User Training Guide

ERDC's Education Data Enclave

Please read this document carefully before you start working in the Education Data Enclave (EDE). Save this guide to help you use the EDE in the future.

Have Questions?
Contact NORC Data Enclave Helpdesk
DataEnclaveManager@norc.org
Mon-Friday: 9am-5pm, Central

About the Education Data Enclave

The ERDC Education Data Enclave (EDE), a subnet of the NORC Data Enclave®, is a secure virtual desktop environment co-managed by the Washington State Education Research & Data Center and NORC at the University of Chicago.

The EDE is an extension of your research workspace. It is configured to provide you with the tools you need to analyze data, collaborate with your team, and prepare output. The EDE offers resources to users on a **virtual desktop**.

Security Guidelines

The EDE is a closed environment which helps prevent accidental disclosure by separating the confidential data from potential sources of disclosure. This means:

- You **cannot** access the internet from within the EDE. The Microsoft Edge and Firefox browsers in the EDE can only be used to submit Export Requests through the DEER portal and to preview HTML documents.

- You cannot move data, files, or screenshots between your **local desktop** and the **EDE virtual desktop**.

Each EDE user is provided a set of credentials that allows access to the EDE environment. This is your personal passport to the EDE, so you should keep your login information safe and confidential. All EDE users are responsible for maintaining the environment's security by following the EDE User Best Practices in the box below.

EDE User Best Practices

To keep the EDE secure, all users must follow three best practices when accessing and working in the virtual environment:

1. Do **not** share your password, username, or SecurID token with anyone else.

2. Do **not** allow anyone who is not an authorized user to view the EDE virtual desktop. This includes but is not limited to looking over your shoulder while you are logged in or screen sharing through video conferencing software.

3. Do **not** use screen-capture software and devices on your local desktop while you are working in the EDE.

Privacy Statement

ERDC data collection, use, and disclosure is based on legal authority. The ERDC collects, uses, and discloses information responsibly and ethically, avoiding discrimination, deception, or harm.

Federal law (specifically, the Federal Educational Rights and Privacy Act of 1974, also known as "FERPA") safeguards the confidentiality of individual student information. This law requires that educational institutions and state agencies maintain the confidentiality and privacy of personally identifiable information in student records. The U.S. Department of Education has created extensive regulations regarding implementation of FERPA under Title 34, Part 99 of the Code of Federal Regulations.

In some instances, data may also be protected by the Parts B and C of the federal Individuals with Disabilities Education Act, also known as "IDEA". Federal regulations regarding implementation of IDEA can be found in Title 34, Part 300 and Title 34, Part 303 of the Code of Federal Regulations. IDEA incorporates all the provisions of FERPA and adds eight additional requirements to safeguard privacy.

Workforce-related data are also protected and secured by federal law, such as Section 303 of the Social Security Act, for which the U.S. Department of Labor has promulgated Title 20, Part 603 of the Code of Federal Regulations. Furthermore, the federal Workforce Innovation and Opportunity Act of 2014 prohibits the disclosure information collected under the auspices of the workforce development system that would "constitute a clearly unwarranted invasion of personal privacy.

New User Setup

Recommended System Requirements

- Recommended operating systems and browsers for the best experience:
  - ▶ **Microsoft Windows** (7 or higher)
    - Also compatible: **macOS**
  - ▶ **Microsoft Edge**
    - Also compatible: **Chrome, Mozilla Firefox**

Installation Steps

1. Install the SecurID App on your smartphone device for two-factor authentication. If you have any questions about the following installation steps, please reach out to the DE Helpdesk.

   - Search for "SecurID" in the app store and install the app on your phone.

Figure 1. SecurID App Interface downloadable from App Store

- Open the SecurID app on your phone.

- Follow the prompts on the SecurID app until you are asked to open your camera.

  - (You may need to click the "+" sign in the top right corner to add a token).

- You should have received a welcome email from a Data Enclave Manager at the DE Helpdesk (DataEnclaveManager@norc.org). Open the welcome email on a separate device so it can be visible with the SecurID in-app camera.

- The welcome email contains a QR code attachment assigned according to your device type (Android/iPhone). Open the QR code.

- Point your in-app camera at the QR code.

- You will be prompted for a password to complete the token installation. Enter your Data Enclave username (lastname-firstname, all lowercase).

- Afterwards, your SecurID token should be installed and generating 6-digit token codes.

Figure 2. SecurID App Interface on Android and on iPhone

2. Download the latest version of Citrix Workspace, the Virtual Desktop Infrastructure (VDI) client: https://www.citrix.com/products/receiver.html.

   - You do not need to "Add Account" in the Citrix Workspace pop-up window.

   - If you want to suppress the "Add Account" window at startup, please refer to the Citrix documentation: https://docs.citrix.com/en-us/citrix-workspace-app-for-windows/getting-started.html%23user-accounts
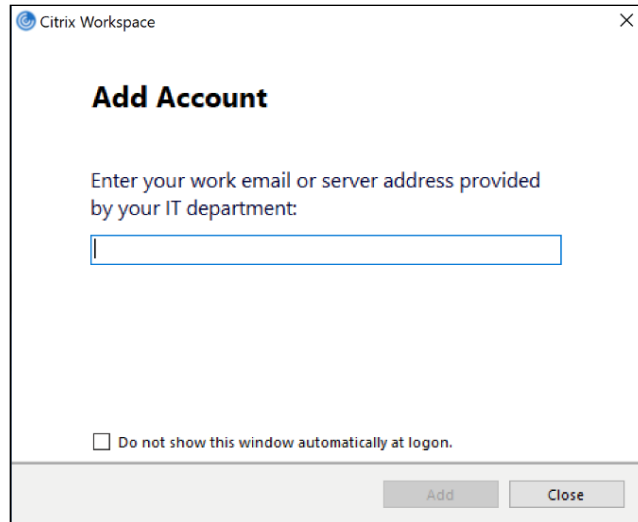
Figure 3. Citrix Workspace App's "Add Account" screen

First-time Login Instructions

1. Navigate to the NORC Data Enclave® login page: https://deiv.norc.org. Add the login page to trusted sites in your browser.

2. Enter your **username**, **password**, and **passcode** on the login page.

Your **username** is *Lastname-Firstname* (E.g., *doe-john*), unless otherwise specified in the welcome email.

Your initial **password** is provided to you in a separate email titled "*Message from NORC*." Change Your Password as soon as you log in for the first time.

To generate the *initial* **passcode,** read the **tokencode** from your device.

For the *first-time login*, enter the 6-digit **tokencode** that is displayed on your device, without spaces.

- For example, if the **tokencode** is "123456", enter "123456" in the **passcode** field.
- If the **tokencode** is about to change, please let it refresh.

For all *future logins*, your **passcode** will be your customized **PIN** followed by the 6-digit **tokencode**. Steps 3 – 5 guide you to create a **PIN**.

3. Click **Log On.** You are prompted to create a **PIN**. Your PIN must contain 4 to 8 characters (numbers and/or letters). *Memorize your PIN or save it in a safe space.*
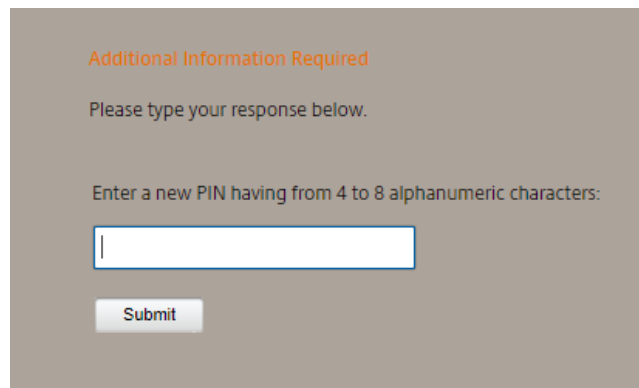

Figure 4. First Login – "Enter a new PIN" screen

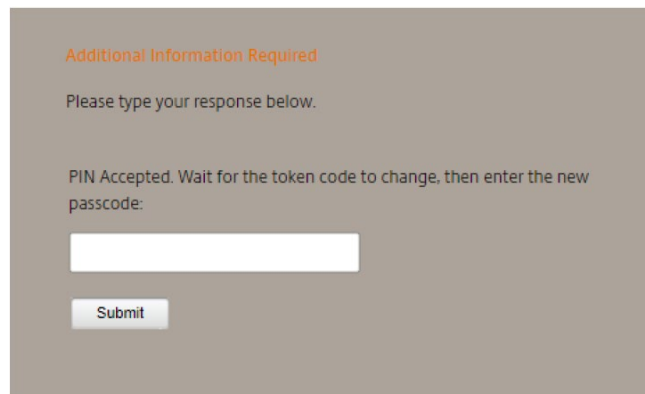4. Enter and confirm your new **PIN**. When you see *"PIN Accepted"*, your PIN has been registered.

Figure 5. First Login – "Re-enter new PIN" screen

5. You will then be prompted for a **passcode**. A passcode is the combination of your **PIN** and the **tokencode** generated by the SecurID software. Wait for the **tokencode** to change on your device, and then enter the **passcode**.

    ► For example, if the **PIN** is "0000" and the **tokencode** is "123456", your **passcode** would be "0000123456". *This would be your passcode format for all future logins.*

    ► If you see *"Access Denied"*, enter your 6-digit **tokencode** again and repeat steps 3 – 5.

6. When you reach this page with the blue icon, you have successfully set up your new account! Click on **ERDC Desktops** to launch the EDE virtual desktop.

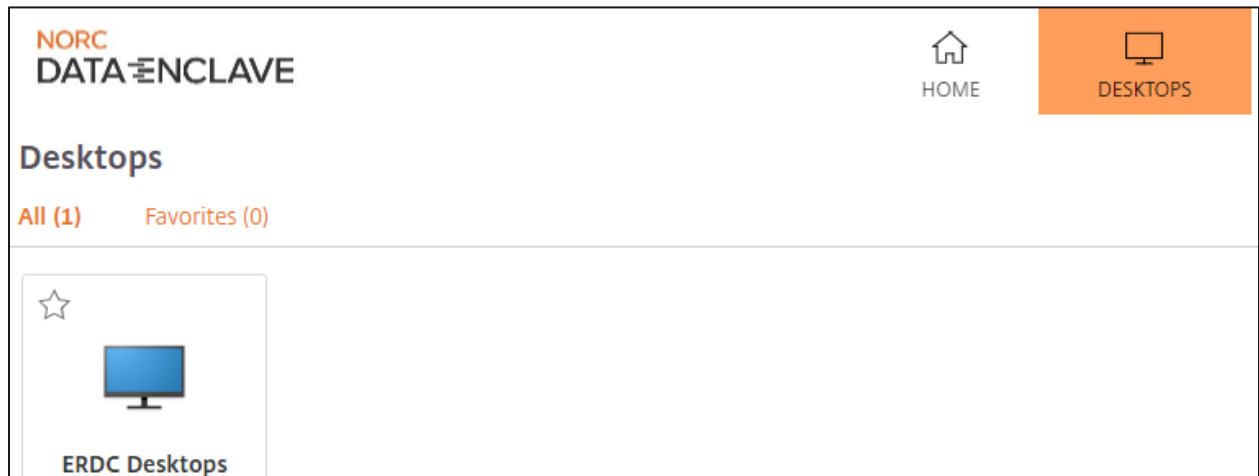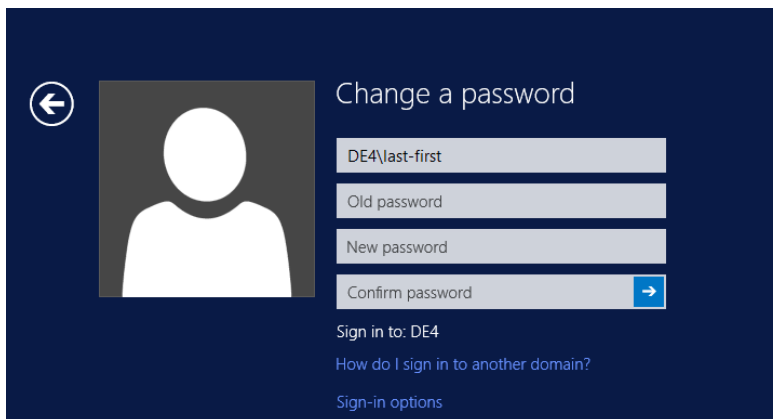▶ **NOTE**: You should disconnect from other VPNs before launching the EDE virtual desktop.

Figure 6. First Login – Click on the ERDC Desktops icon to launch the EDE desktop

▶ On your first login, you may be prompted to "Install" Citrix workspace, even if you already have. Please go ahead and finalize the installation by clicking "Install".

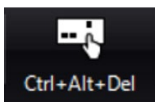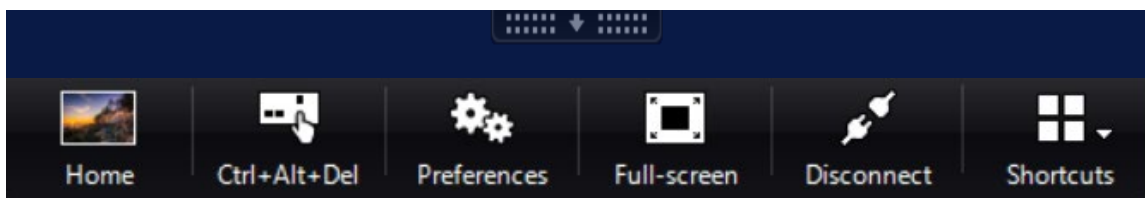▶ Some browsers may prompt you to "Detect" Citrix Workspace. Click "Detect."

When to Ask for Login Help

■ **No need to contact the Helpdesk** after *three consecutive* failed login attempts. Your account will be locked and automatically unlocked after **30 minutes**.

■ Email the **Helpdesk (DataEnclaveManager@norc.org)** if:

▶ You forgot your **password** or **PIN.** Once the Helpdesk resets your **password**, you can reset your password after **24 hours**.

▶ You installed the Citrix Workspace App but failed to launch the EDE virtual desktop.

▶ Your credentials are rejected after three consecutive login attempts after your account has been automatically unlocked. You may be using incorrect login information, or your account may be suspended.

Change Your Password

You should change your password as soon as you log in for the first time and every 90 days. At the top of your EDE virtual desktop, you can see a pull-down toolbar with a downward pointing arrow:

In the pull-down toolbar, select the icon.
Then select the **Change a password** option.

Password Requirements

8 characters minimum and at least:

- 1 uppercase letter
- 1 lowercase letter
- 1 number
- 1 symbol

Your password cannot include any part of your **username** or a previous password that you have used in the Date Enclave.

Applications

- On the **Start** screen, click on the **downward facing arrow** at the bottom left corner to reveal the **Apps** screen.

- Locate an application by alphabetic order or search by name in the **search bar** on the upper right corner.

- To pin a frequently used application, **right-click** the application, and select **Pin to Start** or **Pin to taskbar**.

Statistical Applications

All users have access to SAS, Stata, Stat/Transfer, R, RStudio, and Python (Jupyter Notebook, Spyder). **Data Enclave's internal repository contains most common packages, including a routinely updated Comprehensive R Archive Network (CRAN) mirror.** NORC reviews applications and the package repository for updates on a regular schedule.

Application	Icon	Version	Instructions
SAS	SAS 94 English	SAS 9.4 English	▪ SAS (Statistical Analysis System) is a software suite for advanced analytics, multivariate analyses, business intelligence, data management, and predictive analytics. ▪ Please open files *directly* from the application, not from the File Explorer. ▪ Please note that SAS limits queries to **50 million records or less.**
Stata	StataMP 16 64-bit	StataMP 16 64-bit	▪ Stata is a general-purpose statistical software. ▪ Please open files *directly* from the application, not from the File Explorer. ▪ To install a package from the repository, enter the **net** command and click on each letter to expand the directories.
Stat/Transfer	StatTransfer	Stat/Transfer 64-bit	▪ Stat/Transfer is a **data conversion** software utility that allows you to move data between worksheets, databases, and statistical programs (e.g., SAS to Stata, or SAS to Excel).
R	R x64 363 R x64 404	R 3.6.3 R 4.0.4	▪ R is a programming language for statistical computing and graphics. ▪ To install a package from the repository, select **Package** in the toolbar and **Install package(s)**.

Application	Icon	Version	Instructions
RStudio		R 3.6.3 R 4.0.4	■ RStudio is an integrated development environment (IDE) for R. ■ To install a package from the repository, select **Packages** on the right-hand side and search for the package name in the **Install Packages** dialog.
Jupyter Notebook		Python 3.6	■ Jupyter Notebook is an integrated development environment that allows you to create and share documents that contain live code, equations, visualizations and narrative text. ■ To install a package from the repository, use the **import <package name>** command.
Spyder		Spyder 3 Python 3.6	■ Spyder is an open-source, cross-platform integrated development environment for scientific programming in Python. ■ To install a package from the repository, use the **import <package name>** command. You can browse the repository by navigating to **Tools -> External Tools -> WinPython Control Panel.**

File System

You have access to two network drives in **File Explorer**:

- **DOCUMENTS (H:\ drive):** Your personal workspace with 50 GB of available storage.

- ERDC_RESEARCH (K:\ drive): Shared data drive.

  ► **K:\Datasets:** Data storage area.

    • **K:\Datasets\Common**: Reserved for read-only updates and announcements available to all researchers.
    • **K:\Datasets\<project folder name>:** Reserved for customized datasets for your project. All researchers on your project share *read* access to this project datasets folder that contains the ERDC-provided read-only data files.

  ► **K:\Research:** Research project folder.

    • **K:\Research\<project folder name>**: All researchers on your project share *write* access to this project research folder to collaborate on work products.

► **K:\Home:** Links to your H:\ drive.

Import Requests

To initiate an **Import Request**:

Send Files

Import Request - NORC Data Enclave

1. Fill out all required fields on the **Import Request form**:
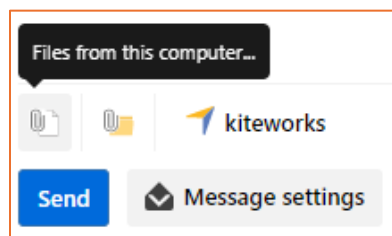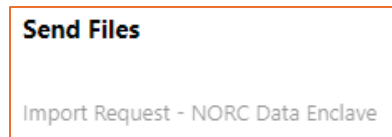   https://accellion.norc.org/form/import-request

    ► Sign into Accellion kiteworks with your EDE **username** and **password**.

2. Attach Files from your computer**.** Before the upload:

    ► **Importing multiple files:** Group the files into as few zipped files as possible.

    ► **Encryption**: If your file(s) contains sensitive or confidential information (e.g., Personally Identifiable Information), the files must be encrypted.

3. Click **Send.**

    ► **NOTE**: Do not change any Message settings.

NORC will email you when your file has been imported into the EDE.

Export Requests

The **Data Enclave External Review (DEER)** portal within the EDE enables researchers to save outputs for statistical disclosure control review and release. The Export Process must be used to export data and documents from the Enclave to your local computer. The ERDC will review for FERPA compliance (including cell sizes) and then approve or deny the export request. This process may also involve the ERDC sending your draft materials to data contributors for their review and feedback. If you are exporting a report or other deliverable (e.g., research reports, scholarly journal publications, presentations, and/or data dashboards), then you must submit all draft materials that use the data requested in this form to ERDC for review before any materials are shared with anyone not listed in the data-use agreement and before any materials are published.

Figure 7. EDE desktop – DEER portal's "New Request" screen

1. To access DEER, launch **Microsoft Edge in the EDE**. You can also access DEER in **Firefox in the EDE** by typing in this URL: https://deer.de4.norc.org/norc-deer.

2. Upload the file that you would like to export out of the EDE. If you have more than multiple, please zip them using **7-Zip File Manager available in the applications section**.

3. To help expedite the review process, please include details about the file:

   ► A brief description of the output (e.g., simple regression, box-and-whiskers plot)

   ► Whether this is a new request or one that builds on a prior request

   ► A list of the key variables

   ► Whether or not the variables are continuous

4. Click **Submit.** Your request will be added to the review queue.

5. NORC will notify the **ERDC reviewer** to conduct disclosure review.

   ► If the file is **approved**, NORC will send you an email with an *Accellion kiteworks link* so that you can download your file outside of the EDE.

   ► If the file is **rejected**, NORC will prompt you to check the reviewer's comments in DEER. Once the appropriate edits are made, you can submit a new request.

Export Request Best Practices

All users should follow these best practices when preparing an export request:
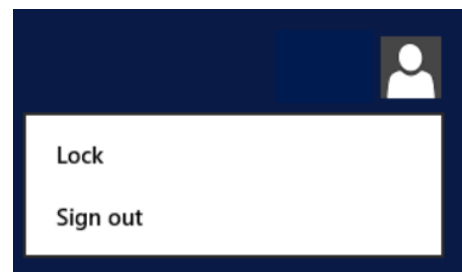
1. ERDC does **not** typically approve requests to export record-level data from the enclave to your local computer. If you expect to request an export of record-level data, then please notify the ERDC before you submit your export request.

2. Due to FERPA compliance requirements, unredacted aggregate data (i.e., data with cell values less than 10) will **not** be approved for export from the enclave to your local computer.

3. Word documents, Excel spreadsheets, text files, and statistical software files can be exported through the DEER portal. Make sure to describe the files that you want to export, as outlined in Step 3 above.

Leaving the Education Data Enclave

Save your work (including outputs, programs, or other documents) and **Sign Out** after each EDE session. Any unsaved files may be lost if not properly saved. It is also good practice to save in progress work routinely during a session.

Sign Out

- Go to the Start menu. Click on your profile at the upper right corner and select **Sign Out**.

System Maintenance

System maintenance that impacts user access to EDE desktops and applications will take place on the **first Monday of each month** from **1 am to 4 am (Central Time)**.

- **What to expect:** During this time, all existing user sessions will be terminated.

- **What to do:** Please make sure to save your files and **Sign Out** before the maintenance window.

Disconnect

- If you need to run a program overnight, you can use the **Disconnect** option in the pull-down toolbar rather than signing out at the end of the session.

- **NOTE:** If your session is inactive for 72 hours, it will be terminated.

■ Make sure to log back on so that it remains active. Make sure to save your outputs so they are not lost due to a terminated session.