

# Multifactor Authentication (MFA) Set Up for Remote Access to HFIR/SNS Beamlines

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## Overview

The Neutron Sciences Directorate (NScD) at Oak Ridge National Laboratory (ORNL) now requires Multi-Factor Authentication (MFA) for users performing remote experiments. We are using the [Duo Mobile app](#) for authentication.

These instructions explain how to set up your Duo MFA account prior to the start of your scheduled experiment and how to use the Duo app to authenticate to beamline remote instrument control.

## What you will need: mobile device and ORNL XCAMS account

You will need a personal mobile device (i.e., smartphone or tablet) to download and install the Duo app. The Duo app runs on both iOS and Android operating systems.

Your enrollment will need to use the same account (XCAMS) you use to log into IPTS, Analysis and other ORNL computer systems. If you don't already have this account, you can create one at [ORNL Guest Portal](#).

## Communication from ORNL NSD User Office

Enrollment in the Duo authentication system requires previous identity vetting by the Neutron Scattering Division's (NSD) User Office. If this is your first time visiting the Spallation Neutron Source (SNS) or the High Flux Isotope Reactor (HFIR), or your first time accessing remote instrument control, you may be contacted by the User Office with additional instructions about identity vetting. Please respond to messages from the User Office promptly to avoid delays in your ability to participate in your experiment. Once activated, your Duo authentication account will be used to authenticate each time you attempt to log into a remote instrument control session at SNS or HFIR.

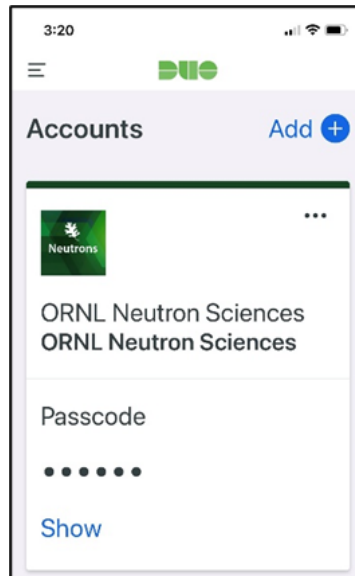
For more information or help setting up your authentication, email [neutron-mfa-support@ornl.gov](mailto:neutron-mfa-support@ornl.gov).

## Duo Mobile App Set Up

Note: Duo setup steps require a smart phone, tablet or other personal mobile device.

1. Users eligible for enrollment in the NSD Duo authentication system will receive an enrollment email from Duo. The email will come to the email address associated with your XCAMS account. The email will be from [no-reply@duosecurity.com](mailto:no-reply@duosecurity.com) with the subject line MFA Enrollment Required for your upcoming HFIR/SNS experiment.
2. Open the link in the enrollment email. This link will open the Duo account setup wizard in a web browser.
  - a. Note: We recommend opening the link on your mobile device. If you open the link from a computer, you will be prompted to download the app to your phone and then associate the app with your account via a QR code on the computer.
3. Follow the below steps in the setup wizard to establish your Duo account, download the mobile app and associate your Duo account with your mobile device.
  - a. The first three screens are informational screens about Duo Security (Welcome to Duo Security, Did You Know? What Can You Do?). There are no actions to take on these screens. Use the Next button to move past them.
  - b. You will then find a screen that asks you to set a preferred authentication option. For this, selecting the Duo Mobile option is recommended. This will send a notification to the Duo app on your phone.
  - c. You will next be prompted to enter your mobile phone number.
  - d. After entering your mobile phone number, you will be prompted to verify the number you entered is correct.
  - e. You will next be prompted to download the Duo Mobile app. This screen has direct links to download the app from either the [Apple App Store](#) or [Google Play](#). Choose the download location appropriate to your device. Once the app is downloaded, click Next.
  - f. You will be prompted to Open the Duo Mobile app on your device by pressing the continue button.
  - g. This action will register your device with the Duo Security authentication service.

- h. Once your device is registered, the Duo Mobile app will display an account entry for ORNL Neutron Sciences. You will be prompted to update the displayed account name with either your username or email. Either is fine.
  - i. If the Duo setup wizard prompts you to add another way to log in, you can skip the step.
4. You may see a “Setup completed” message when you completed all the needed steps to activate your Duo authentication account. When successfully setup, your Duo Mobile app will look something like this.



Note: Android users may see two additional prompts for enabling notifications and account backups. You will need to enable notifications but do not need to enable account backups.

## Access to beamline remote instrument control

These steps describe the process to connect to beamline remote instrument control. You will likely do this part on a computer rather than a mobile device. Note: Remote instrument connection is only available during the scheduled dates/times for your experiment.

1. Point a web browser to <https://analysis.sns.gov:8080> and log in using your XCAMS username/password.
2. Go to Applications, then Remote Experiments, then select the applicable instrument.
3. Login with your ORNL computer systems account (XCAMS) username/password.
4. You will receive a notification on your mobile device from the Duo app to Approve the login.
5. On your phone, tap the Duo authentication app action to Approve/Accept the connection.
6. When you see the “Welcome to Cendio ThinLInc” screen, this is success!