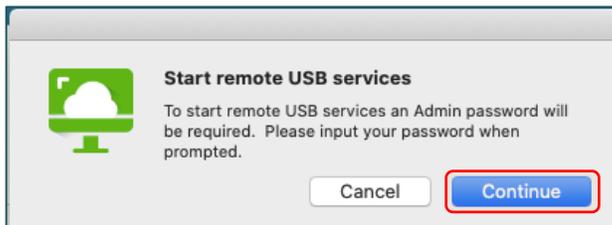
1. Go to the **Applications** folder and open the VMware Horizon Client application.

A new window that says **VMware Horizon Client is an app downloaded from the Internet. Are you sure you want to open it?** may pop up. Click the **Open** button.

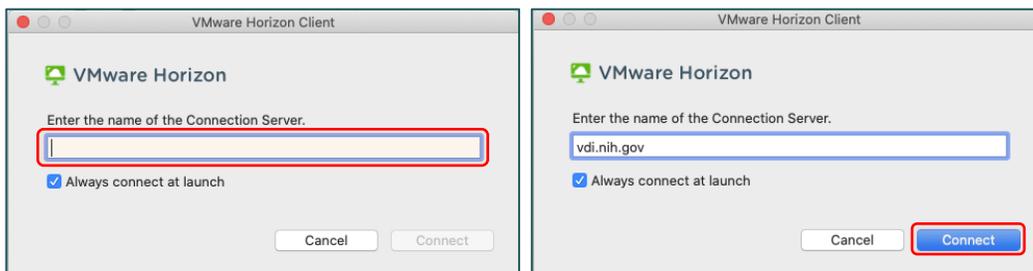
*If the application doesn't open up automatically, go back your **Applications** folder and open the VMware Horizon Client application again.*



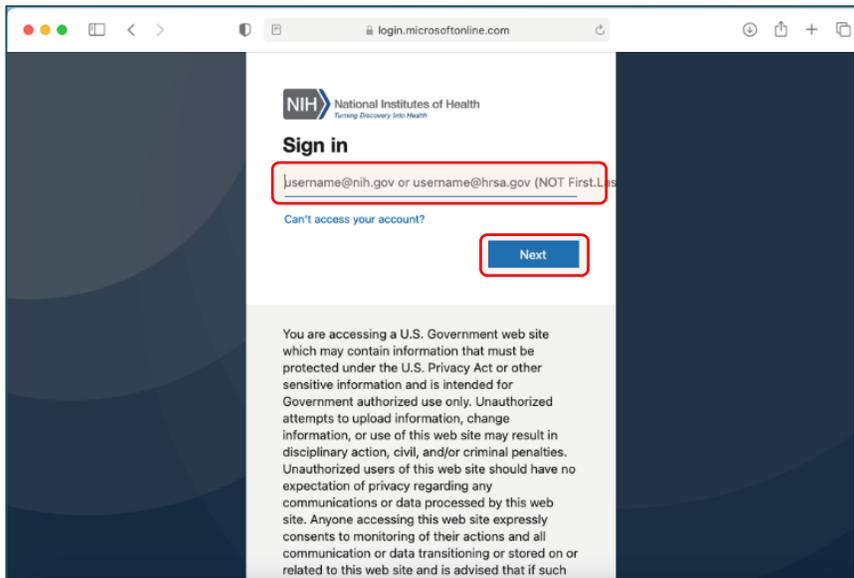
2. A new window that says **Start remote USB services** will pop up. Click the blue **Continue** button.



3. You will need to verify that you are the administrator of your personal computer by entering your personal computer's username and password (i.e., the username and password you used to log into your personal computer).
4. A new window that says **Enter the name of the Connection Server** will pop up. Enter **vdn.nih.gov** in the box, then click the blue **Connect** button.

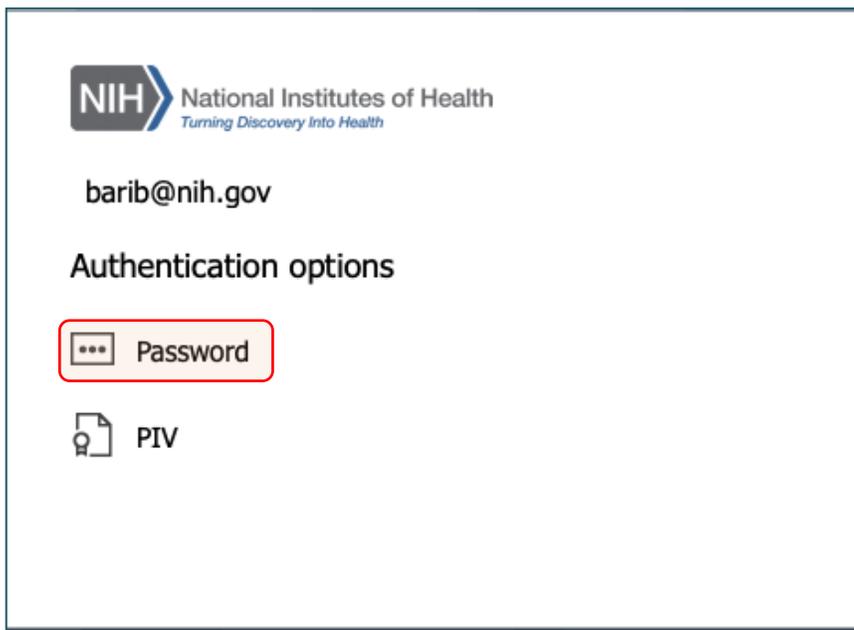


5. After clicking the Connect button, a new internet browser window will open. Enter the NIH username provided to you during onboarding, then click the **Next** button.

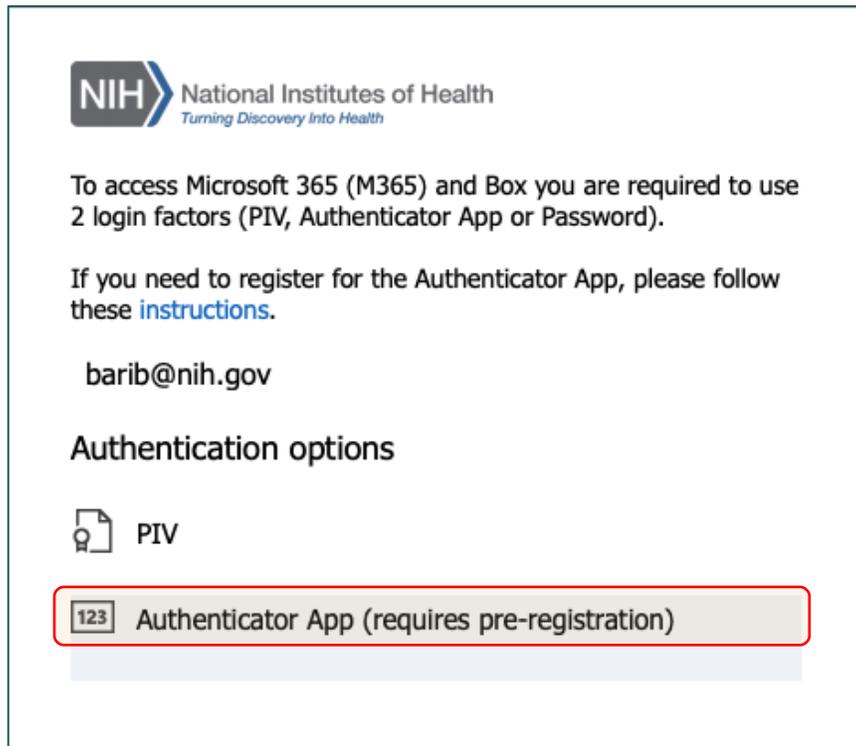


Note: When entering your username, add the **@nih.gov** (example: enter `jadoc@nih.gov`).

6. You will be prompted to choose your login method. Choose **Password** and enter the password provided to you during onboarding. On the next screen, you will be prompted to use multi-factor authentication.



7. You will be prompted to choose your secondary login method. Choose **Authenticator App (requires pre-registration)**.

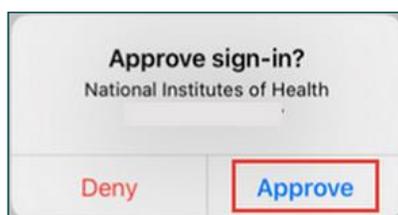


8. You will now need your mobile device. Open the Authenticator app that was installed earlier.
9. Depending on the default authentication method that was set up during the registration process, you will be prompted to either:
  - a. Approve the push notification sent to your mobile device, or
  - b. Enter the one-time passcode (OTP) displayed on your mobile device

*Note: Both the push notification and the OTP time out after 30 seconds. Please have your Authenticator app open.*

#### Push Notification

If you set your default method to push notification, look for the prompt in the Authenticator app on your mobile device to approve access.



**Note:** If the push notification on your mobile device times out, you are rerouted to a timeout screen that prompts you to click and try again. Once rerouted to the main screen, please refresh your browser, and try again.

 **Authenticator App Timeout**  
 You did not approve the push notification in the Authenticator App on time. Try again by [clicking here](#)

One-Time Passcode (OTP)

If you set your default method to one-time passcode, look for the six-digit code in the Authenticator app on your mobile device and enter it in the **Passcode** field displayed on your computer. Then click the blue **Sign In** button.



### Enter Your One-Time Passcode

The passcode is displayed in the Authenticator App on your phone

Passcode

Sign in

[Trouble signing in?](#)

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**WARNING NOTICE**

For public facing web pages to which the public has privileged access, e.g., clinical trial or adverse effects systems where users/patients are logging in to enter PII/PHI: You are accessing a U.S. Government web site which may contain information that must be protected under the U.S. Privacy Act or other sensitive information and is intended for Government authorized use only. Unauthorized attempts to upload information, change information, or use of this web site may result in disciplinary action, civil, and/or criminal penalties. Unauthorized users of this web site should have no expectation of privacy regarding any communications or data processed by this web site. Anyone accessing this web site expressly consents to monitoring of their actions and all communication or data transitioning or stored on or related to this web site and is advised that if such monitoring reveals possible evidence of criminal activity, NIH may provide that evidence to law enforcement officials.

**10.** You will be prompted to reduce the number of times you are asked to sign in. Due to security restrictions, you will not be able to stay signed in. Click the grey **No** button.



National Institutes of Health  
Building Discovery into Health

barib@nih.gov

### Stay signed in?

Do this to reduce the number of times you are asked to sign in.

Don't show this again

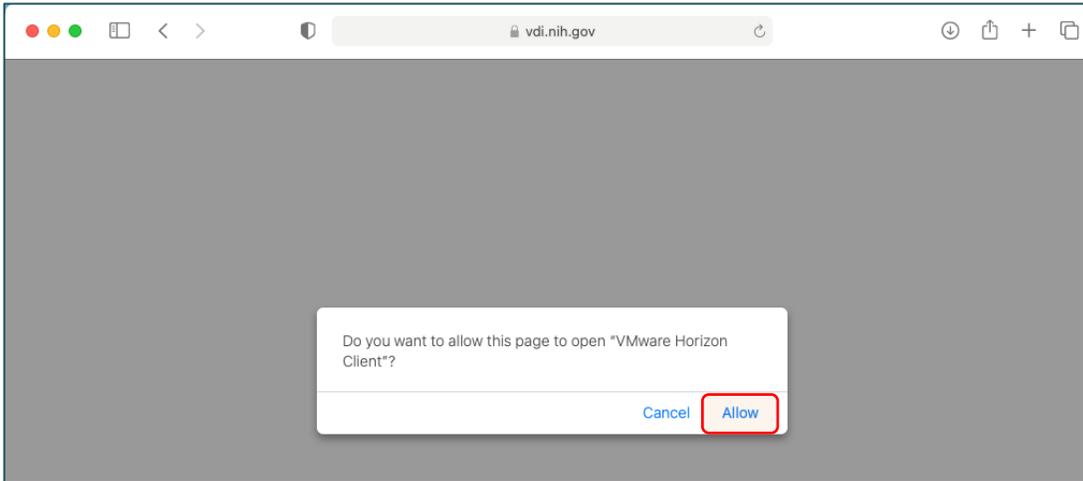
No

Yes

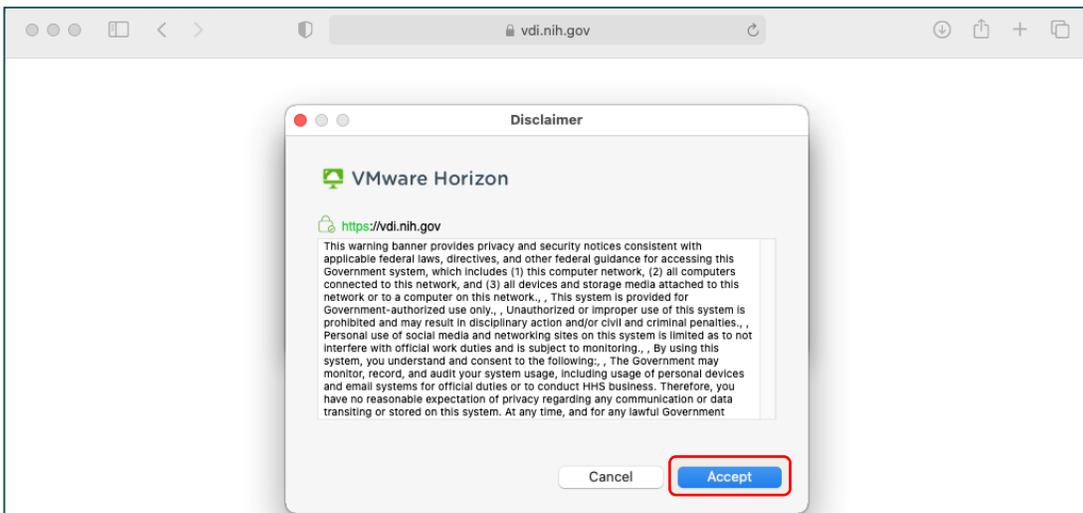
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You are accessing a U.S. Government web site which may contain information that must be protected under the U.S. Privacy Act or other sensitive information and is intended for Government authorized use only. Unauthorized attempts to upload information, change information, or use of this web site may result in disciplinary action, civil, and/or criminal penalties. Unauthorized users of this web site should have no expectation of privacy regarding any communications or data processed by this web site. Anyone accessing this web site expressly consents to monitoring of their actions and all communication or data transitioning or stored on or related to this web site and is advised that if such monitoring reveals possible evidence of criminal

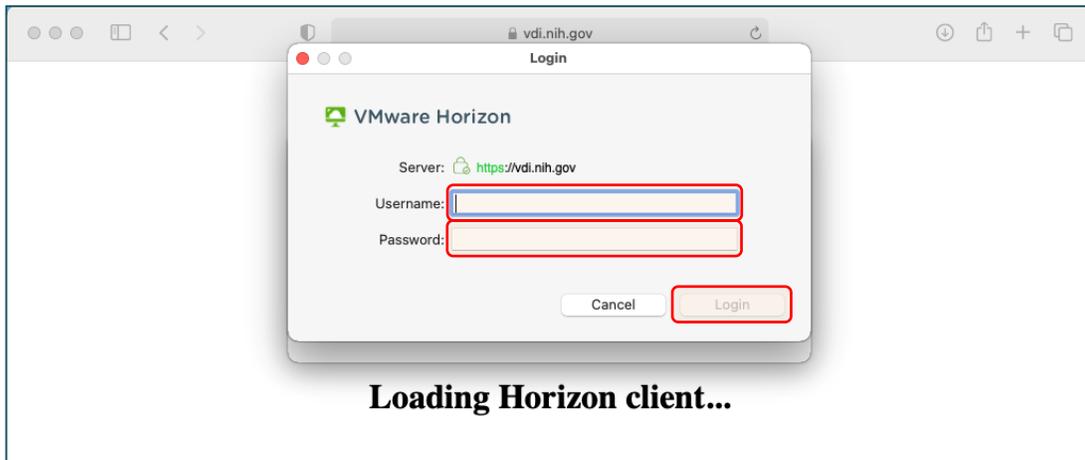
11. After successfully authenticating, you will be prompted to switch back to the VMWare Horizon application. Click **Allow**.



12. You will be prompted with a disclaimer notifying you that you are accessing a federal system. Click the blue **Accept** button.

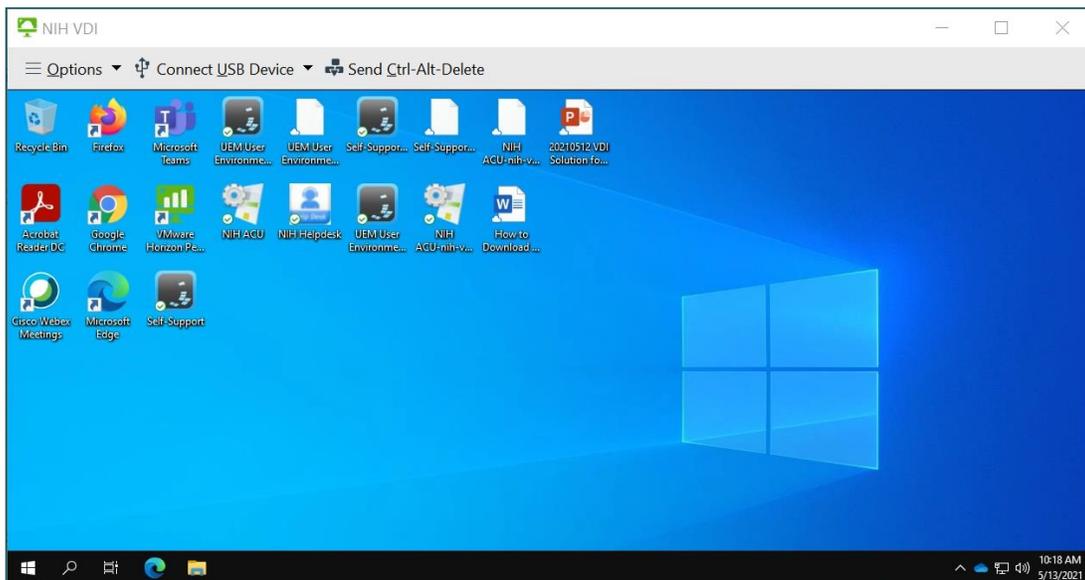


13. You will be prompted to log in using your NIH username and password. Enter your username and password into the corresponding areas and click **Login**.



Note: When entering your username, enter it as **nih\username** or **username@nih.gov** (example: enter nih\jdoe or jdoe@nih.gov).

14. When your virtual desktop loads, you will be automatically logged into a Windows 10 desktop as shown below.



15. You are now ready to use NIH's Virtual Desktop to complete your day-to-day activities!

## IT Support

For assistance, contact the NIH IT Service Desk.

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(866) 319-4357 (toll free)

(301) 496-8294 (TTY)

[itservicedesk.nih.gov](https://itservicedesk.nih.gov)

## Standard Applications and Resources Available on NIH's Virtual Desktop

Below is a list of applications that are pre-loaded or accessible using your virtual desktop (listed in alphabetical order).

- **Adobe Reader:** A tool that allows you to view, edit, and sign PDF documents
- **Anaconda:** An end-to-end data science platform
- **Biowulf:** NIH's state-of-the-art supercomputer that allows you to process and analyze large scientific datasets
- **Box\*:** A file storage tool that allows you to save, edit, and share documents and data with internal and external collaborators
- **Firefox:** A web browser that allows you to visit websites online
- **Google Chrome:** A web browser that allows you to visit websites online
- **Internet Explorer:** A web browser that allows you to visit websites online
- **MATLAB\*:** A tool that allows you to build applications, visualize data, and process data in a cloud environment
- **Microsoft Access:** A database management tool that allows you to manage and analyze large datasets
- **Microsoft Edge:** A web browser that allows you to visit websites online
- **Microsoft Excel:** A spreadsheet tool that allows you to create, organize, and edit large amounts of data/information
- **Microsoft OneNote:** A collaborative notepad tool that allows you to create notes and store multimedia
- **Microsoft Outlook:** An email tool that allows you to send and receive emails as well as schedule meetings with internal and external participants
- **Microsoft PowerPoint:** A presentation tool that allows you to develop slide decks
- **Microsoft Publisher:** A publishing tool that allows you to develop visually-compelling documents
- **Microsoft Teams:** A communication and collaboration tool that allows you to message and meet with team members, and share and edit files
- **Microsoft Word:** A file editing tool that allows you to create and edit documents
- **The NIH Library:** A biomedical research library that provides access to over 12,000 electronic journals, 160,000 eBooks, and over 50 databases
- **nVision\*:** A central data hub for reporting and data dissemination throughout the NIH
- **OneDrive:** A file storage tool that allows you to send a link and collaborate on a document in real time with a few colleagues
- **Python:** A programming language tool that allows you view and edit code
- **Query, View, and Report (QVR) System:** A tool that allows you to search for and select grants and grant applications
- **SharePoint Online:** A file storage tool that allows you to save, edit, and share documents with internal and external collaborators

- **Skype for Business:** A communication tool that allows you to meet and chat with internal collaborators
- **Webex:** A communication tool that allows you to meet with internal and external collaborators
- **Zoom for Government:** A communication tool that allows you to meet with internal collaborators

**If you need additional software, please contact your daily mentor or Principal Investigator (PI).** Your mentor/PI will authorize and coordinate software requests with the NIH IT Service Desk.

*\*Subject to licensing and authorization*