



# **ASSESSMENT EVALUATION AND STANDARDIZATION (AES)**

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## **Defend Cyber Moodle Learning Management System Quick Start Guide**

CISA Vulnerability Management (VM) Branch

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U.S. Department of Homeland Security  
Cybersecurity and Infrastructure Security Agency

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## 1 Introduction

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This guide provides step-by-step instructions for registering for and administering your Moodle account, as well as working in Moodle to complete Assessment Evaluation and Standardization (AES) prerequisites and courses in the Defend Cyber Moodle Learning Management System (LMS).

**Note:** This guide refers to two systems:

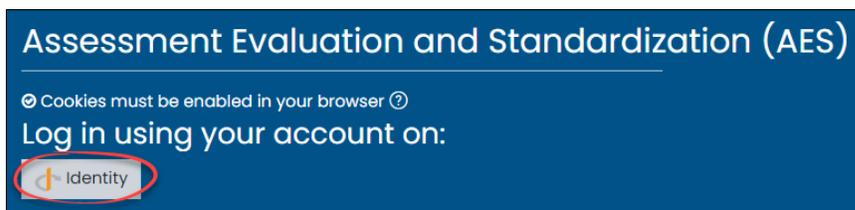
- Defend Cyber Moodle, also referred to as “Moodle,” the AES Training Program LMS; and
- Identity, the authentication management service required to access Moodle.

## 2 Registering for a New Moodle Account

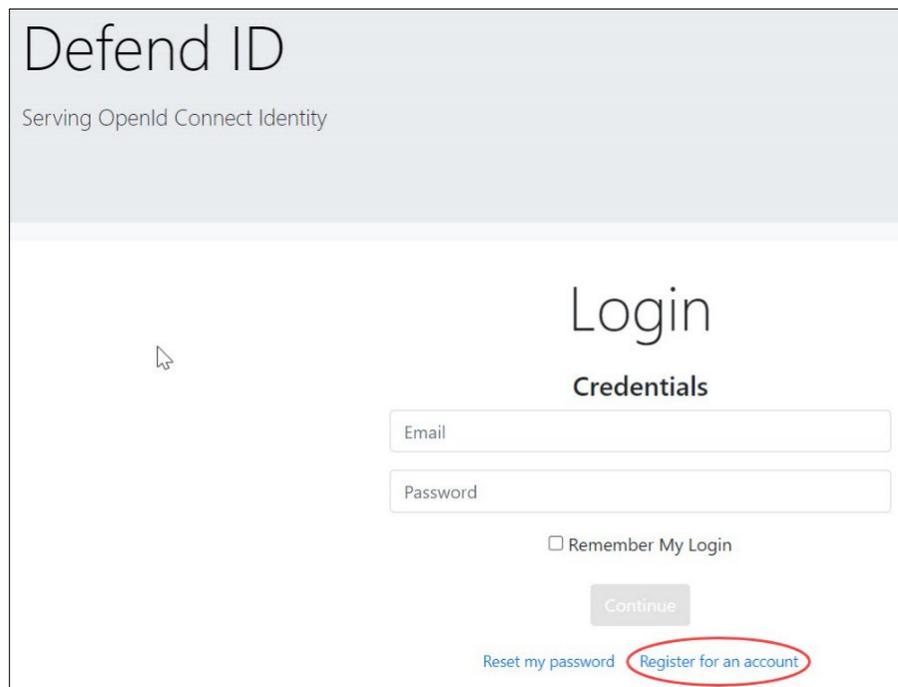
Follow the instructions below to register for a new Defend Cyber Moodle account. If you have an account from your application to a previous AES training course, do not create another account. Instead, Follow the instructions in [Chapter 4](#) to log in to your existing account. Email [AEStraining@hq.dhs.gov](mailto:AEStraining@hq.dhs.gov) if you have questions about your account.

**Note:** You must have access to email to create a Moodle account.

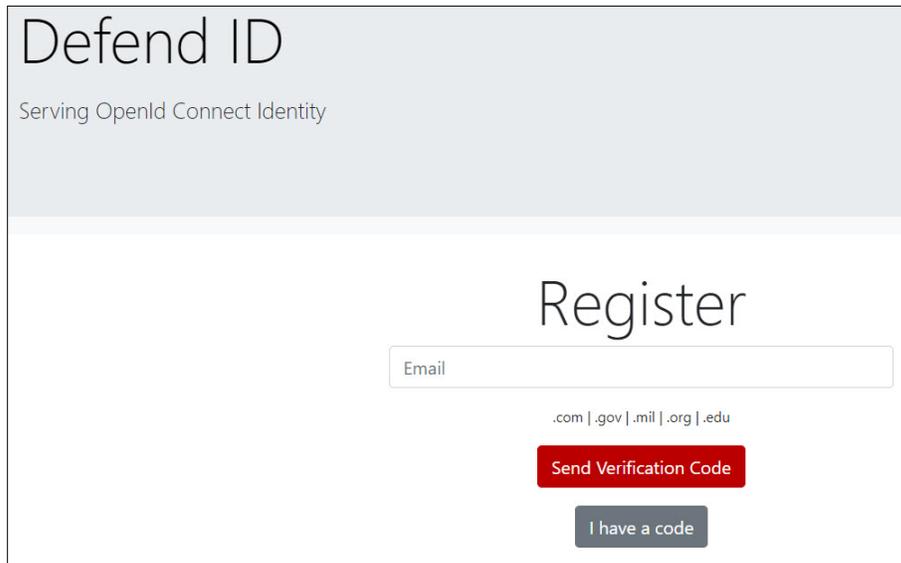
1. Go to the Defend Cyber Moodle Learning Management System website, <https://moodle.defendcyber.us>, then click the **Identity** button. The Identity authentication management service opens. This service enables you to access Moodle.



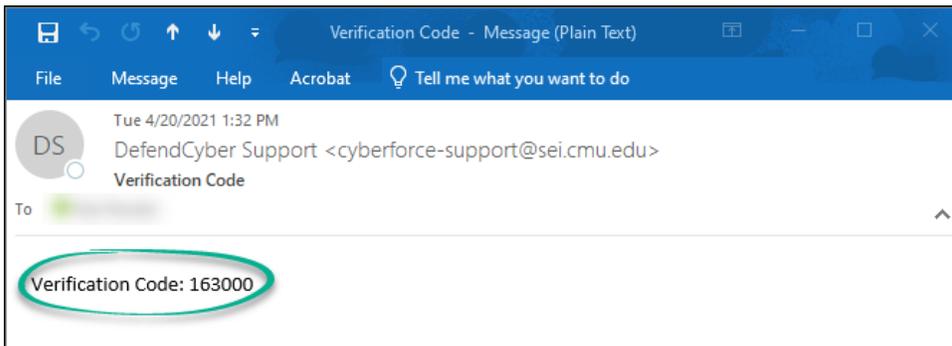
2. In the Identity **Defend ID** window that opens, click **Register for an account** on the bottom right.



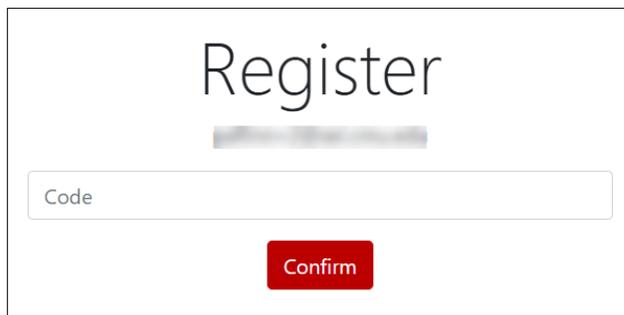
3. In the **Email** field in the **Register** window, enter your email address, then click the **Send Verification Code** button.



It may take up to 10 minutes for you to receive an email from DefendCyberSupport with the verification code. If you do not receive an email, check your junk or spam folder. If you click **Send Verification Code** a second time, use the new code you receive. The previous code is no longer valid.

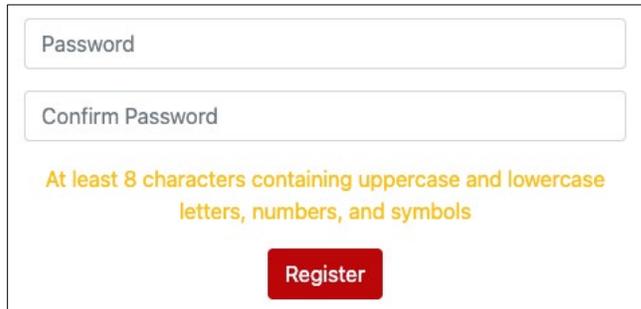


4. In the **Code** field in the **Register** window, enter the six-digit number you received, then click the **Confirm** button.



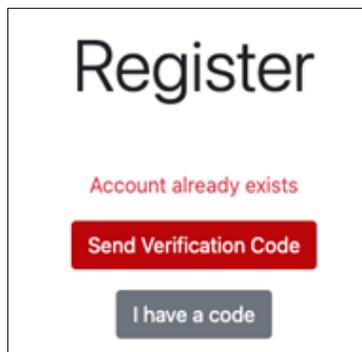
5. In the **Password** field, enter the password you want to use to log in to the Moodle learning management system, then enter it a second time in the **Confirm Password** field and click the **Register** button. Your password must contain:

- at least eight characters
- at least one uppercase letter
- at least one lowercase letter
- at least one number
- at least one symbol



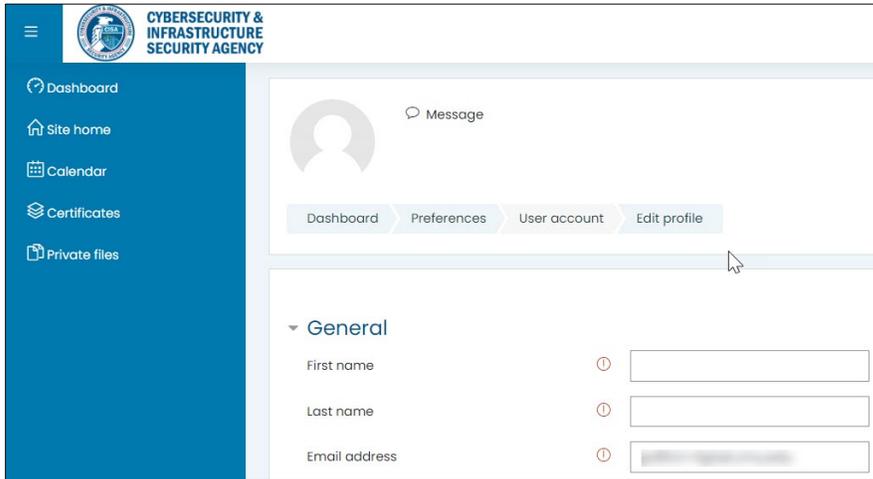
The screenshot shows a registration form with two input fields: "Password" and "Confirm Password". Below the fields is a yellow text requirement: "At least 8 characters containing uppercase and lowercase letters, numbers, and symbols". At the bottom of the form is a red "Register" button.

**Note:** If the message **Account already exists** appears, the email address you provided is already registered. To log in, use the email address and follow the steps in [Chapter 4](#). If you forgot your password, click **Reset my password** then follow the instructions to reset your password.



The screenshot shows the "Register" page with the word "Register" at the top. Below it is a red error message: "Account already exists". Underneath the error message are two buttons: a red "Send Verification Code" button and a grey "I have a code" button.

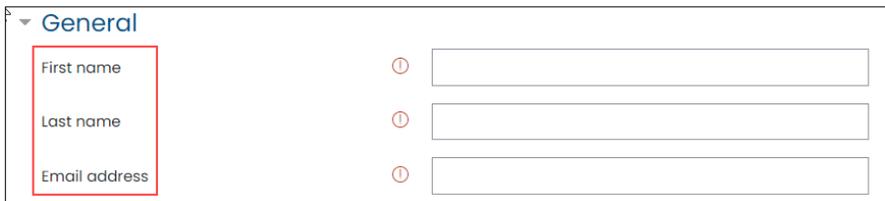
- In the **Consent moodle** window, click the **Continue** button. The Moodle learning management system opens. In the Moodle **Edit Profile** page, complete the fields, then click the **Update Profile** button.



These eight fields are required:

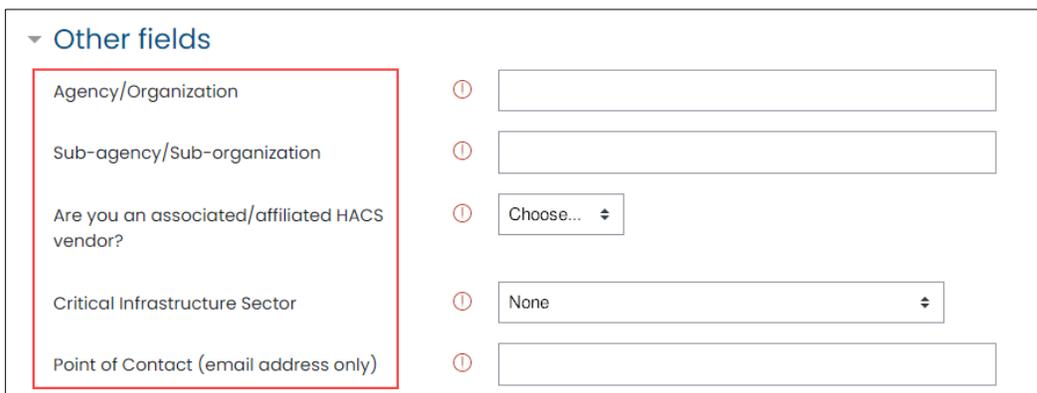
In the **General** section

- First name
- Last name
- Email address



In the **Other fields** section

- Agency/Organization
- Sub-agency/Sub-organization
- Are you an associated/affiliated HACS vendor?
- Critical Infrastructure Sector
- Point of Contact (email address only)



For example, if you are an employee of the National Oceanic and Atmospheric Administration (NOAA), the **Other fields** section may look like this:

Agency/Organization	ⓘ	Department of Commerce
Sub-agency/Sub-organization	ⓘ	NOAA
Are you an associated/affiliated HACS vendor?	ⓘ	No
Critical Infrastructure Sector	ⓘ	Energy
Point of Contact (email address only)	ⓘ	mysupervisorsemail@noaa.gov

For a description of critical infrastructure sectors, visit the [CISA website](#).

7. In the **Preferences** window, click an item to set your preferences.

## Preferences

### User account

- Edit profile
- Preferred language
- Forum preferences
- Editor preferences
- Course preferences
- Calendar preferences
- Message preferences
- Notification preferences
- Linked logins

### 3 Navigating in the Moodle Learning Management System

You can use the following menu commands to navigate in the Moodle site from any Moodle window:

- In the left vertical menu, click the three horizontal lines in the top left to collapse and expand the menu.

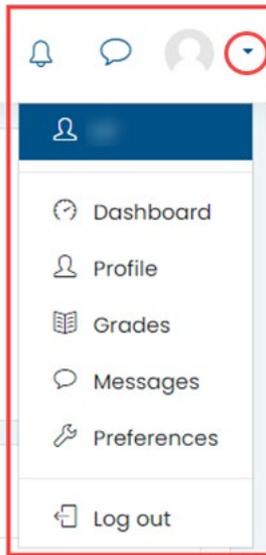


- In the left vertical menu, click the icons to navigate to the corresponding pages:



- **Dashboard:** navigate to the CISA AES Program Dashboard.
- **Site Home:** navigate to the list of CISA AES Program courses.
- **Calendar:** manage to your personal calendar.
- **Certificates:** view your list of CISA AES Program certificates.
- **Private files:** manage your CISA AES Program files.

- In the top-right of any page in Moodle, click the down arrowhead, then click the page you want:



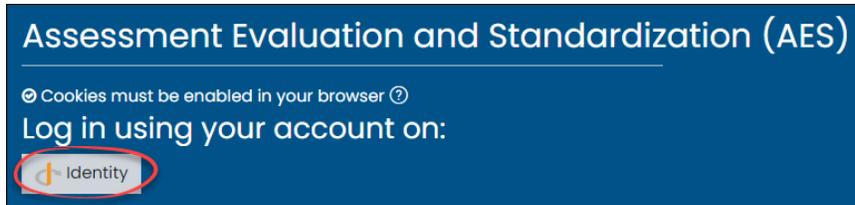
- **Dashboard:** navigate to the CISA AES Program Dashboard.
- **Profile:** navigate to your profile page.
- **Grades:** view your course grades.
- **Messages:** read your Moodle system messages.
- **Preferences:** navigate to the CISA AES Program Preferences your CISA AES Program files.
- **Log out:** log out of the Moodle learning management system.

## 4 Logging In and Out of Moodle

After you complete the registration steps in [Chapter 2](#) and have your new Moodle account or, if you have an existing Moodle account, follow the instructions below to log in and log out.

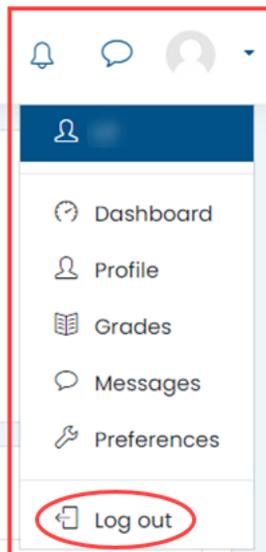
### Log In to Moodle:

Go to the Defend Cyber Moodle learning management system website, , click the **Identity** button, then click the **Continue** button.



### Log Out of Moodle:

In any Moodle window, click the down arrow in the top-right dropdown menu, then click **Log out**.



## 5 Enrolling in AES Prerequisites

All applicants must complete and pass the AES Candidate Evaluation (CE) Prerequisite before they can enroll in a course. All AES RVA applicants must first complete and pass the AES Operator Skills Test (OST) Prerequisite, then complete and pass the AES CE Prerequisite before they can enroll in an AES RVA course.

Log in to the Moodle learning management system, then follow the instructions below to enroll in an AES Prerequisite.

1. In the **AES Dashboard window**, click **Site Home** in the left menu.



2. Click the course name; alternatively, click the **ACCESS** button below the course name.

**Note:** To hide or view the name of a prerequisite course, click the down arrow **Collapse all** or **Expand All** on the right.



3. In the **Enrollment Options** window, click **Enroll Me**.

FY24 CISA Operator's Skill Test Prereq

Dashboard > Courses > AES FY24 > Prerequisite Courses > FY24 OST Prereq > Enroll me in this course > Enrollment options

Enrollment options

**AES**  
ASSESSMENT EVALUATION  
AND STANDARDIZATION

Prerequisite Courses  
[FY24 CISA Operator's Skill Test Prereq](#)

Self enrollment (Student)

Enroll me

4. Read and review the information and documents on the AES prerequisite course page to prepare for the CE or OST.

FY24 Candidate Evaluation Prereq

Dashboard > My courses > FY24 CE Prereq

**Introduction** Your progress

Thanks for your interest in becoming an AES assessor. The Moodle Learning Management System hosts all materials required for the prerequisite and course. If you have questions or experience issues, email [AESTraining@hq.dhs.gov](mailto:AESTraining@hq.dhs.gov).

The AES Training Process consists of 7 steps, each of which you must pass before having access to the next. The AES Candidate Evaluation Prerequisite is step 3 in the process.

*AES Training Process*

Prerequisites	Course
1 Orientation	4 Instruction and Exercises
2 Registration	5 Capstone Exam
3 Candidate Evaluation	6 Course Completion
3a RVA Operator Role Only - Operator Skills Test	7 Certificate of Qualification

**Background Materials**

This section contains background materials about the AES Training Program.

Background Materials

5. When you are ready to take the CE or OST, do the following:

- To take the CE exam, click the name or the red **AES Candidate Evaluation (CE) Exam** button.

FY24 Candidate Evaluation Prereq

Dashboard > My courses > FY24 CE Prereq

### Candidate Evaluation Exam

This section contains the Candidate Evaluation (CE) exam.

- You have 3 attempts to score 70% or higher to pass the exam.
- Your successful CE result is valid for 6 months.

 AES Candidate Evaluation (CE) Exam

- To take the OST exam, click the name or the red **AES Operator Skills Test (OST)** button.

FY24 CISA Operator's Skill Test Prereq

Dashboard > My courses > FY24 OST Prereq

### OST Lab and OST Quiz Questions

This Operator Skills Test (OST) assesses your ability to perform basic penetration testing, exploitation, and pivoting skills. Complete the OST Lab in TopoMojo (OST Lab link below) **BEFORE** proceeding to the CE. The OST quiz is part of the CE.

-  AES RVA OST Exercise Resources
-  AES Operator Skills Test (OST)

You **\*MUST\*** submit the quiz in Moodle in order to be graded. If you end the lab or allow the timer to expire, your answers will be saved but you will not receive a grade or feedback on your attempt. If you did not pass the Operator Skills Lab and OST Quiz Questions, you will not have passed this section. The checkboxes on the right indicate both completion of this step and successful passing grade.

The first item in the quiz will be a link to the OST Virtual Environment.

## 6 Enrolling in an AES Course

After you complete and pass the AES Candidate Evaluation (CE) Prerequisite and the AES Operator Skills Test (OST) Prerequisite (AES RVA applicants only), follow the instructions below to enroll in an AES training course.

1. In the **AES Dashboard window**, click **Site Home** in the left menu.



2. Click a course name, then select an available course date.

**Note:** To hide or view the name of a prerequisite course, click the down arrow **Collapse all** or **Expand All** on the right.



3. Click the course name or the **Access** button to enroll in a course. The Moodle course page opens.



**Note:** Some course materials on the course page are unavailable until the course start date or later.

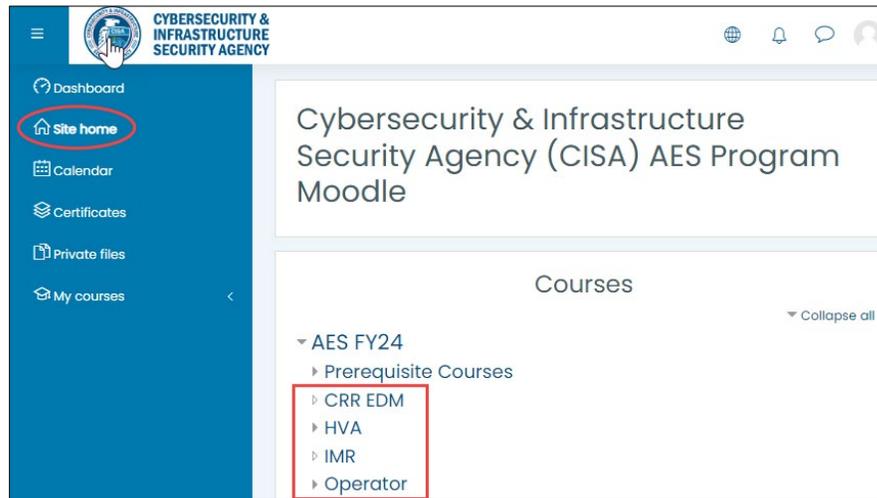
4. Click **Enroll me**,

A message appears on the screen, confirming your enrollment. Moodle sends you an enrollment confirmation email.

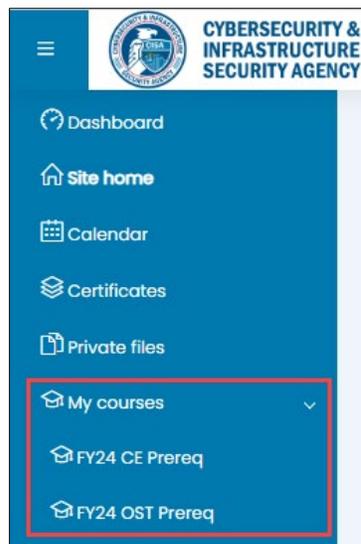
## 7 Launching an AES Course

To launch an AES course after your enrollment, log in to the Moodle learning management system, then do one of the following:

- In the AES Dashboard window, click **Site Home** in the left menu. Click a course name, then select the course you enrolled in.



- Alternatively, in the AES Dashboard window, click **My Courses** in the left menu, then select the course you enrolled in.

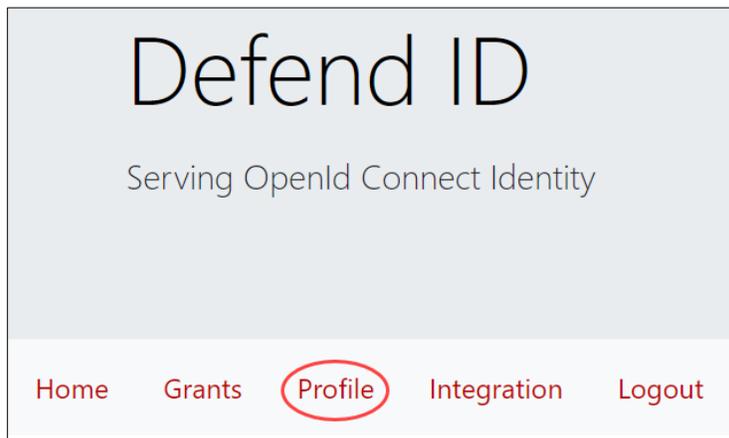


## 8 Updating Your Identity Profile

Follow the instructions below to update your profile in Moodle.

### Change Your Moodle Credentials

1. Go to the Defend Cyber Moodle Learning Management System website, , click the button **Identity**, then do the following in the Defend ID Consent window:
2. Click **Profile**.



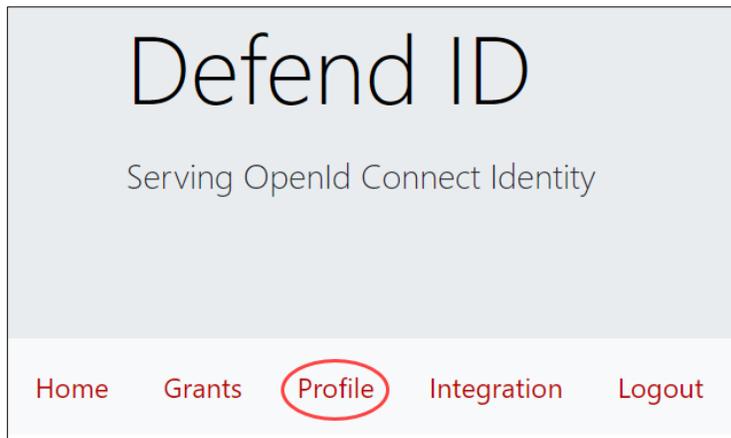
3. In the Profile window, click **Credentials**.



4. In the **Profile Credentials** window, enter the appropriate information:
  - To change your Moodle email address, enter the new email address, click **Send Verification Code**, enter the numbers you receive in a verification code email in the **Code** field, then click **Submit**.
  - To change your Moodle password, type your current password in the **Current** field, type your new password in the **New Password** field, type your new password again in the **Again** field, then click **Submit**.

**Change Your Moodle Login Name, Status, Organization, Unit, Logos, and Avatar**

1. Go to the Defend Cyber Moodle Learning Management System website, , click the **Identity** button, then click **Continue**.
2. In the **Updating Your Profile** section in the **CISA AES Program: Dashboard** window, click the Defend Cyber link, .
3. Click **Profile**.



4. Click **Edit**.



5. In the **Edit-Profile** window, enter the text you want to change, or click **Change** to update a service logo, avatar, or unit logo. Follow the prompts to save your updates.

Profile

/ ... / Edit-Profile

Bio/Status

Organization

Unit

Service Logo      Avatar      Unit Logo

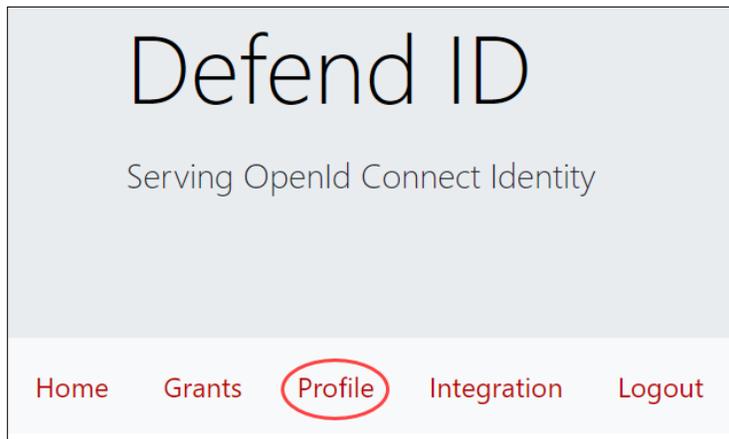
Change      Change      Change

6. To return to the Moodle learning management system, click Home in the top left, then click **moodle** in the bottom right.

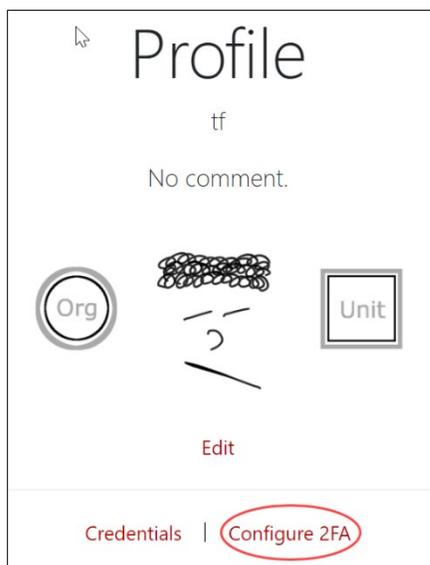
## 9 Configuring Two-Factor Authentication (2FA) With Your Moodle Account

Follow the instructions below to configure two-factor authentication (2FA) in Moodle. Two-factor authentication is useful when you want to log in to your Moodle account from a remote location.

1. Go to the Defend Cyber Moodle Learning Management System website, <https://moodle.defendcyber.us>, click the button Identity, then do the following in the Defend ID Consent window:
2. Click **Profile**.



3. In the Profile window, click **Configure 2FA**.



4. The **2FA Profile** window displays instructions for using a Time-based One Time Password (TOTP).

## Profile

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/ ... / TOTP

Multi-factor authentication can be satisfied with a Time-based One Time Password (TOTP). Generate a secret key, and import that key into a TOTP authentication application, like Duo Mobile or Google Authenticator. Use such a phone app to scan the barcode. Or you can import the key manually.

Note: Generating the key multiple times will invalidate previous keys. Only the last key generated will be valid.

Generate

5. Click **Generate**, then enter the appropriate information:

Generate

**Manual Input**

- Copy left to right, top to bottom.
- Don't include spaces.
- Valid characters are *a-z* and *2-8*.
- There are no zeros or ones.

```
my4dezdf gy4wmytb my4dszbv giygmmlc ha2dsn3d
mu2diytc me2tenzt mzqtin3f
```

**Optical Input**

- point your device's camera at the barcode to import the key.



After importing the secret key, test a code:

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## 10 Getting Support

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For assistance with Defend Cyber Moodle LMS, to report a problem, or to provide feedback, contact us by email at [AESTraining@hq.dhs.gov](mailto:AESTraining@hq.dhs.gov). Include as much detail as possible, including the specific lesson in the course, system element(s) involved, and error messages that appeared.