

ICPSR VDE User Guide

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Technical Support

This guide shows you how to connect to the ICPSR VDE and how to access your project data.

For assistance with the ICPSR VDE please contact ICPSR-help@umich.edu.

The VMware login and installation windows that you encounter on your personal computer may differ slightly from the screenshots shown in this Guide due to variations in the VMware client version that you install, your operating system, your networking setup, and the web browser that you use.

Obtain a VDE ID and Activate Duo Two-Factor Account

When your research project has been approved and all required agreements have been signed and processed the VDE support group will provide each project collaborator with a unique username, a temporary password, and instructions for setting up a Duo Two-Factor account. With these credentials you can access the ICPSR VDE.

Passwords

Upon receipt of your password please visit <https://password.it.umich.edu> to change your temporary password. This must be done before you use your account credentials to access the VDE.

Your password must use nine or more characters, with characters in at least three of the following categories:

- lowercase letters
- uppercase letters
- numerals
- punctuation

While on the password change website, please also configure security questions and an email address that can be used to automatically reset your password if needed.

If you do not set up your security questions and email address, send your request for a password reset to ICPSR-help@umich.edu.

Two-factor Authentication

When you attempt to log on to the VDE you will be required to provide two credentials: (1) your U-M username (i.e., username) and U-M password and (2) approval of a Duo notification or a code generated by a Duo hardware token.

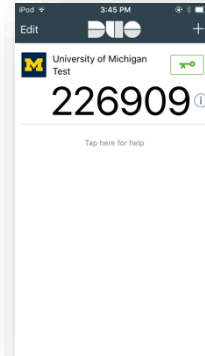
Hardware Token

A Hardware token can be purchased from ICPSR



Software MToken

Once installed on a mobile device and configured, the Duo app



will allow for approvals, or will display codes

Duo Two-Factor Account

Logging in to the VDE requires a password and a second-factor device from Duo. Duo provides a smartphone app for easy access. The smartphone app is available for iOS, Android, Blackberry, and Windows phones. When you attempt to logon to the VDE a notification will be sent to your smartphone Duo app. You will be prompted to approve or deny the logon attempt. If you approve your logon will proceed. If you are in a location without phone or internet service, you can use a code generated by the smartphone app to complete your logon to the VDE. If you do not have access to a smartphone, your Duo account can be configured to send you an access code via SMS message or to call a landline for approval. A small hardware token can be purchased from ICPSR if you are unable to use any of these methods. For more information about Duo Security, please visit <https://www.duo.com>.

Your Duo Two-Factor Account can be configured on the password management page at <https://password.it.umich.edu>. Follow the steps illustrated there.

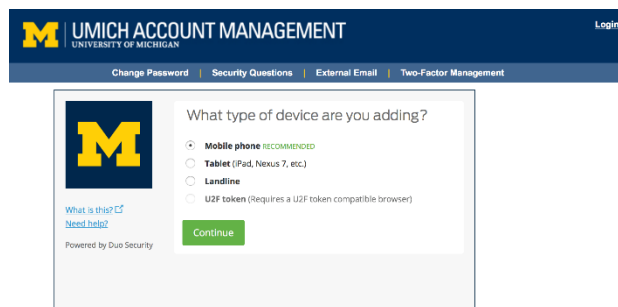
From the U-M password change page, select the 'Two-Factor Management' tab.



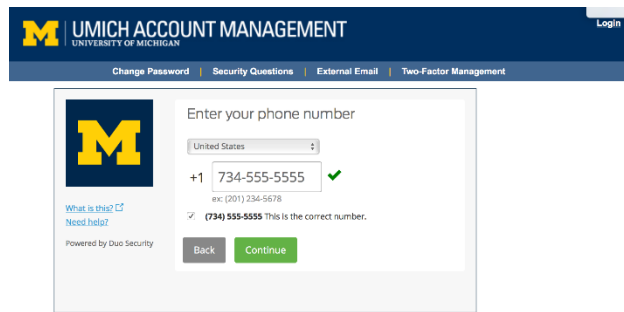
Click 'Start Setup'



Select the type of device you are enrolling and click 'Continue'



If prompted, enter your device's phone number, confirm the number is correct and click 'Continue'



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Change Password | Security Questions | External Email | Two-Factor Management

Enter your phone number

United States

+1 734-555-5555 ✓

ex: (201) 234-5678

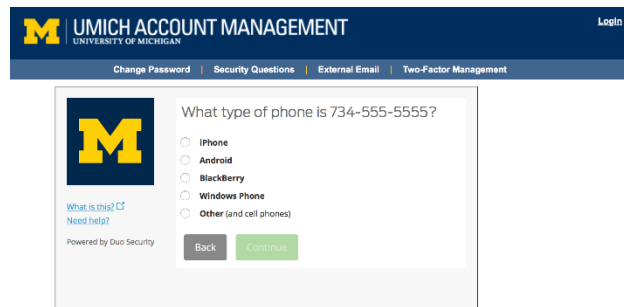
✓ (734) 555-5555 This is the correct number.

Back Continue

What is this? Need help?

Powered by Duo Security

If prompted select your device's Operating System and click 'Continue'



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Change Password | Security Questions | External Email | Two-Factor Management

What type of phone is 734-555-5555?

☐ iPhone

☐ Android

☐ BlackBerry

☐ Windows Phone

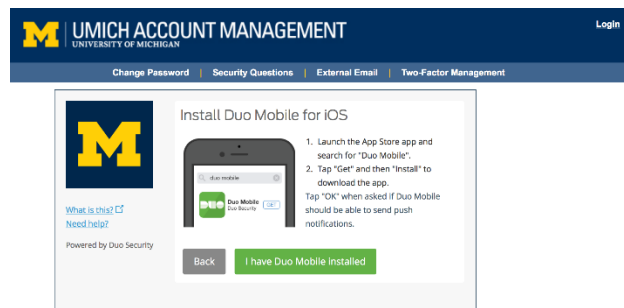
☐ Other (and cell phones)

Back Continue

What is this? Need help?

Powered by Duo Security

Follow the directions to install the Duo Mobile app on your device. Once installed, click 'I have Duo Mobile Installed'



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Change Password | Security Questions | External Email | Two-Factor Management

Install Duo Mobile for iOS

1. Launch the App Store app and search for "Duo Mobile".

2. Tap "Get" and then "Install" to download the app.

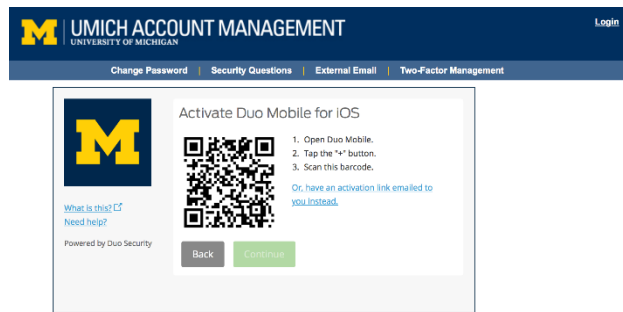
Tap "OK" when asked if Duo Mobile should be able to send push notifications.

Back I have Duo Mobile Installed

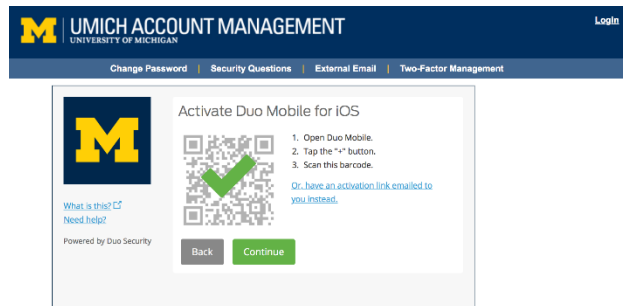
What is this? Need help?

Powered by Duo Security

Follow the instructions to use your device's camera to activate Duo Mobile.



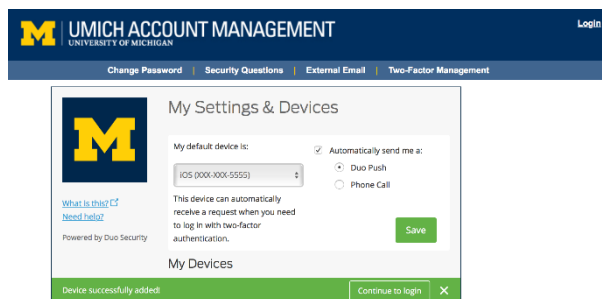
Once activated a checkbox will automatically appear on the screen. Click 'Continue'



Check the box to automatically send a push notification and click 'Save'

Your Duo app is now configured to provide approvals.

Click the 'X' to exit.



Purchasing a Hardware Token from ICPSR

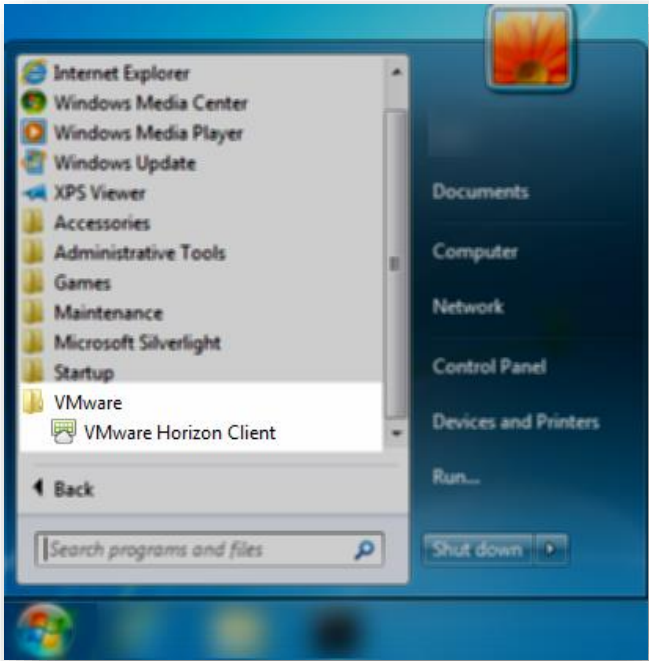

If you do not have access to a smartphone and do not want to use text messaging or landline phone calls for access, you may purchase a hardware token from ICPSR for \$35. To purchase a token, please contact Ren Lee at (734) 763-9023 between 8:00 a.m. and 4:00 p.m. EST.

Lost Hardware Tokens

You must contact ICPSR-help@umich.edu if a hardware token is lost or stolen.

Launch VMWare Horizon Client

To connect to the VDE launch the VMware Horizon Client.¹

Windows	Mac
<p>From the Start menu select</p> <p><i>All Programs >> VMware >> VMware Horizon Client</i></p>  <p>The screenshot shows the Windows Start menu with a list of programs. The 'VMware' folder is expanded, and 'VMware Horizon Client' is highlighted. The taskbar at the bottom shows the Start button and several application icons.</p>	<p>Click on the <i>VMware Horizon Client</i> icon in your Applications folder</p>  <p>The icon is a white square with a green grid pattern and a white cloud shape in the center. Below the icon, the text 'VMware Horizon Client.app' is displayed.</p>

¹ For installation guidance consult https://www.icpsr.umich.edu/files/VDE/VMWare_Download_Instructions.pdf.

Log On to the VDE

Once the VMware client launches connect to the virtual desktop server.

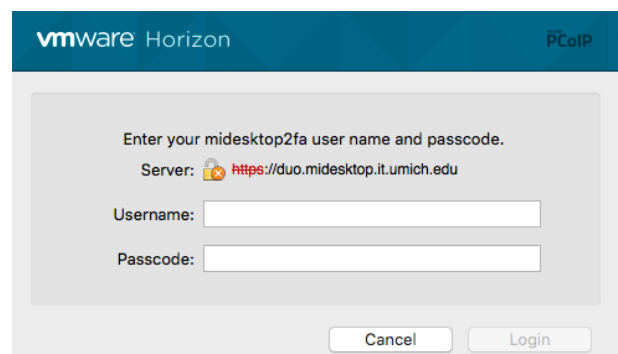
Double-click the icon labelled
2fa.midesktop.it.umich.edu



A dialog will prompt you for your username and a passcode.

The passcode is your **U-M PASSWORD**

Click the **Logon** button to proceed.

The image shows a login dialog box with a blue header bar containing 'vmware Horizon' and 'PCoIP'. The main area has a grey background with the text 'Enter your midesktop2fa user name and passcode.' Below this, it says 'Server: https://duo.midesktop.it.umich.edu'. There are two input fields: 'Username:' and 'Passcode:'. At the bottom right, there are two buttons: 'Cancel' and 'Login'.

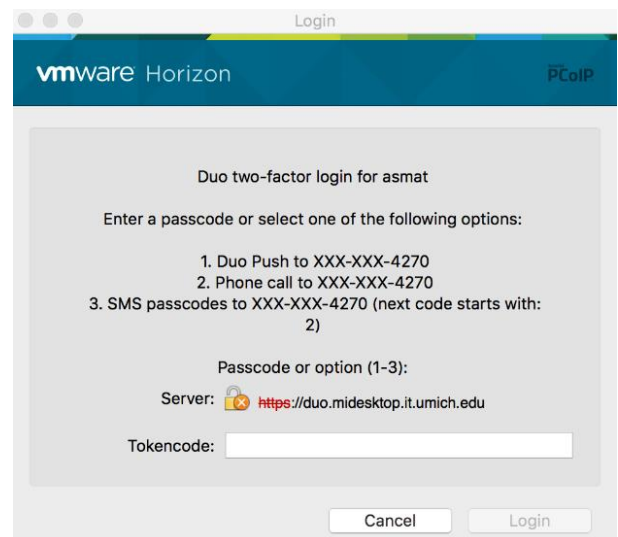
Next, you will be prompted for Duo Two-Factor approval.

Press '1' and click '**Login**' to receive a push notification to your smartphone for approval.

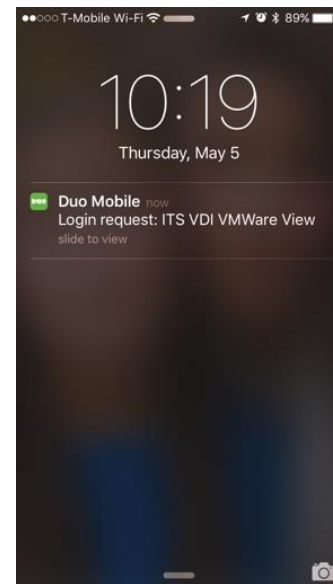
Press '2' and click '**Login**' to receive an automated phone call for approval.

Press '3' and click '**Login**' to receive a passcode via SMS. Then Enter the token code received.

Or enter the token code displayed on your smartphone app or hardware token.

The image shows a Duo two-factor login dialog box with a blue header bar containing 'vmware Horizon' and 'PCoIP'. The main area has a grey background with the text 'Duo two-factor login for asmat'. Below this, it says 'Enter a passcode or select one of the following options:'. There are three numbered options: '1. Duo Push to XXX-XXX-4270', '2. Phone call to XXX-XXX-4270', and '3. SMS passcodes to XXX-XXX-4270 (next code starts with: 2)'. Below the options, it says 'Passcode or option (1-3):'. There is a 'Server:' label with the URL 'https://duo.midesktop.it.umich.edu'. Below that is a 'Tokencode:' label and an input field. At the bottom right, there are two buttons: 'Cancel' and 'Login'.

If you selected a push notification, open the push notification received on your smartphone.

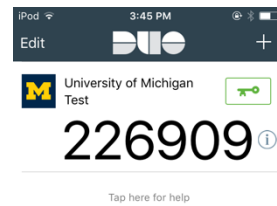


Once the Duo app is open, click the green 'Approve' button. You will then automatically be logged in.

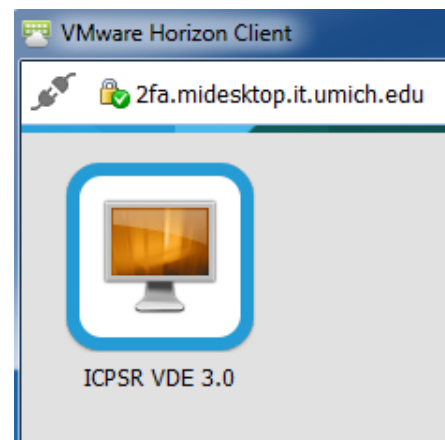
If you receive a push notification when you did not attempt to login, press the red 'Deny' button to deny access.



If you cannot receive a push notification, open the Duo Mobile app, and press the green key icon. A 6-digit passcode will appear. Enter that passcode on the VDE Duo-factor login screen. Note that the passcode changes every 60 seconds. You must enter the current passcode to be approved.



Upon logon double-click the icon to open a VDE session.



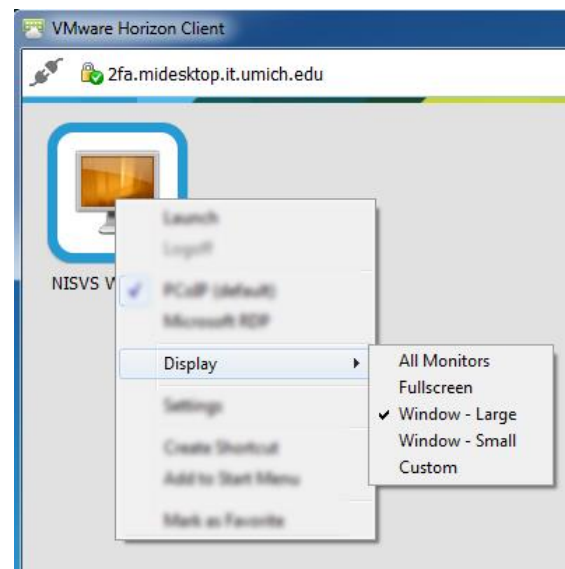
Set the VDE Display Size

Those who use the Windows VMWare client can configure the VDE session to display in full screen or as a window. The display options are:

Display Option	Description
All Monitors	Full screen display across all connected monitors. This is the default setting.
Fullscreen	Full screen display on primary monitor
Window - Large	Large window display
Window - Small	Small window display
Custom	Custom window size

To change the display configuration, follow these steps. You need do this only once. The setting is persistent.

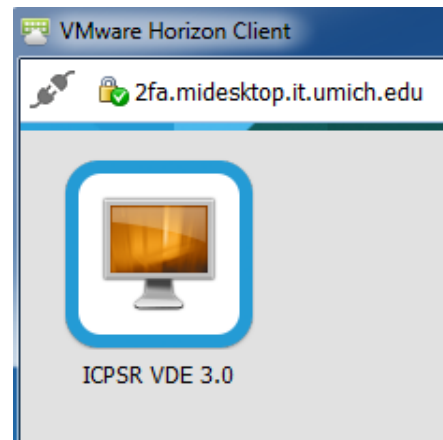
1. Log on to the VDE server
2. Right-click your project icon
3. Select *Display* from the pop-up menu
4. Select a display option from the fly-out menu



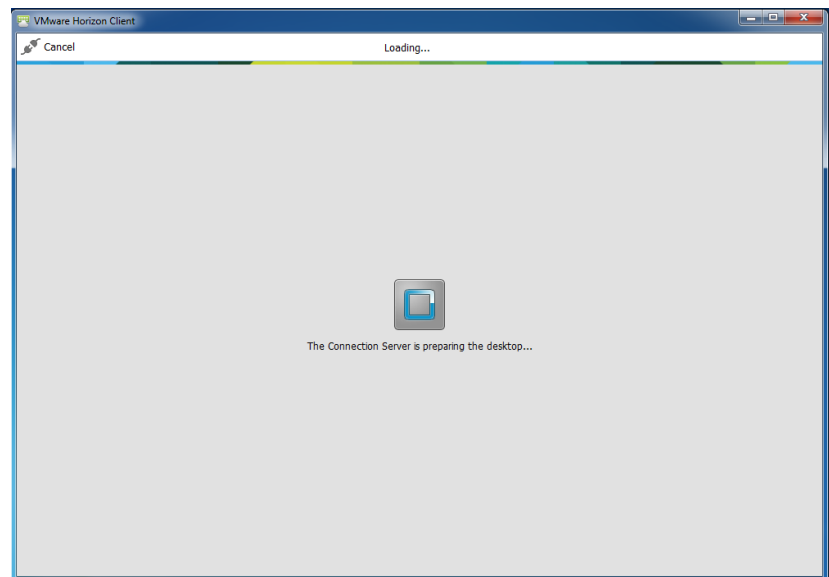
Note: These configuration options are not available to those who use the Mac client.

Start a VDE Instance

Double-click the icon to start a VDE session.

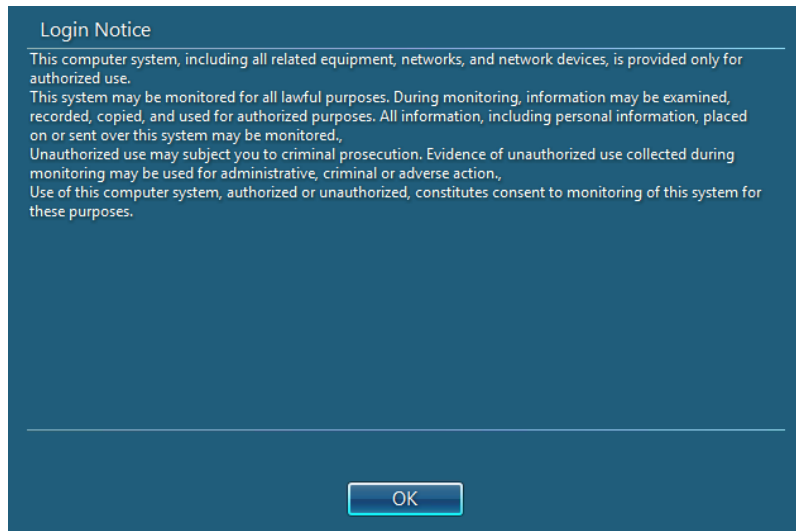


While the connection is established you will see a notification that your virtual desktop is being prepared.

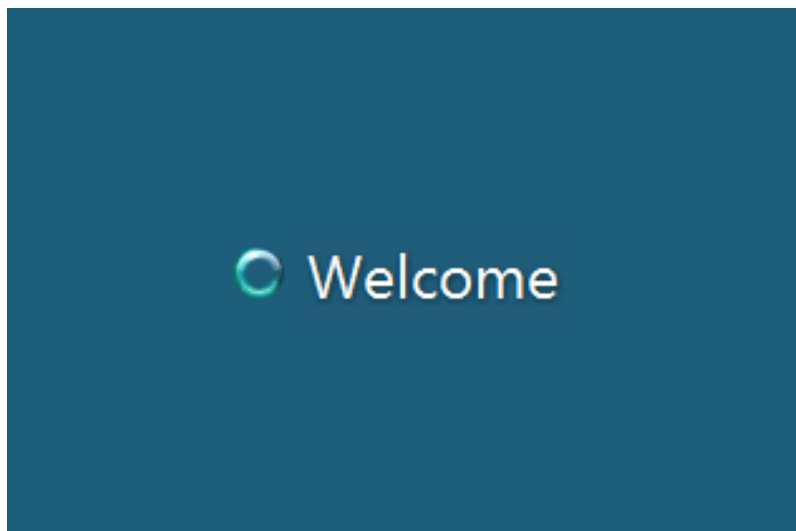


Start (con't)

After the connection is established you will see a Login Notice. Review the notice and if you accept the terms of use click the **OK** button to continue.



You will see a spinning circle as the new virtual machine *instance* is created. At this stage your user profile, files, and software are being prepared for your use.

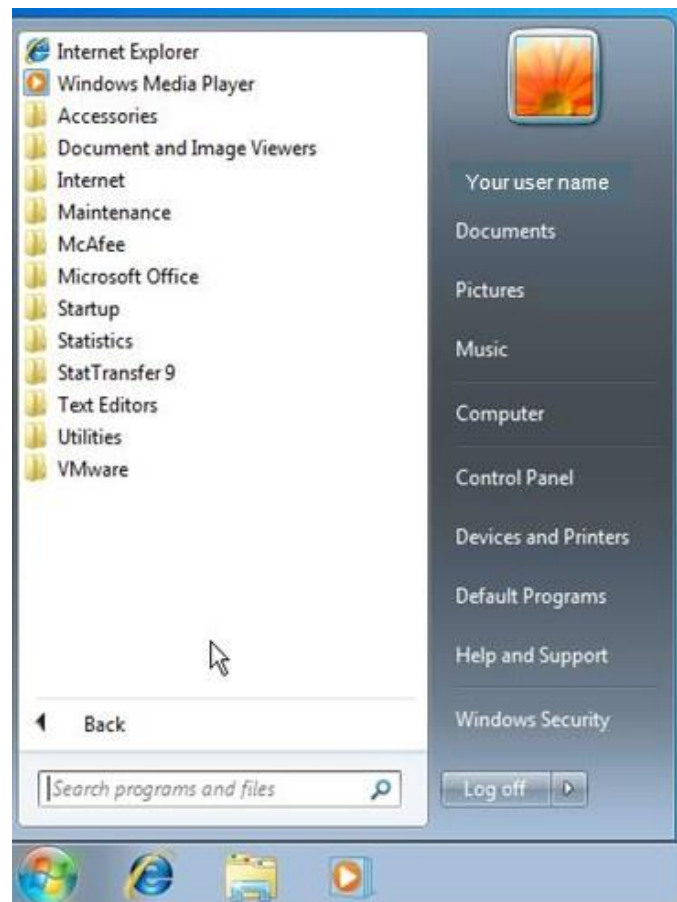


Windows Start Menu in the VDE

The Windows **Start** menu for your VDE is independent of your local desktop. The applications listed on the VDE Start menu will execute in the virtual environment only.

The VDE **Start** menu includes an Internet folder that contains links to several SSH clients. Those clients can connect to approved ICPSR servers.

All access between the Internet and VDE is blocked.



Log Off from the VDE

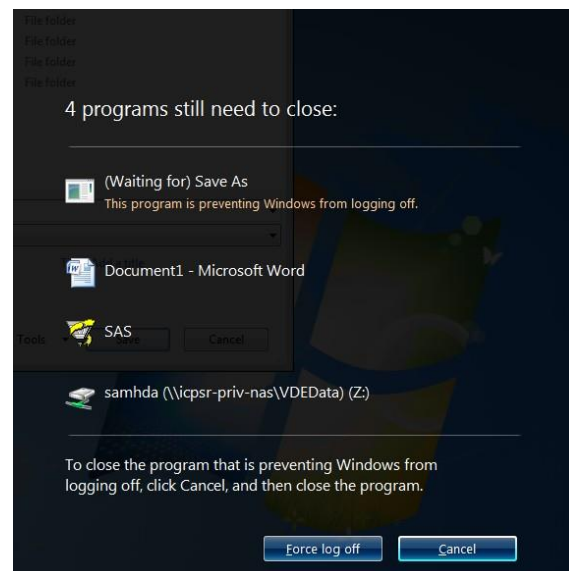
Logging off disconnects you from the VDE instance, stops all open programs in the VDE, and logs you off. Unsaved data are lost.

To Log off, open the **Start** menu and click the **Log off** button.

Do not simply close the VDE session window. Doing so will not log you off.



If any programs in the VDE are open when you select **Log off**, a warning message lists the programs that are open and gives you the opportunity to either cancel logging off or to continue to log off and force the closure of the open programs.



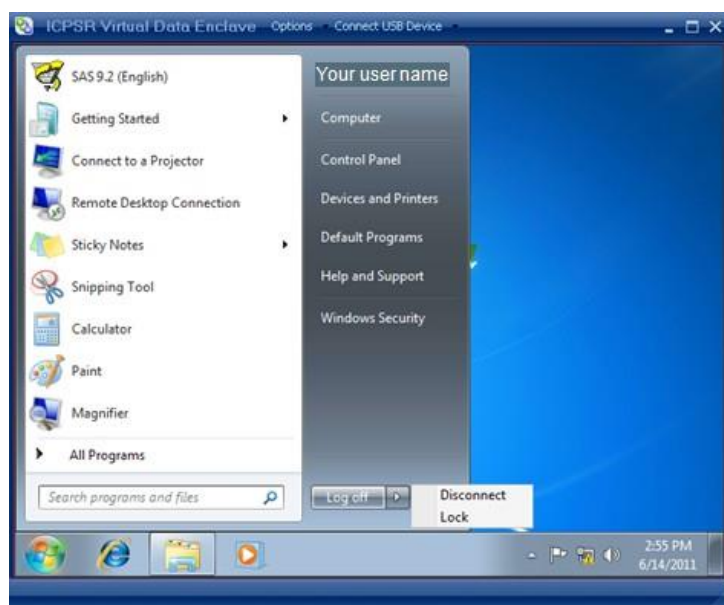
Disconnect from the VDE

If you need to close your session, but you want to have a program continue to run in the background, you can disconnect from the VDE.

To disconnect, open the **Start** menu and click the arrow button to the right of the **Log off** button. Select **Disconnect** from the fly-out menu.

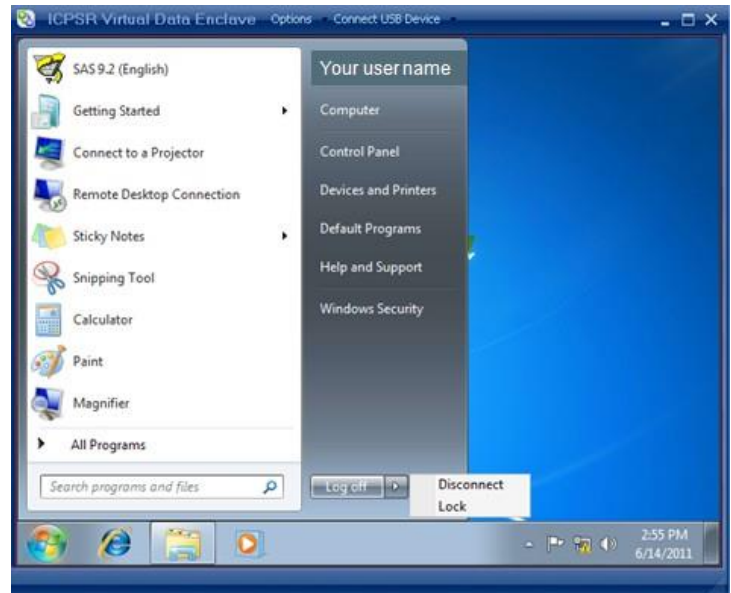
Disconnecting closes the VDE desktop but leaves any open programs in their current state. When you reconnect to the desktop, programs resume in the same state in which you left them.

Log off if you do not need a program to continue to run. If you disconnect from a VDE instance that you no longer need you tie up VDE resources. Those resources are unavailable for use by other users or project team members.



VDE Security

To prevent access to the VDE by unauthorized persons do not leave your computer unattended while you are logged in to the VDE. If you need to leave your computer either disconnect or log off from the VDE.



Project Folders

Master Project Folder

When you log on to the VDE your project's Master Project folder will be mapped to the [H:] drive. By default, the master project folder contains two additional subfolders. You cannot change the access permissions on these two folders.

OriginalData This folder contains read-only copies of the datasets and associated documentation

DisclosureReview Place files that you would like to have reviewed in this folder. Contact ICPSR to request a review of those files.

You can create other subfolders within the master project folder. You can set access permissions on the folders that you create.

Your project is allocated a limited amount of storage space. It is important that you manage your files to conserve storage space. The drive location for your data within the VDE will be mapped to the [H:] drive when you log on.

Note: Please change your U-M password from its temporary value. Your project folder will not be mapped automatically to [H:] at log on if you fail to change your password.

Folder Naming Conventions

The convention used to name the master folder is:

PrimaryPILastname_1

For example, if the primary PI's last name is Smith, the master folder name is:

Smith_1

File Management Guidelines

Save all research project files only to your **PROJECT FOLDER**

- Do not save anything to the virtual desktop.
- Your personal settings for the Windows environment and files that you have saved are retained after you log off.
- The virtual machine is deleted when you log off. Files that you have not saved will be lost.