

# AFRC DESKTOP ANYWHERE WINDOWS 10 INSTALLATION GUIDE

*AFRC's Desktop-as-a-Service, aka Desktop Anywhere (DA), utilizes a user's personal computer (Mac/Windows), valid AF CAC, and additional applications (described below). Once launched on the computer, the DA session is a separate, containerized session completely isolated from the user's data, settings, hard drive, browser history or information of all kinds. There is no intermingling of anything between the secure, DA government session and the personal side of the computer, Essentially the DA session is a 'dumb' terminal that displays and accepts input--nothing is actually downloaded or uploaded to the user's computer.*

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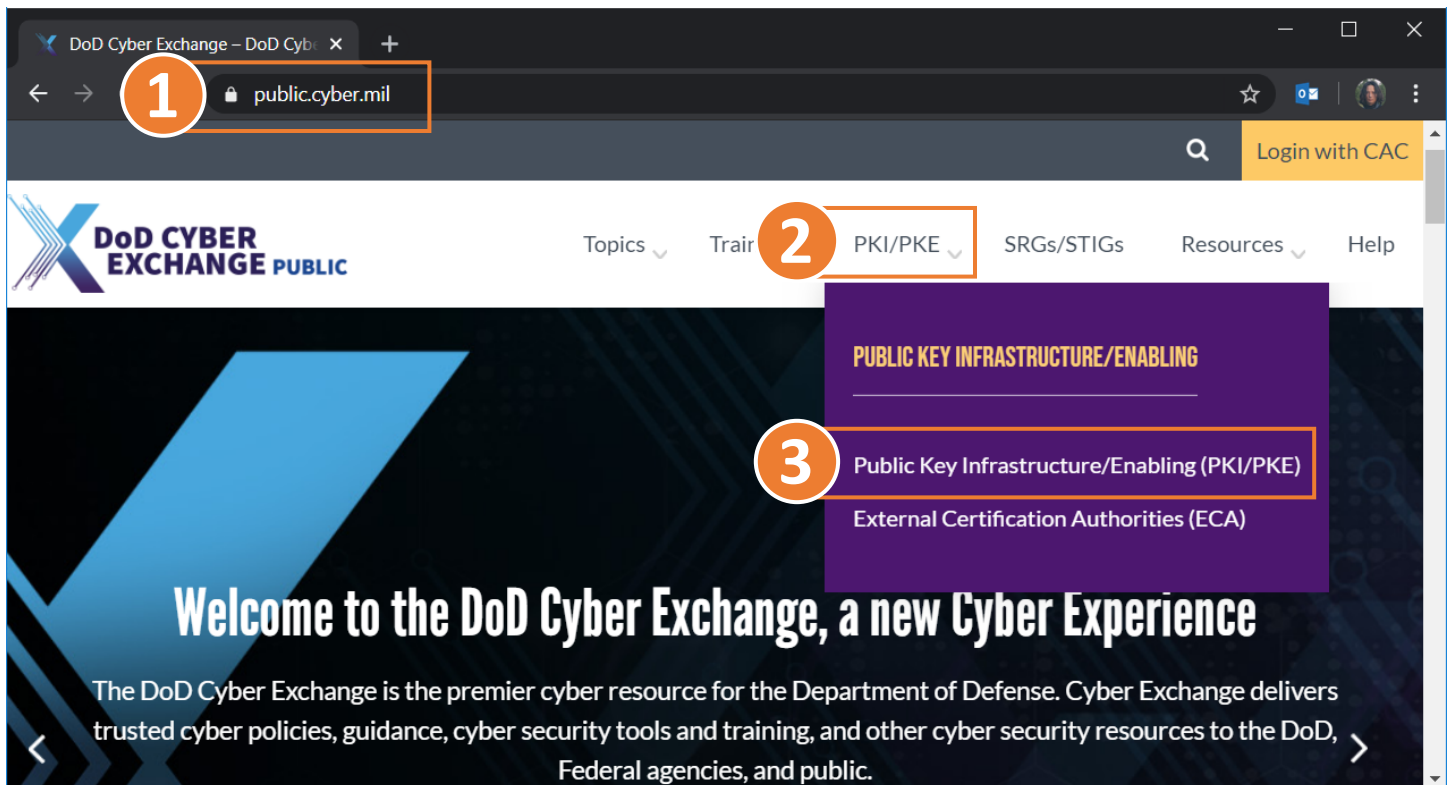
## QUICK LINKS

- My AF Portal – Desktop Anywhere Article  
*Find installation guides and related information here.*  
<https://www.my.af.mil/gcss-af/USAF/content/ZAHkU>
- DoD Cyber Exchange – PKI/PKE Document Library  
*Follow Windows directions to install DoD Certificates.*  
<https://public.cyber.mil/pki-pke/end-users/getting-started/>
- VMware Horizon Clients Product Download Page  
*Download the client appropriate to your operating system.*  
<https://www.vmware.com/go/viewclients>
- MS Office Teams Desktop Application – AFRC Desktop Anywhere  
*Teams group for questions and comments about DA (internal only).*  
[Join group - AFRC Desktop Anywhere](#)
- Facebook Group – AFRC Horizon View Desktop as a Service (aka Desktop Anywhere)  
*Community for questions and comments about DA.*  
<https://www.facebook.com/groups/359448488094264/>
- MilitaryCAC.com  
*Wealth of public information for Common Access Card (CAC) use and tips.*  
<https://militarycac.net/>

## DOD CERTIFICATES

*DoD Certificate Authorities (CAs) are required to establish a trust between the end users device and the Desktop Anywhere environment. This prerequisite can be fulfilled by downloading and installing the PKI-PKE tool InstallRoot (5.X) from the DoD Cyber Exchange Public website.*

### DOWNLOAD INSTALLROOT



1. Open your internet browser to the DoD Cyber Exchange Public Library.  
<https://public.cyber.mil>
2. Expand the **PKI/PKE** dropdown menu.
3. Select [Public Key Infrastructure/Enabling \(PKI/PKE\)](#).

The screenshot shows the DoD Cyber Exchange Public website. The left sidebar is purple and contains the following navigation items: PKI/PKE Home, About, Cryptographic Modernization, Document Library, End Users (highlighted with a red circle and the number 4), External and Federal PKI Interoperability, For Administrators, Integrators and Developers, For RAs, LRAs, KRAs & TAs, Policies, Mobile Devices & Purebred, RSS Feeds, Tools, Training, Web Content Filtering / Break and Inspect, and Help. A dropdown menu is open under End Users, with 'Getting Started' highlighted (circled with a red circle and the number 5). The main content area has a white background and contains the following text: 'Individuals who have a valid authorized need to access DoD Public Key Infrastructure (PKI)- protected information but do not have access to a government site or government-furnished equipment will need to configure their systems to access PKI-protected content. Accessing DoD PKI-protected information is most commonly achieved using the PKI certificates stored on your Common Access Card (CAC). The certificates on your CAC are used for activities such as accessing OWA, signing documents, and accessing information online. For more information about your organization's policies regarding remote access, visit <http://www.cac.mil>. Please review your organization's policies regarding remote access. To get started you will need: CAC, Card reader, Middleware (if necessary, depending on your operating system version). You can get started using your CAC by following these basic steps: 1. Get a card reader. At this time, the best advice for obtaining a card reader is to work with your home component to get one. In addition, please review the [DoD CAC Reader Specifications](#) for more information regarding the requirements for a card reader. 2. Install middleware, if necessary. You may need additional middleware, depending on the operating system you use. Please contact your CC/S/A for more information on the middleware requirements for your organization. You can find their contact information on our [Contact Us](#) tab. 3. Install DoD root certificates with InstallRoot (32-bit, 64-bit or Non Administrator). In order for your machine to recognize your CAC certificates and DoD websites as trusted, run the InstallRoot utility (32-bit, 64-bit or Non Administrator) to install the DoD CA certificates on Microsoft operating systems. If you're running an alternate operating system such as Mac OS or Linux, you can import certificates from the [PKCS 7 bundle](#). The [InstallRoot User Guide](#) is available here. 4. Make certificates available to your operating system and/or browser, if necessary. [Pick your browser](#) for specific instructions. An image of a sample CAC is shown in the top right corner.

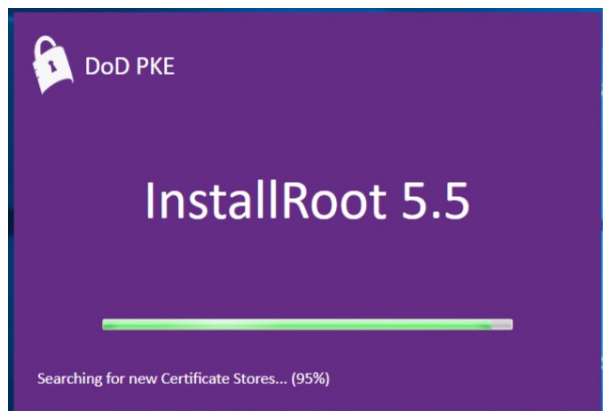
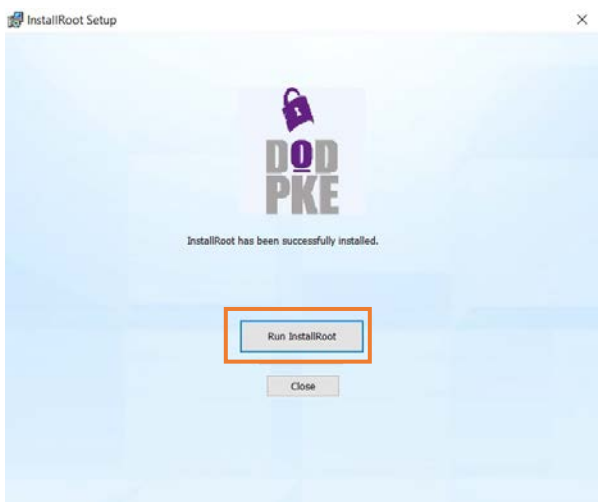
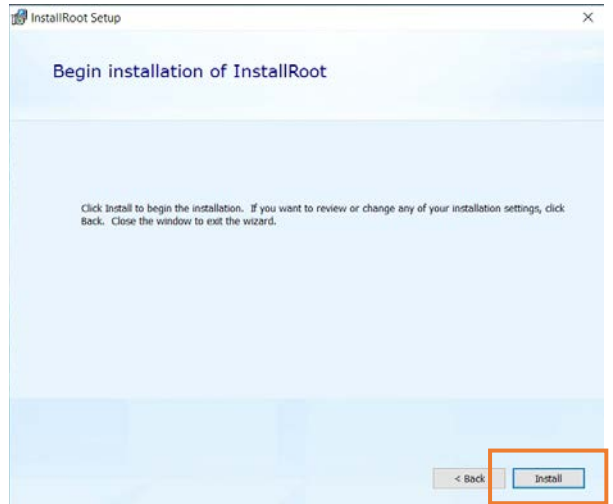
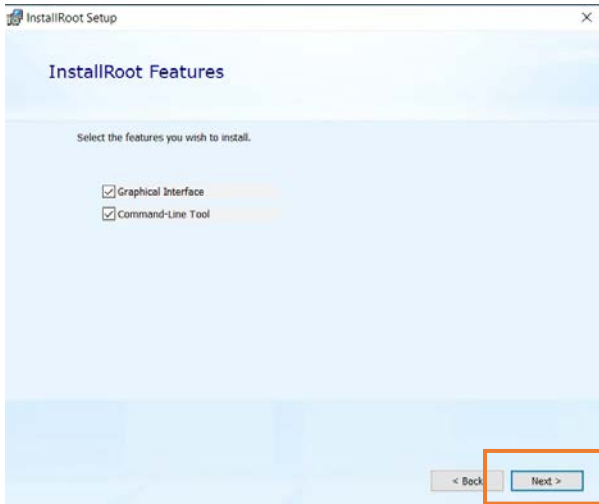
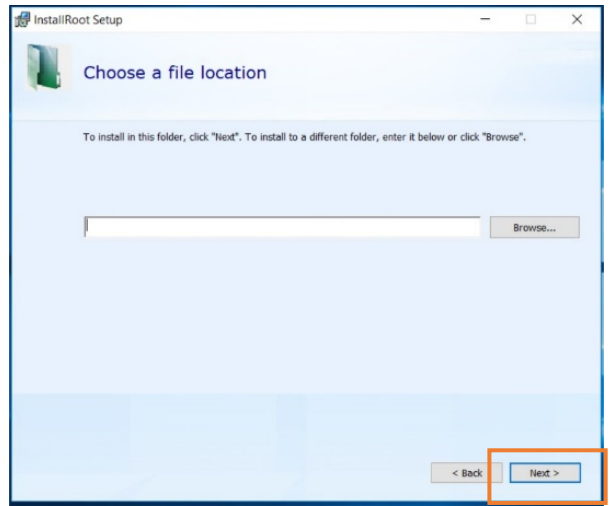
4. Hover over [End Users](#) in sidebar navigation and select [Getting Started](#).

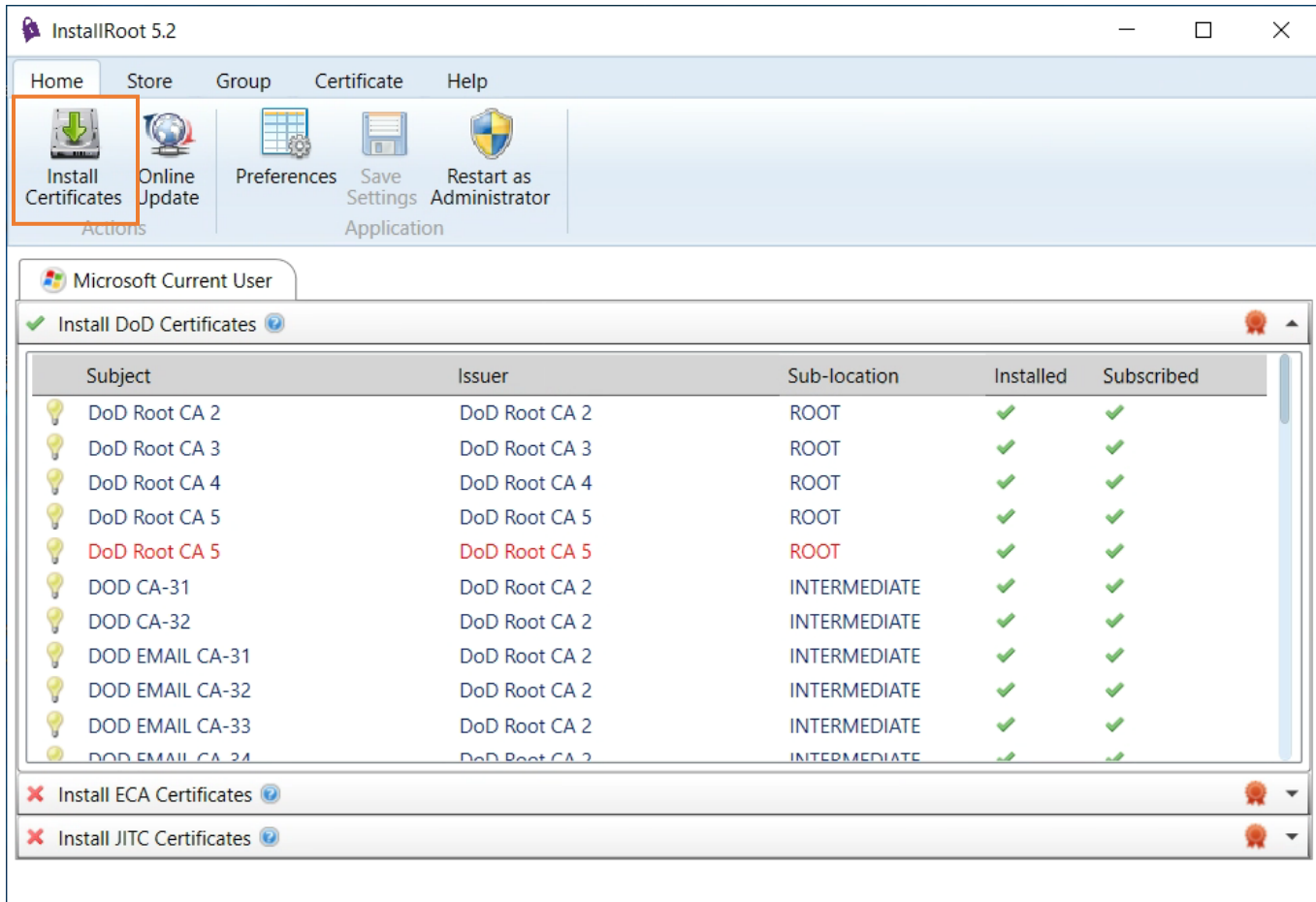
5. Select [Windows](#) to expand the guide section.

6. Use the provided links under step 3 to download **INSTALLROOT NON ADMINISTRATOR MSI INSTALLER**.

INSTALL INSTALLROOT

7. Execute the MSI installer and proceed through the installation wizard with default prompts.





*The following certificates should show as installed and subscribed.*

DOD Root CA 2 through DOD Root CA 5,  
 DOD EMAIL CA-33 through DOD EMAIL CA-34,  
 DOD EMAIL CA-39 through DOD EMAIL CA-44,  
 DOD EMAIL CA-49 through DOD EMAIL CA-52,  
 DOD EMAIL CA-59,  
 DOD ID CA-33 through DOD ID CA-34,  
 DOD ID CA-39 through DOD ID CA-44,  
 DOD ID CA-49 through DOD ID CA-52,  
 DOD ID CA-59  
 DOD ID SW CA-35 through DOD ID SW CA-38,  
 DOD ID SW CA-45 through DOD ID SW CA-48,  
 DOD SW CA-53 through DOD SW CA-58, and  
 DOD SW CA-60 through DOD SW CA-61

*Additional troubleshooting can be found from the InstallRoot User Guide available on [DoD Cyber Exchange](#).*

## MIDDLEWARE FOR CAC AUTHENTICATION

**(SITUATIONAL)** *Not all circumstances require a smartcard middleware application. Evolving development of CAC modernization changes the requirements for smartcard middleware applications for users of different organizations.*

- *Windows users who authenticate with EMAIL/SIGNATURE certificate (10 digit ID #) will be required to install a smartcard middleware.*
- *Windows users who authenticate with PIV/AUTHENTICATION certificate (16 digit ID #) can use the native Windows smartcard services, will not require a middleware application, and can skip this section.*
- *The following middleware applications are approved and tested for use to connect into our environment: Active Client, 90Meter, and CACKey.*

## DOWNLOAD ACTIVCLIENT

8. Download the **ACTIVID ACTIVCLIENT** installation package from the AFRC Desktop Anywhere article on AF Portal under the **ATTACHMENTS** table.

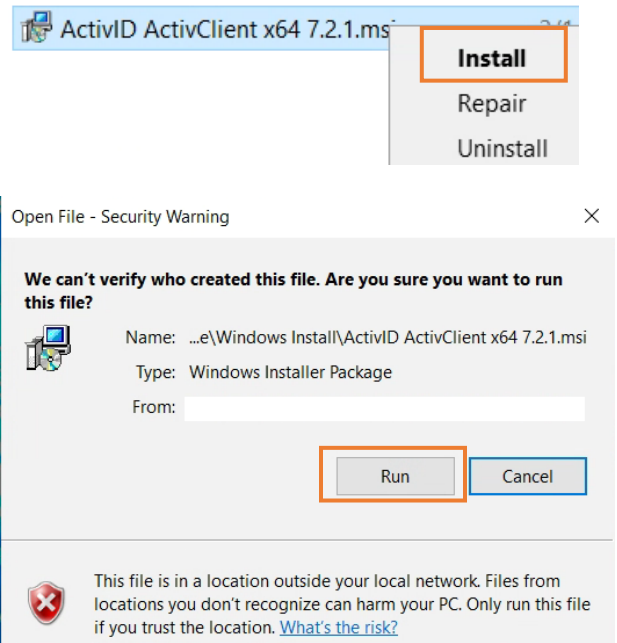
<https://www.my.af.mil/gcss-af/USAF/content/ZAHkU>

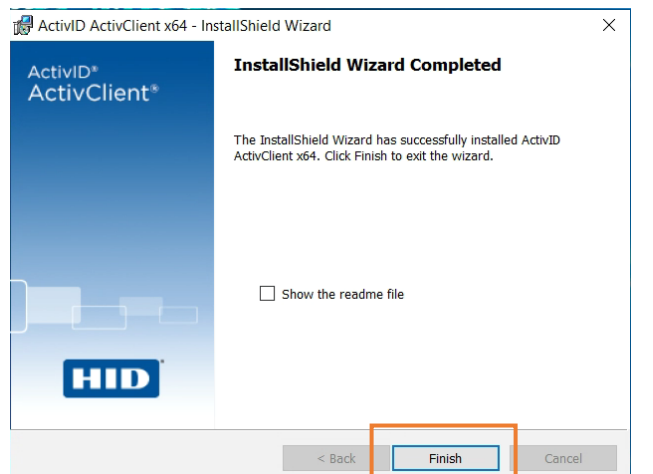
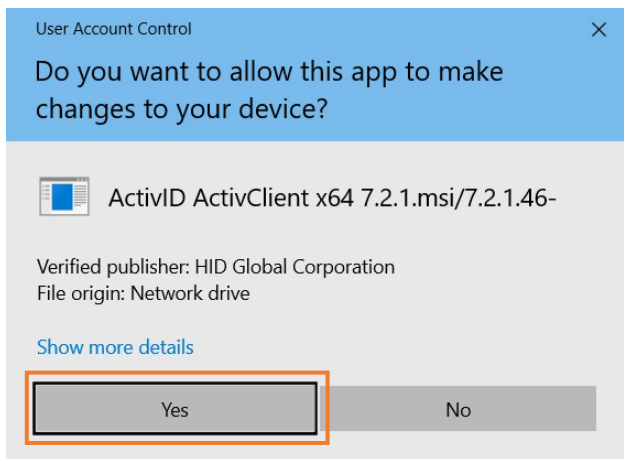
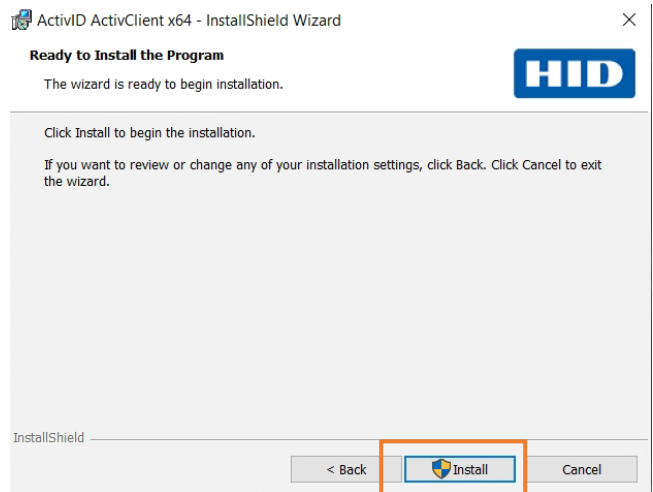
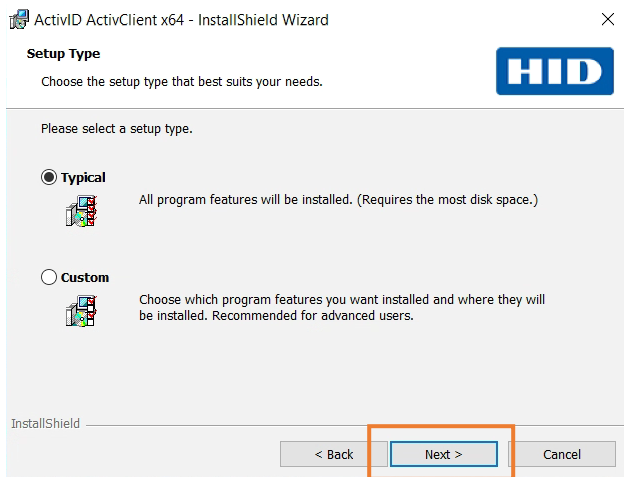
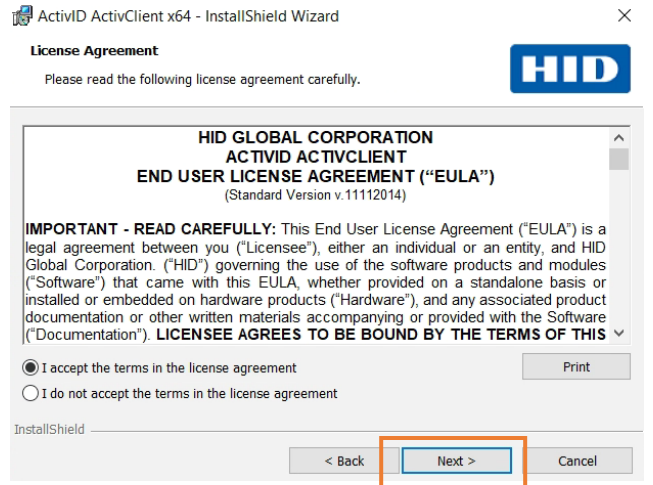
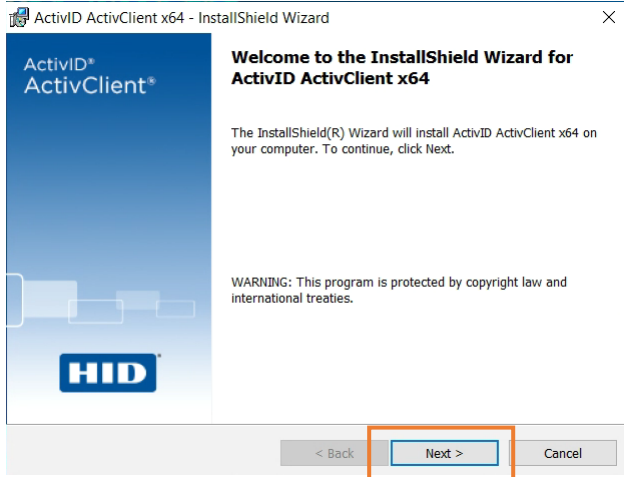
9. Open the downloaded ZIP package with **FILE EXPLORER** and extract the MSI installer file.

## INSTALL ACTIVCLIENT

10. Execute the MSI installer file by right-clicking the file and selecting **INSTALL** from the context menu.

11. Proceed through the installation wizard with default options.





12. After install completes, reboot your machine.



## VMWARE HORIZON CLIENT

Desktop Anywhere relies on VMware Horizon technology to provide end users access to all of their virtual desktops, applications, and online services through a single digital workspace. Users will have to download and install the VMware Horizon View Client to access the resources of Desktop Anywhere.

### DOWNLOAD VMWARE HORIZON CLIENT

Download VMware Horizon Client

vmware®

US 1-877-486-9273 | Communities | Store | Login

VMware Cloud Products Solutions Support Professional Services Downloads Partners Company

Home / VMware Horizon Clients

## Download VMware Horizon Clients

Select Version: VMware Horizon Clients for Windows, Mac, iOS, Linux, Chrome and Android allow you to connect to your VMware Horizon virtual desktop from your device of choice giving you on-the-go access from any location.

5.0

Read More

Product Resources

- View My Download History
- Product Info
- Documentation
- Horizon Mobile Client Privacy
- Horizon Community

Product Downloads Drivers & Tools Open Source Custom ISOs

Product	Release Date
<b>VMware Horizon Client for Windows</b>	
VMware Horizon Client for Windows	2019-12-12 <a href="#">Go to Downloads</a>
<b>VMware Horizon Client for Windows 10 UWP</b>	
VMware Horizon Client for Windows 10 UWP from the Microsoft store	2019-09-17 <a href="#">Go to Downloads</a>
<b>VMware Horizon Client for Mac</b>	

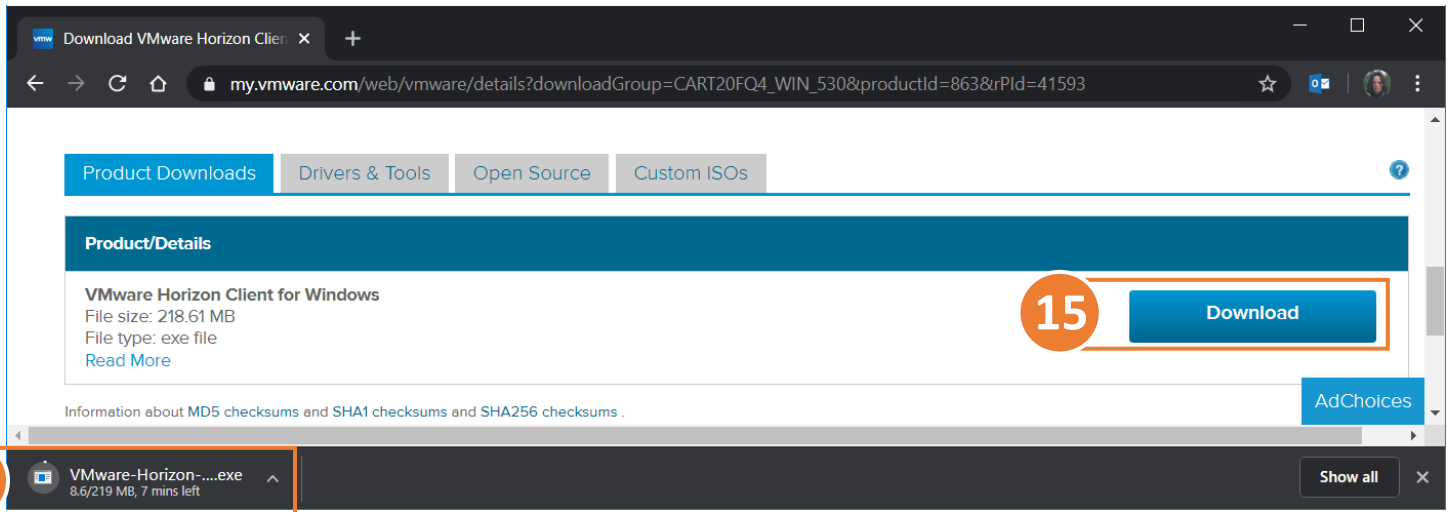
Waiting for my.vmware...

AdChoices

13. Open your internet browser to VMware Horizon Client product download page.

<http://www.vmware.com/go/viewclients>

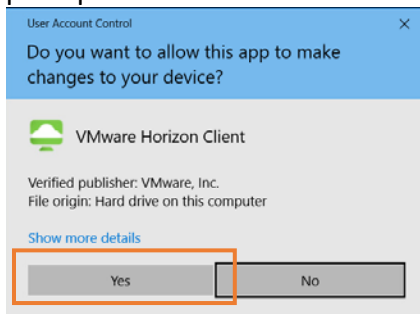
14. Select **GO TO DOWNLOADS** under the Windows product menu.



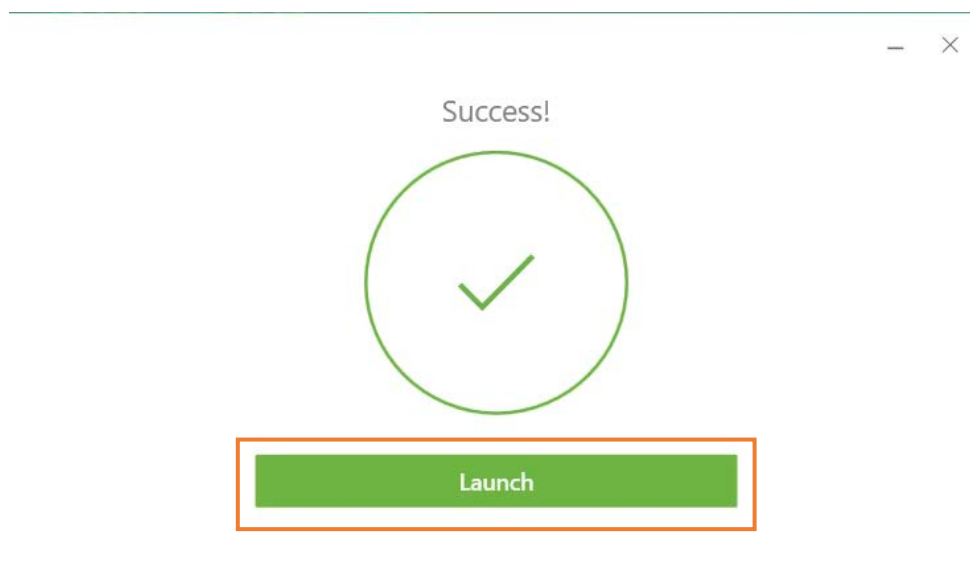
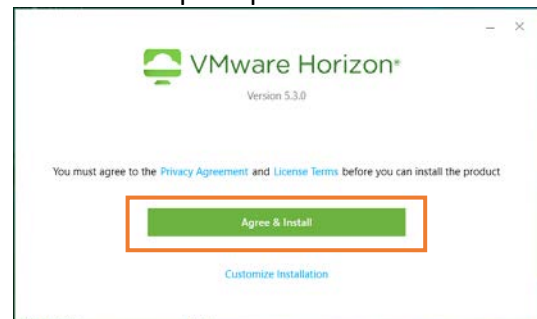
15. Use the **DOWNLOAD** link to save the installer to your device.

## INSTALL VMWARE HORIZON CLIENT

16. Execute the installer and accept UAC if prompted.



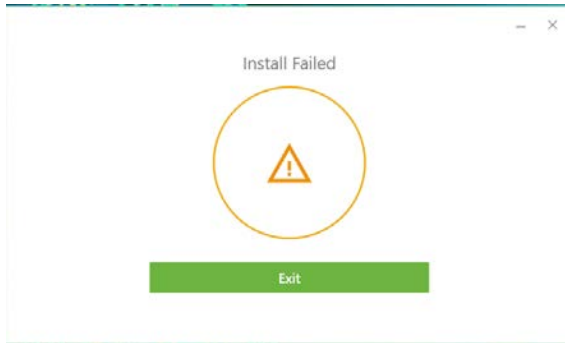
17. Proceed through the installation wizard with default prompts.



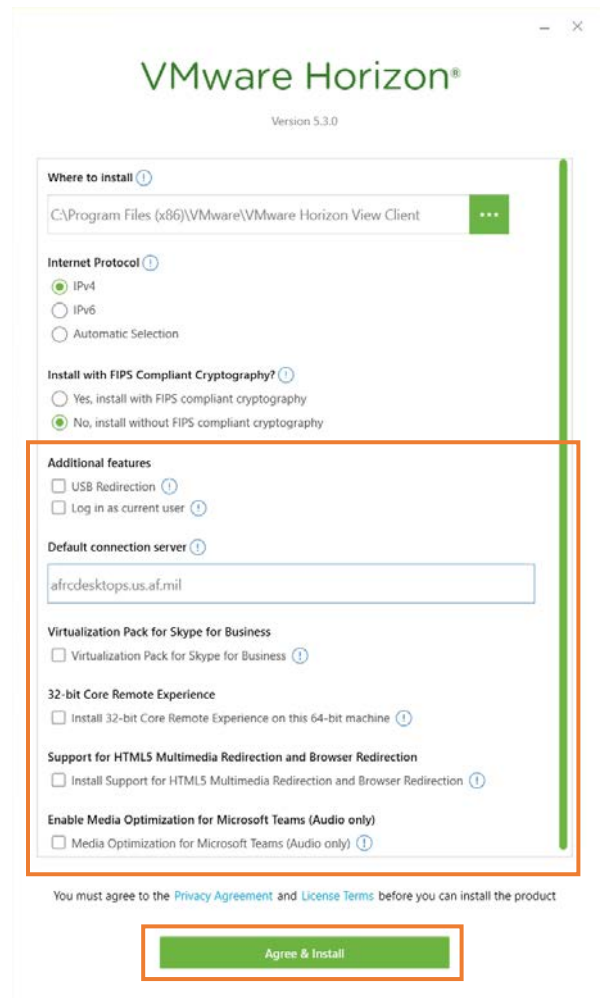
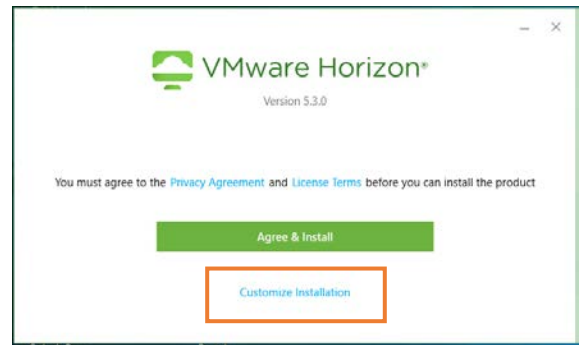
18. After the installation completes, reboot your machine.

**(TROUBLESHOOT) INSTALL FAILED**

If the install fails, relaunch the installer and instead use **CUSTOM INSTALLATION**.



Disable all checkboxes in custom installation options and select **AGREE & INSTALL**.



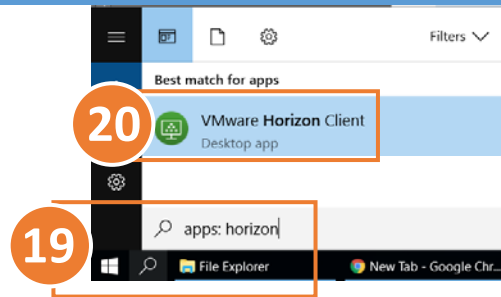
**After the installation completes, reboot your machine.**

Version specific installation information can be found on the [VMware product documentation page](#).

**ACCESS DESKTOP ANYWHERE**

19. Search the start menu for  
**APPS: HORIZON.**

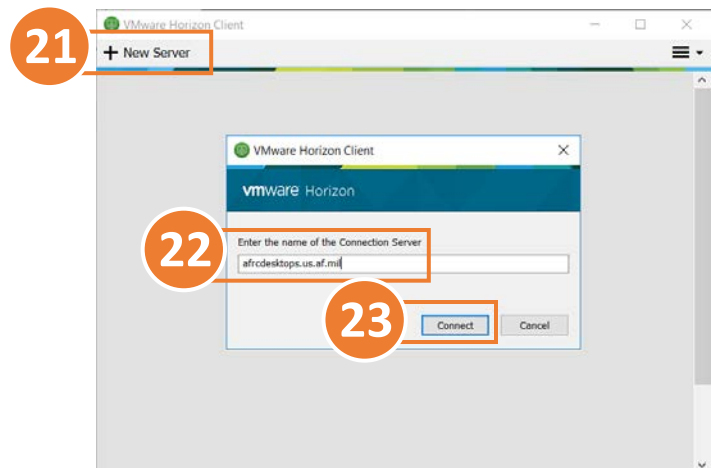
20. Open **VMWARE HORIZON CLIENT.**

**ADD CONNECTION SERVER**

21. Select **+NEW SERVER**

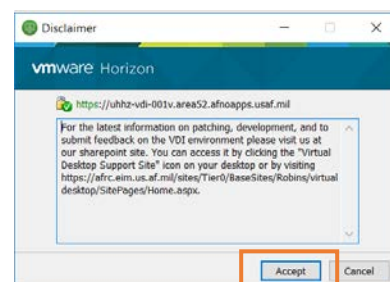
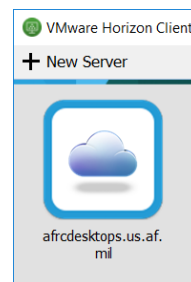
22. Enter **AFRCDESKTOPS.US.AF.MIL**

23. Select **CONNECT**

**CONNECT TO SERVER**

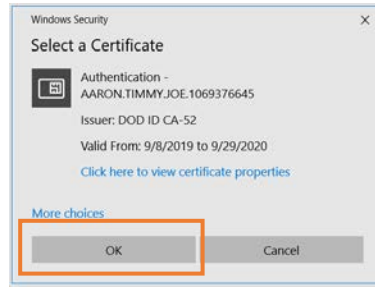
24. Double-click **AFRCDESKTOPS.US.AF.MIL.**

25. Read and **ACCEPT** disclaimer page.

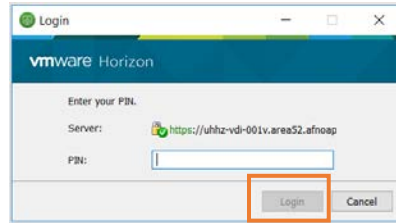


26. Select a Certificate.

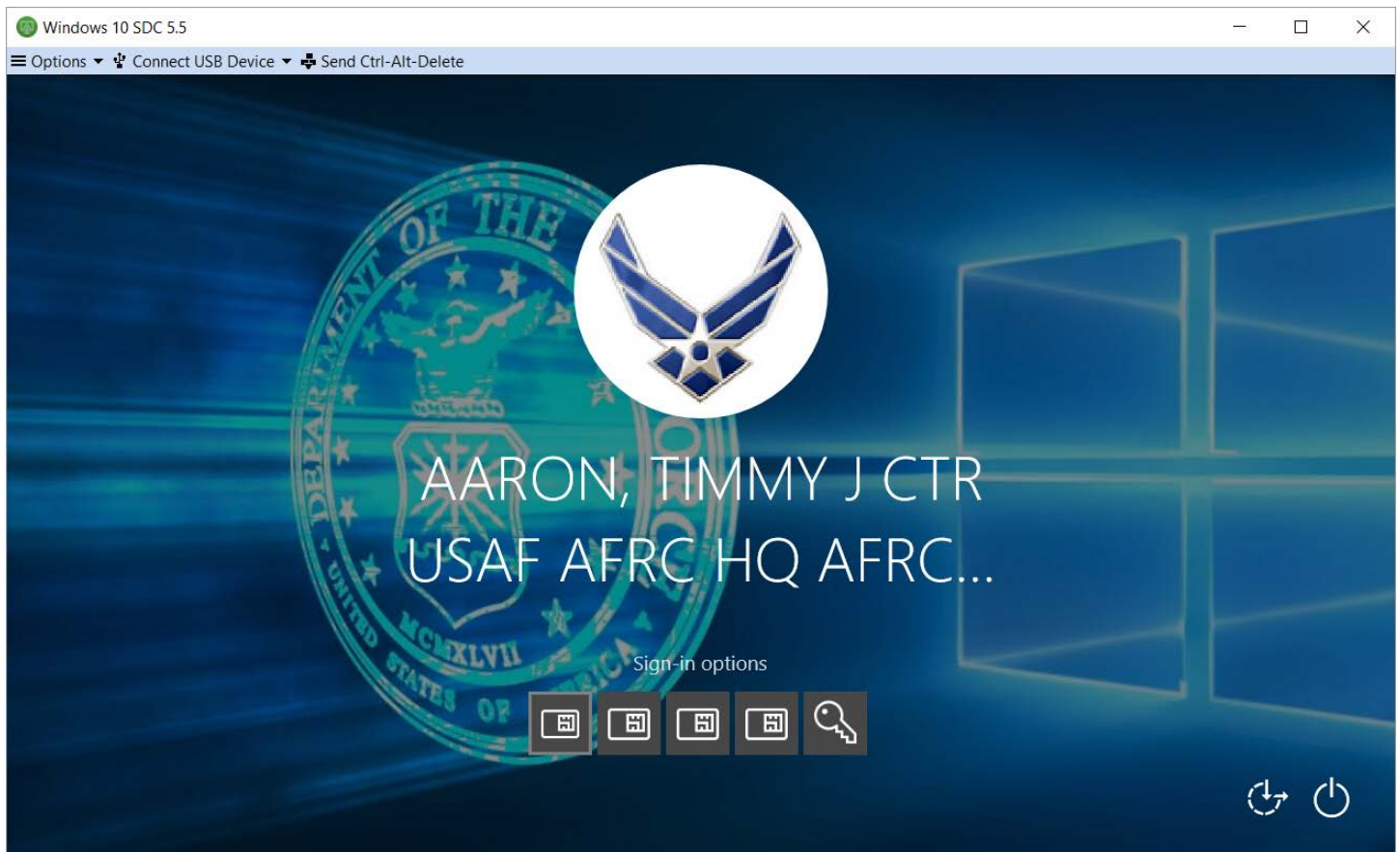
*First attempt with your PIV/Authentication certificate. If that should fail, then use the Email/Signature certificate.*



27. Enter PIN and LOGIN.



28. Launch the WINDOWS 10 SDC 5.X application.



**CONGRATULATIONS! YOU ARE NOW CONNECTING TO YOUR VIRTUAL DESKTOP.**

**(OPTIONAL) ADDITIONAL CONFIGURATIONS****DISABLE H.264 DECODING**

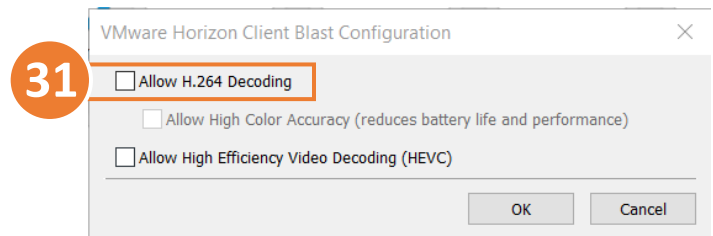
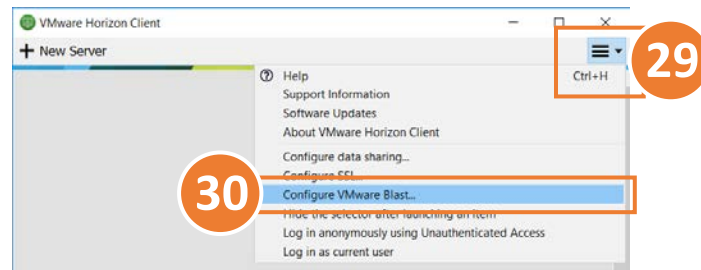
*Older systems may not support newer video technology and can benefit in reduced processing by disabling H.264 decoding.*

29. Expand the options menu on the top right of the application window

30. Select **CONFIGURE VMWARE BLAST**.

31. Deselect **ALLOW H.264 DECODING**.

32. Select **OK** to confirm configuration changes.

**CHANGE DEFAULT WINDOW BEHAVIOR**

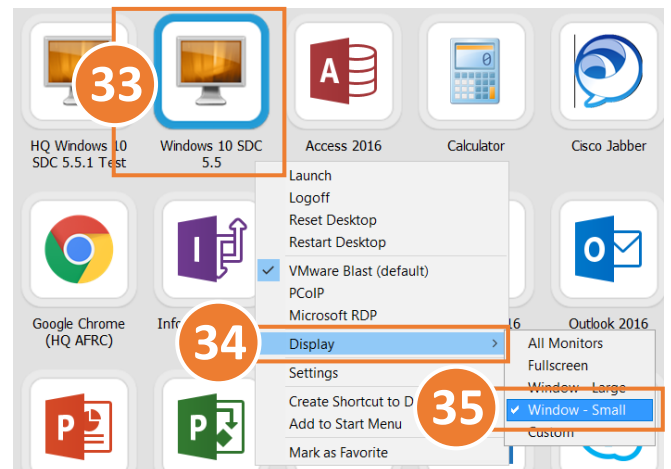
*Default behavior is to full screen all available monitors. Change this setting to increase performance and retain visibility of host device screen space. This setting can be changed at any time.*

33. Right-Click **WINDOWS 10 SDC 5.X** icon.

34. Expand **DISPLAY** menu.

35. Select **WINDOW – SMALL**.

*Additional options available for user preference.*

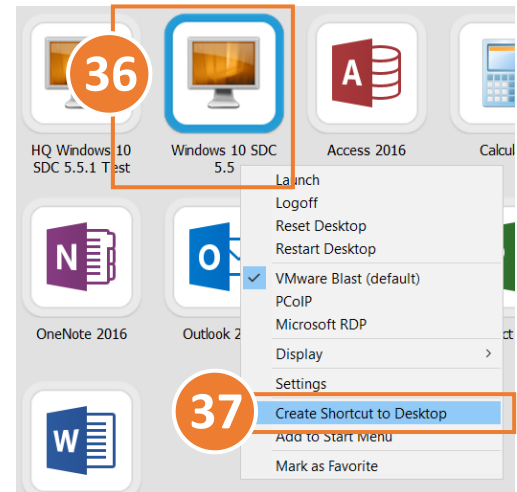


## CREATE SHORTCUT TO DESKTOP

*Create a desktop shortcut to the Windows 10 SDC 5.X application for easier access.*

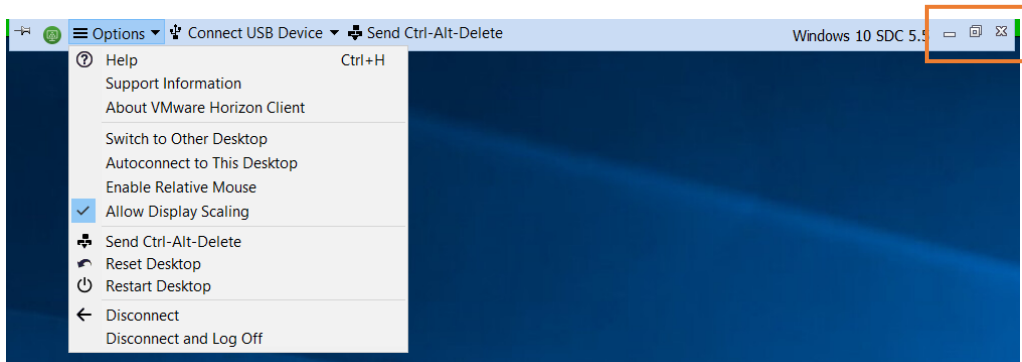
36. Right-Click **WINDOWS 10 SDC 5.X** icon.

37. Select **CREATE SHORTCUT TO DESKTOP**.



## WINDOW CONTROLS

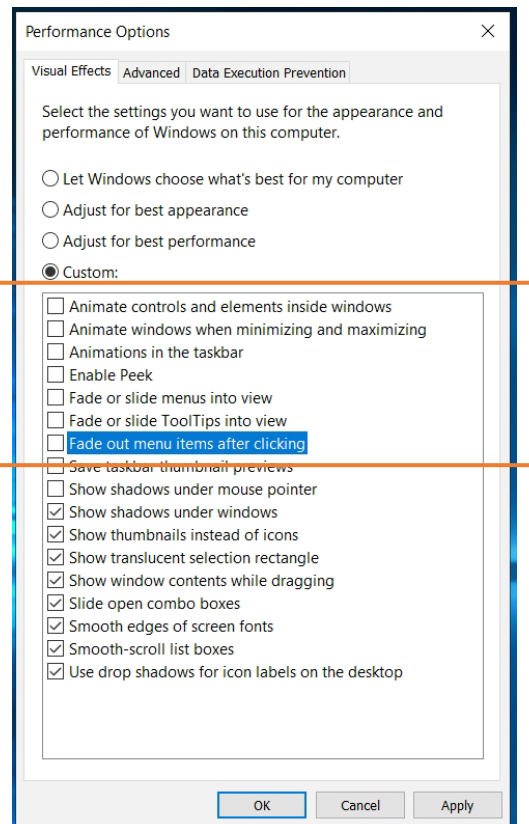
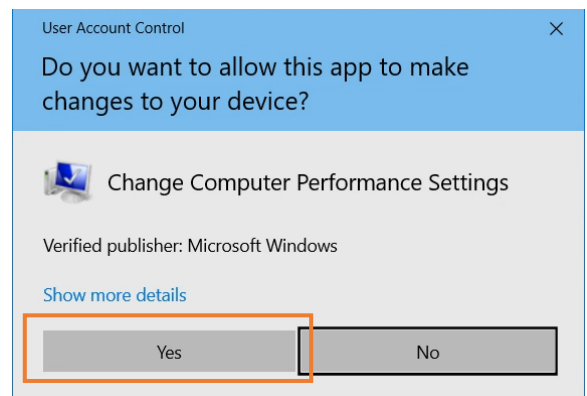
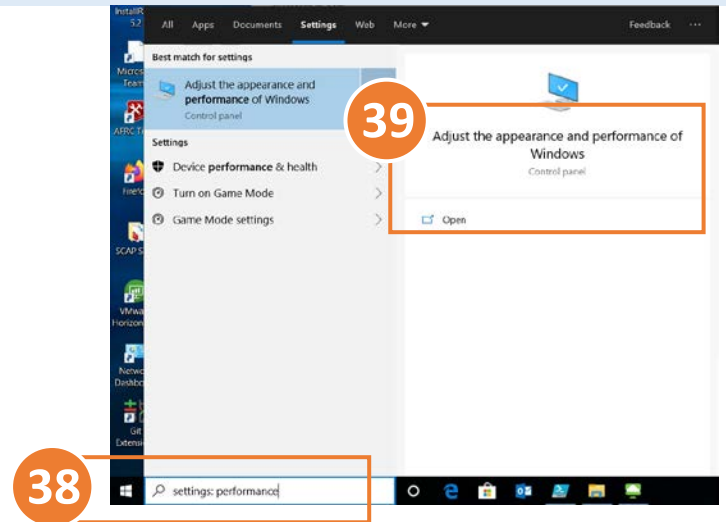
*When in full-screen mode, application window controls can be found by hovering your mouse over the top center of the main monitor. Change the window size by selecting a corner of the application window and dragging to desired scale.*



## DISABLE ANIMATIONS

*Disabling animation effects can slightly increase performance by reducing bandwidth consumption.*

38. From your virtual desktop, open the start menu and enter **SETTINGS: PERFORMANCE**.
39. Select **ADJUST THE APPEARANCE AND PERFORMANCE OF WINDOWS** item from Control Panel
40. Accept UAC if prompted.
41. Disable animated effect checkboxes and select **OK** to confirm changes.





## TROUBLESHOOTING AND FAQ

*This section is for any issues we can account for that our users may encounter during the setup of Desktop Anywhere. If you encounter any issues that are not listed below, please contact the HQ AFRC Help Desk at **Comm 478-327-1999 or DSN 497-1999**, weekdays 0900-1700. Please ensure you are following the latest guide available on the [AF Portal](#). Provide screenshots of any errors and which step you are on.*

### **1. I am receiving a “Timeout” error when attempting to connect**

- a. This is a known issue that is resolved internally by the virtualization team. If you receive this error, you need to contact the help desk and have them inform the Virtualization team

### **2. I am receiving a “SSL” error when attempting to connect**

- a. This error typically occurs when you do not have the proper prerequisite installed. Please ensure that you have all DoD certs installed and the proper CAC middleware

### **3. General issues with certificates**

- a. If you are having issues with your user certificate, always attempt to use a secondary certificate before further troubleshooting. Most CACs have a signature and an email certificate that can be used with Desktop anywhere

### **4. I enter the proper credentials I receive this message: “You are not entitled to use the system”**

- a. This means your selected credential is not entitled to any desktop/application pool. You will have to contact the HQ AFRC Help Desk to get them to add you to the appropriate security groups for access

### **5. I can’t see all of my available certificates**

- a. This may be due to a Certificate Authority issue. You will have to locate the missing certificate and open the Certification Path tab. Submit the full certificate path to the HQ AFRC Help Desk for further investigation

### **6. I am receiving the message “Error: A network error occurred”**

- a. This could be due to an incorrect name when inputting the Connection Server name.
- b. If you are using a government laptop from home, you need to verify that you have disabled your proxy settings in Internet Options.