NEOGOV

Time Clock Guide for Clients

Last revised: 6//27/2023

NEOGOV

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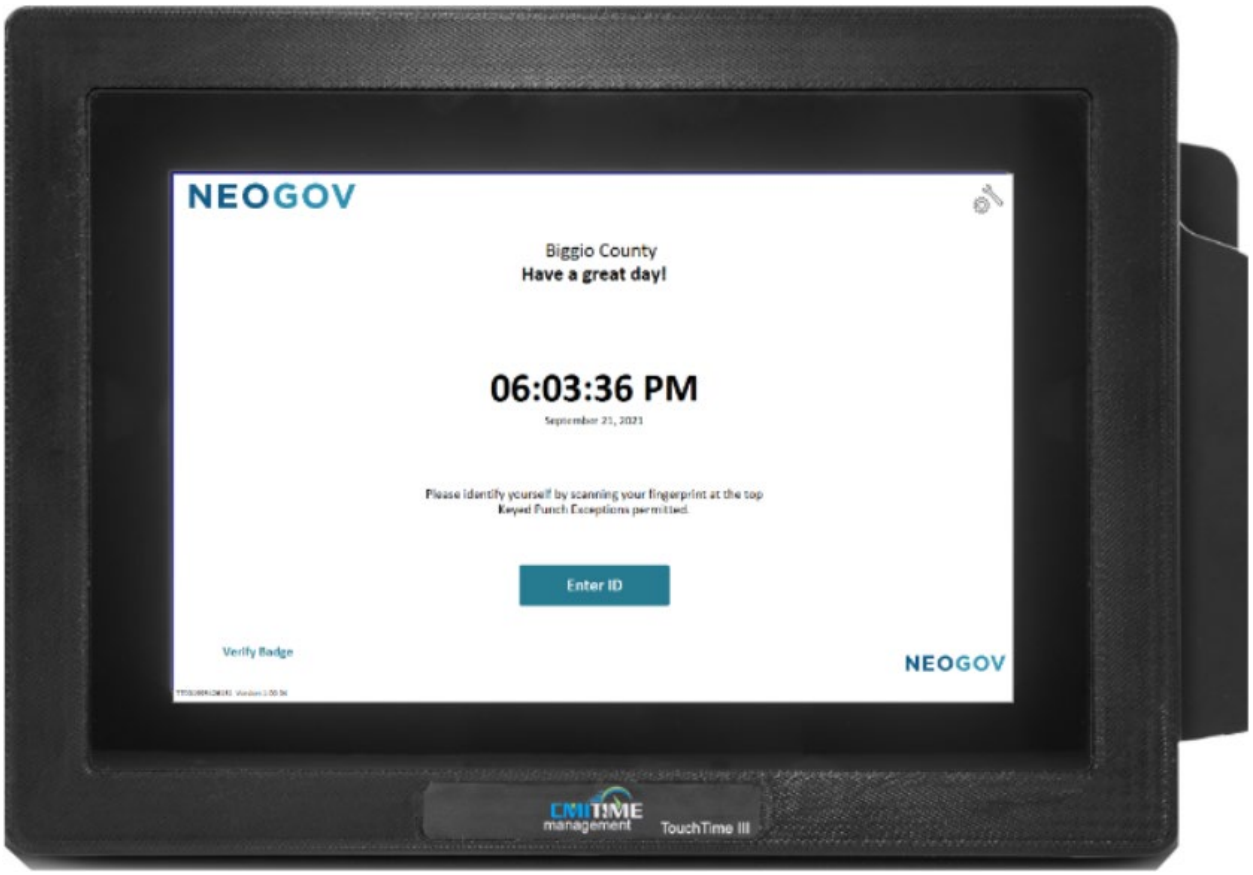
Overview

Clocks are available to you through our partner CMI. CMI has many models in their product line; NEOGOV specifically supports the TouchTime III (TT3) model.

CMI ships the clock to you with the latest NEOGOV software pre-loaded.



When implementing clocks at your site(s), CMI is responsible for supporting you with:

1. Mounting the clock on the wall
2. Connecting the clock to power
3. Connecting the clock to your network

After that, your NEOGOV Implementation Consultant will help you with the steps outlined in this document.

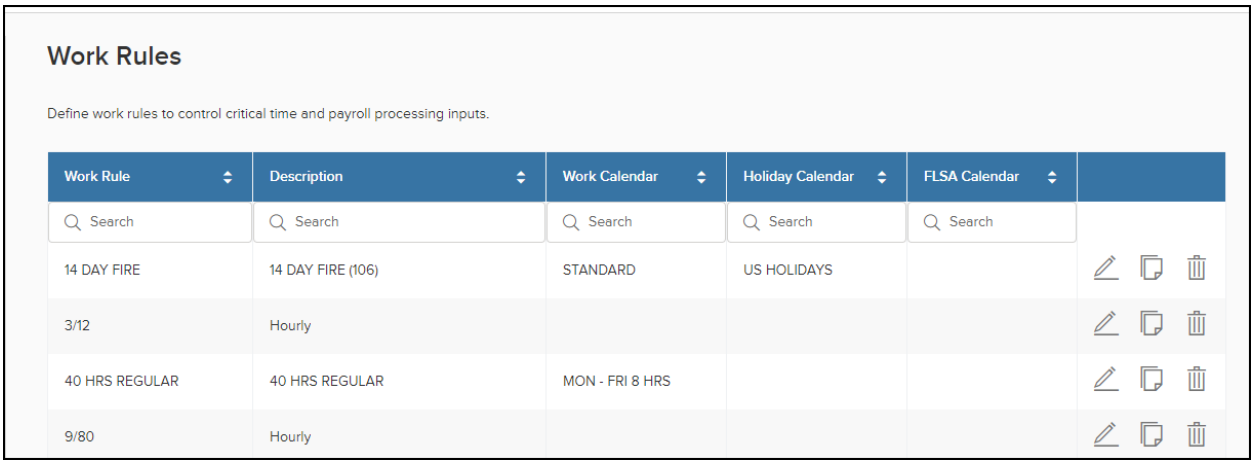
Setup - Time and Attendance

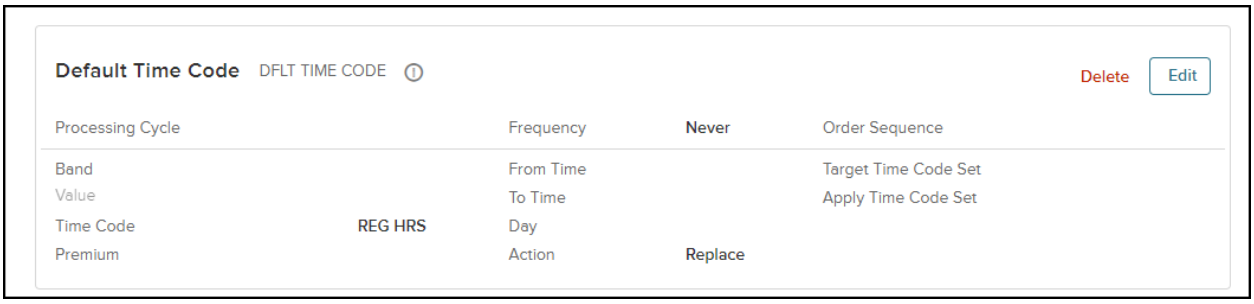
Work Rule

Employees who will be clocking need to be assigned to work rules with specific settings defined.

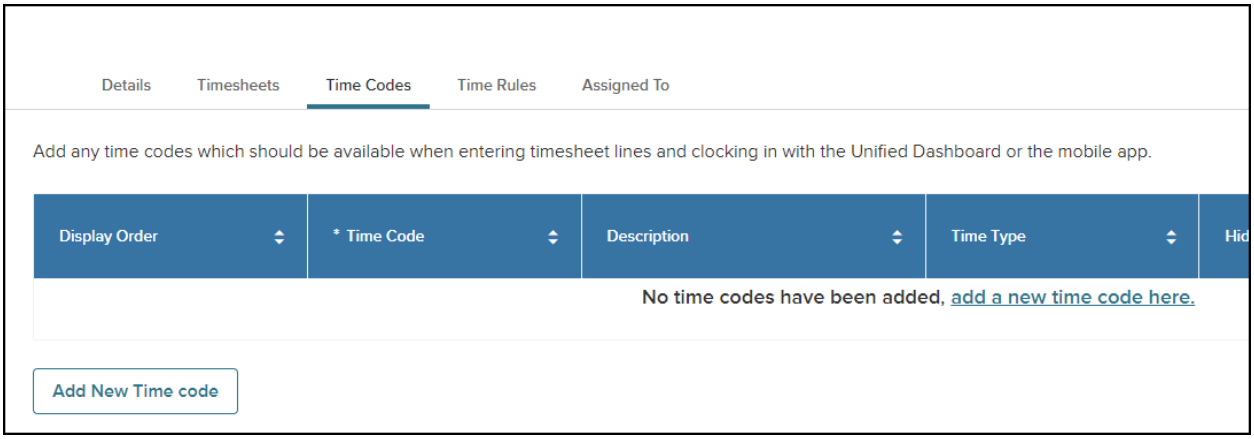
Default Time Code

When an employee clocks in, a time code is associated with the punch and will be used for the timesheet entry created by the punch. To define the default for the clock to apply to the entry, add the **DFLT TIME CODE** time rule to the appropriate work rule(s) on the **Work Rules** screen.



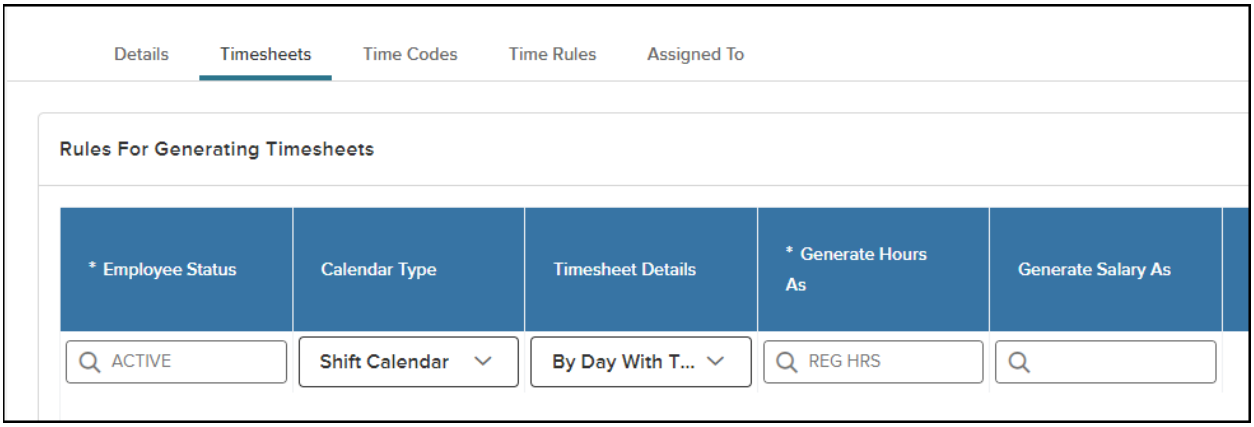


The only other required work rule setup is the **Time Codes** tab, which sets the default code for clocking.



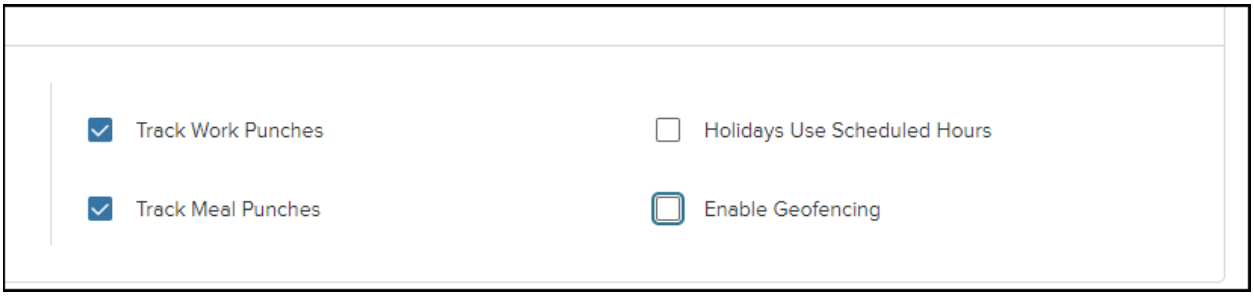
Calendar Type

On the **Timesheets** tab, the **ACTIVE** status row should be defined with the **Calendar Type** of **Shift Calendar**.



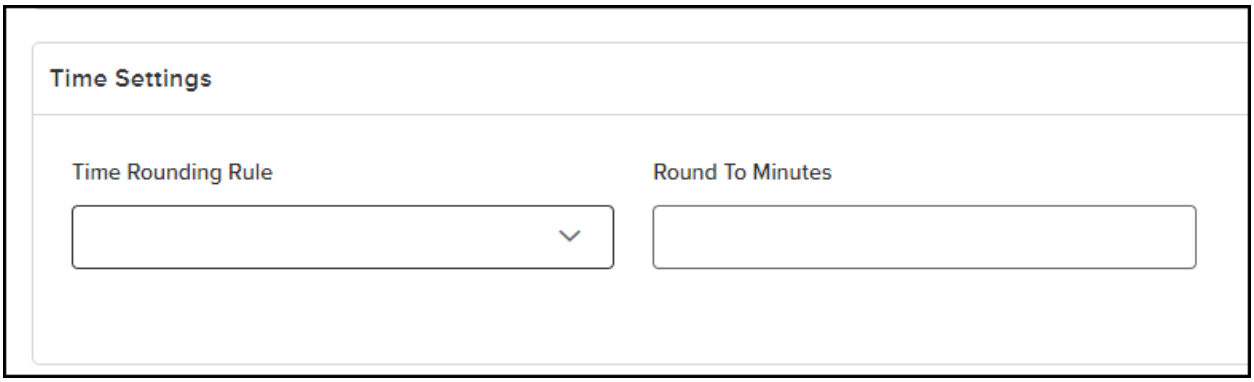
Track Punches

On the **Details** tab, select **Track Work Punches** and **Track Meal Punches**.



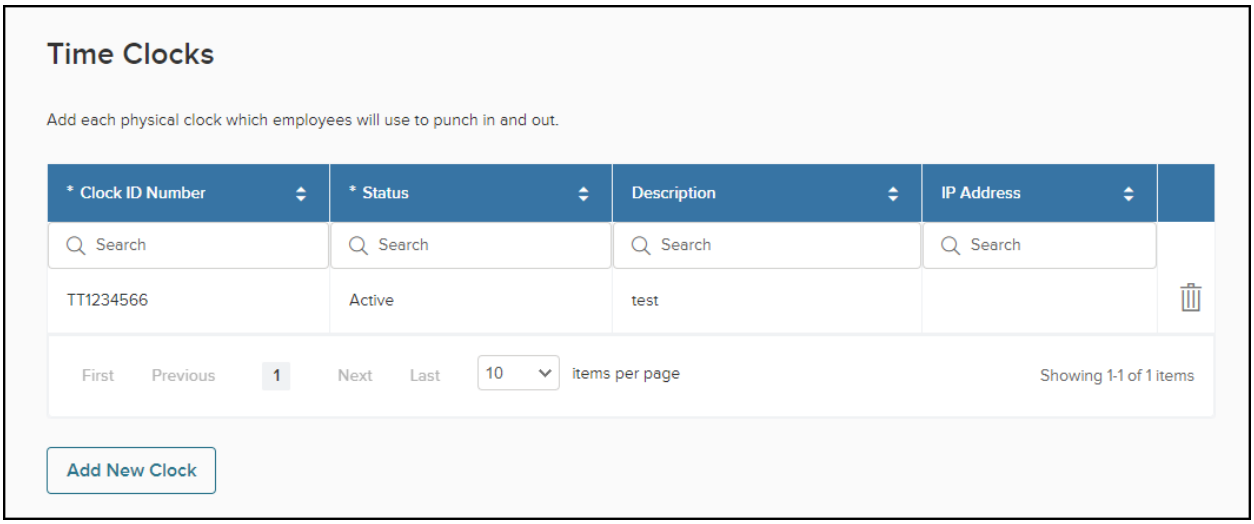
Rounding Rules

Also on the **Details** tab, if punch times should be rounded when applied to timesheets, complete the **Time Rounding Rule** and **Round To Minutes** fields.



Clock Devices

Each clock must be added on the **Time Clocks** screen.



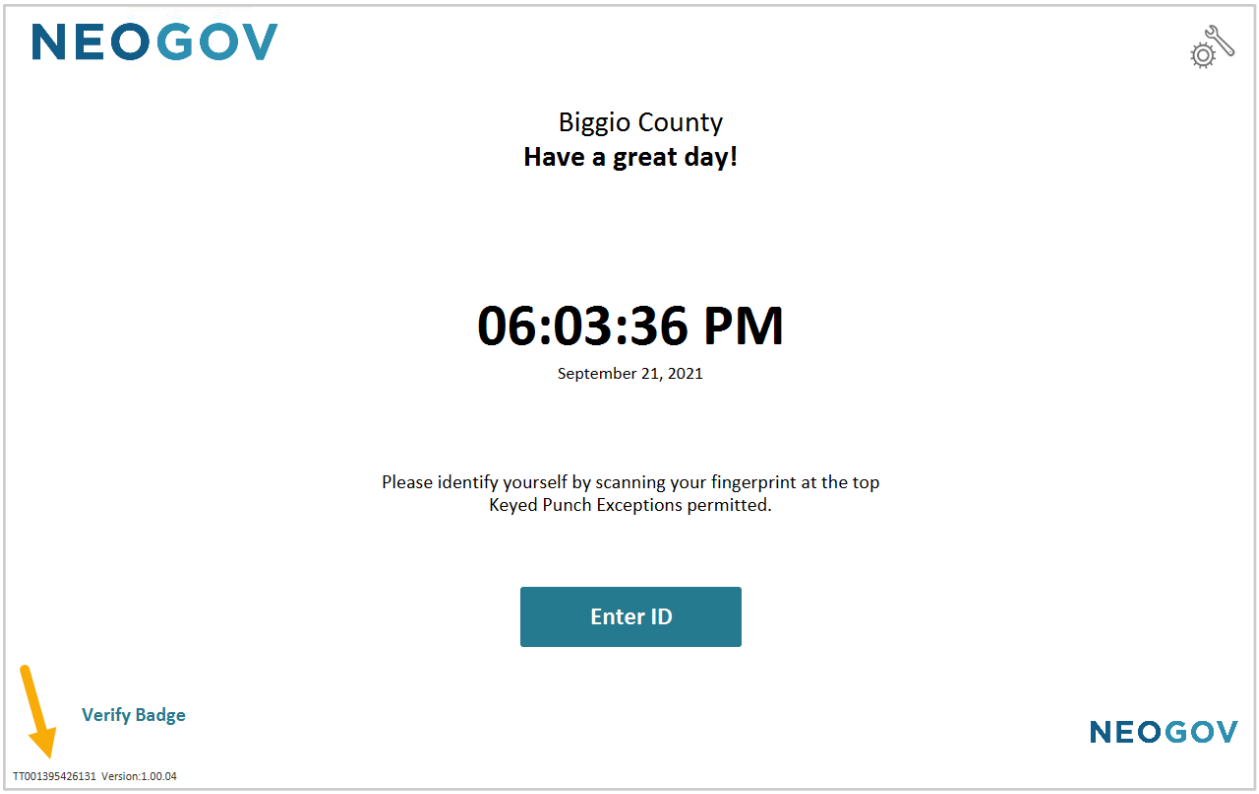
To access this screen, click **Clocking** > **Clocks** from the menu, or search for **CLOCKS** in the **Page Code** field.

When you add a new clock, complete these fields, and save the record.

Field	Notes
Clock ID Number	The unique identification code for the clock
Status	Select **Active**.
Description	Enter a meaningful description.
IP Address	The unique IP address for the clock.

Finding the Clock Identification Number

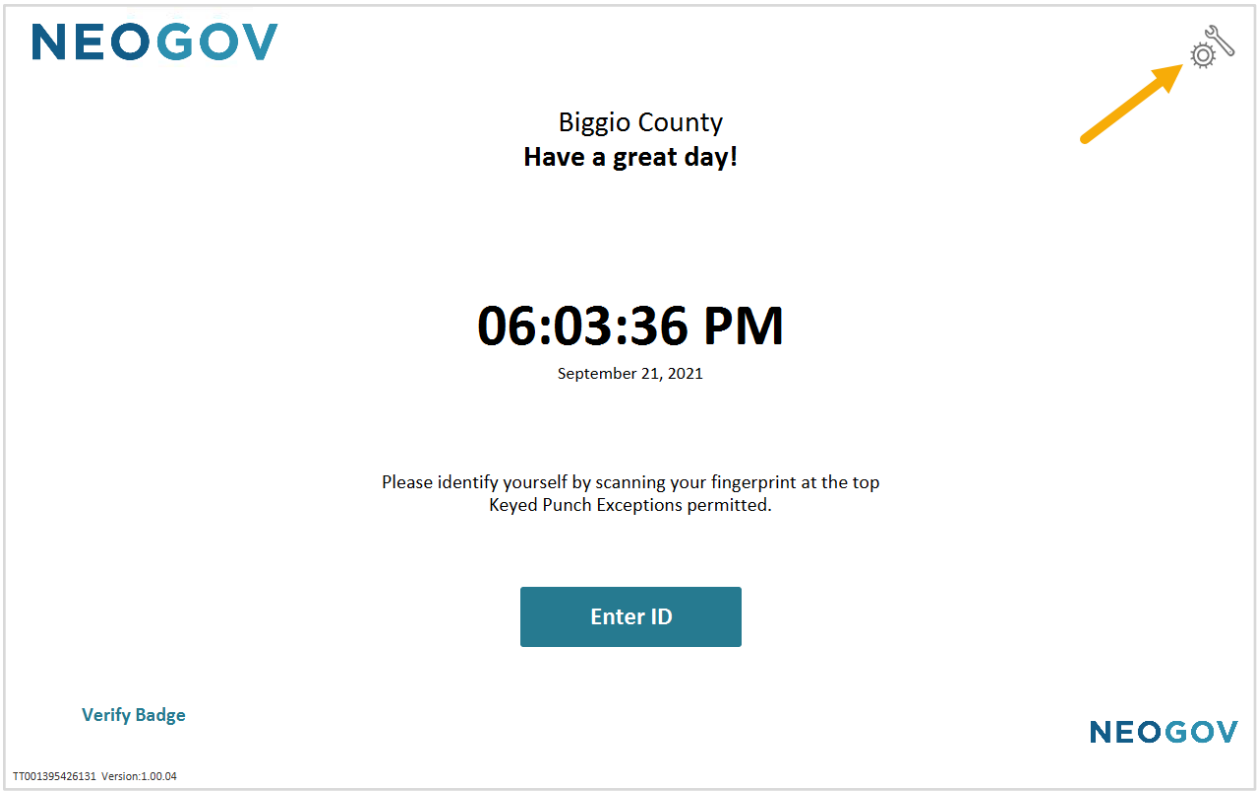
This section describes how to locate the clock's ID number to enter on the **Time Clocks** screen. The clock's ID number appears in the lower left corner of the screen.



Finding the Clock IP Address

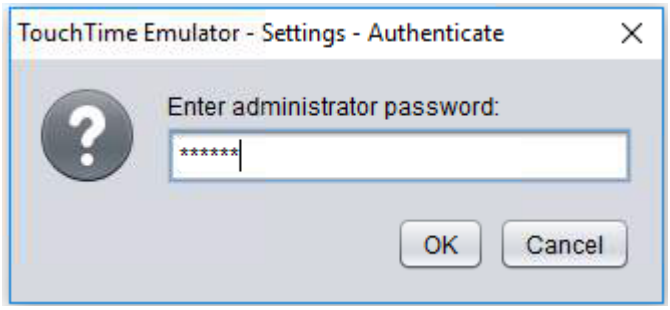
This section describes how to find the clock's IP address to enter on the **Time Clocks** screen.

1. Tap the tool icon in the upper right of the screen.

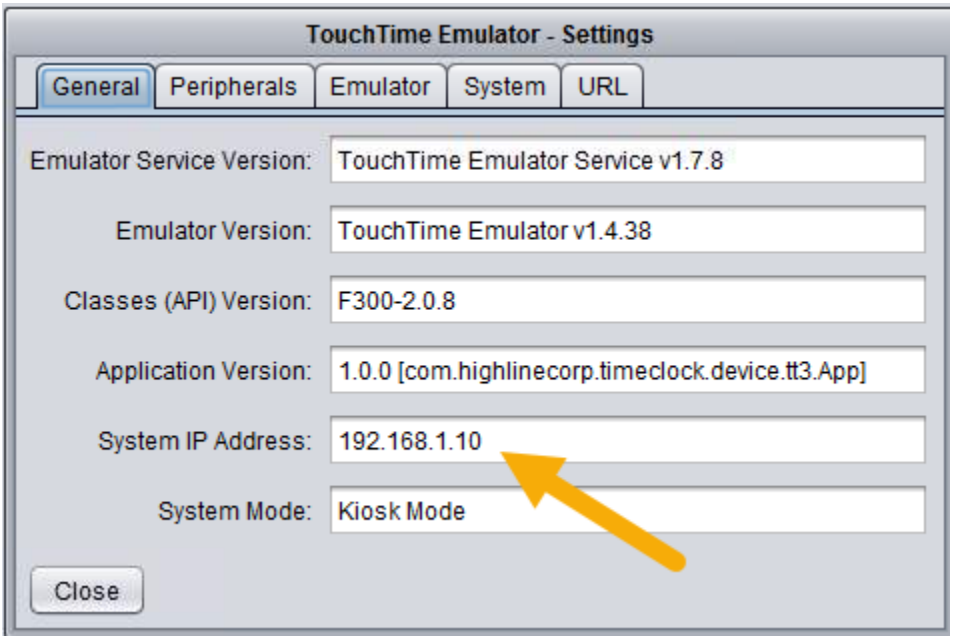


2. A pop-up displays two buttons. Tap the **TT Settings Menu** button.

3. The **Admin Passcode** screen appears. Enter the default passcode **123456**.



4. On the **General** tab, the IP address is displayed.



Clock Cards

When an employee approaches the clock to punch, the first interaction is identification; the clock must know who is clocking in or out to associate the transaction with the right person.

Clock Card Types

The employee can key in the HRIS employee number, though this is not considered best practice because it enables easy 'buddy punching' (i.e., sharing an employee number with a co-worker to punch for you).

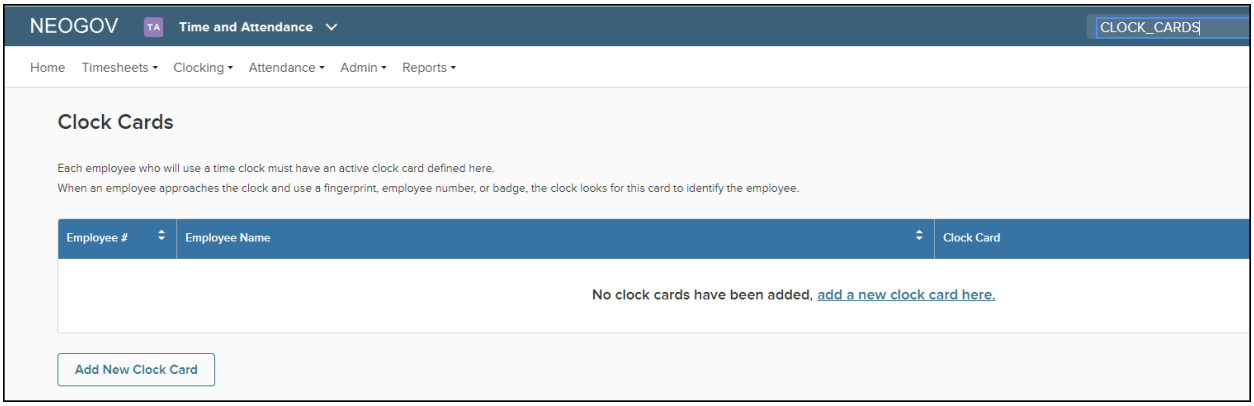
Alternatively, one of the options below can also be used. Biometric is the most secure against buddy punching:

Biometric	Proximity	Swipe
		
Fingerprint scan of 1 finger	Badge held near a reader	Badge swiped through a slot

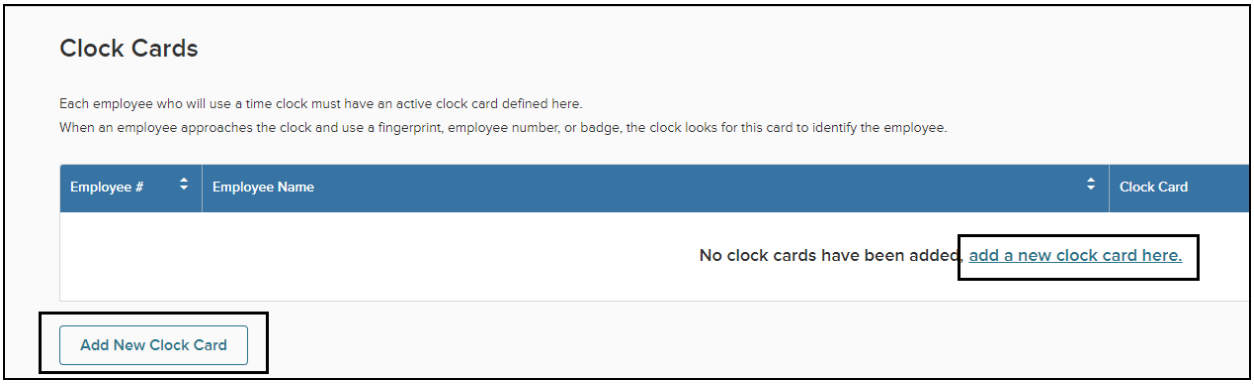
For any of the above options, the employee must have a clock card defined in Time & Attendance.

Adding/Editing/Deleting Clock Cards - Manual

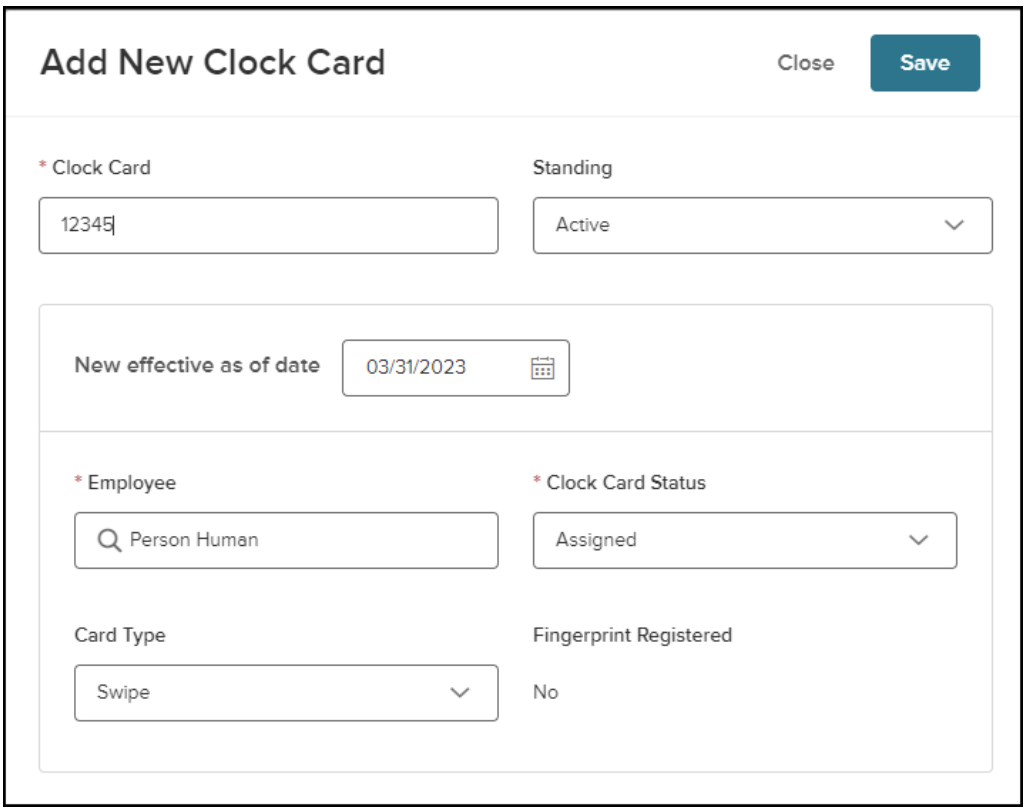
1. From the **Time & Attendance Dashboard** click **Clocking** > **Clock Cards**, or search for **CLOCK_CARDS** in the **Page Code** field.



2. Click **Add New Clock Card**. The **Add New Clock Card** modal appears.

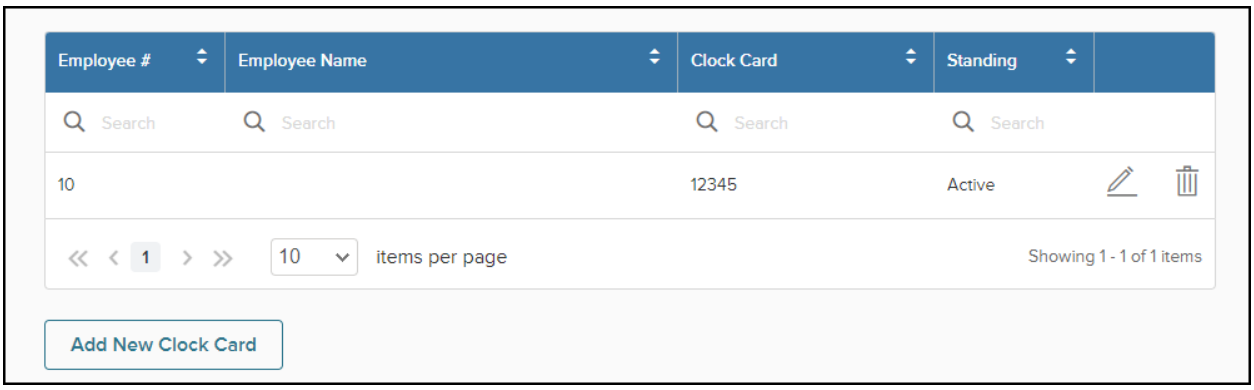


3. Enter these fields, then click **Save**.



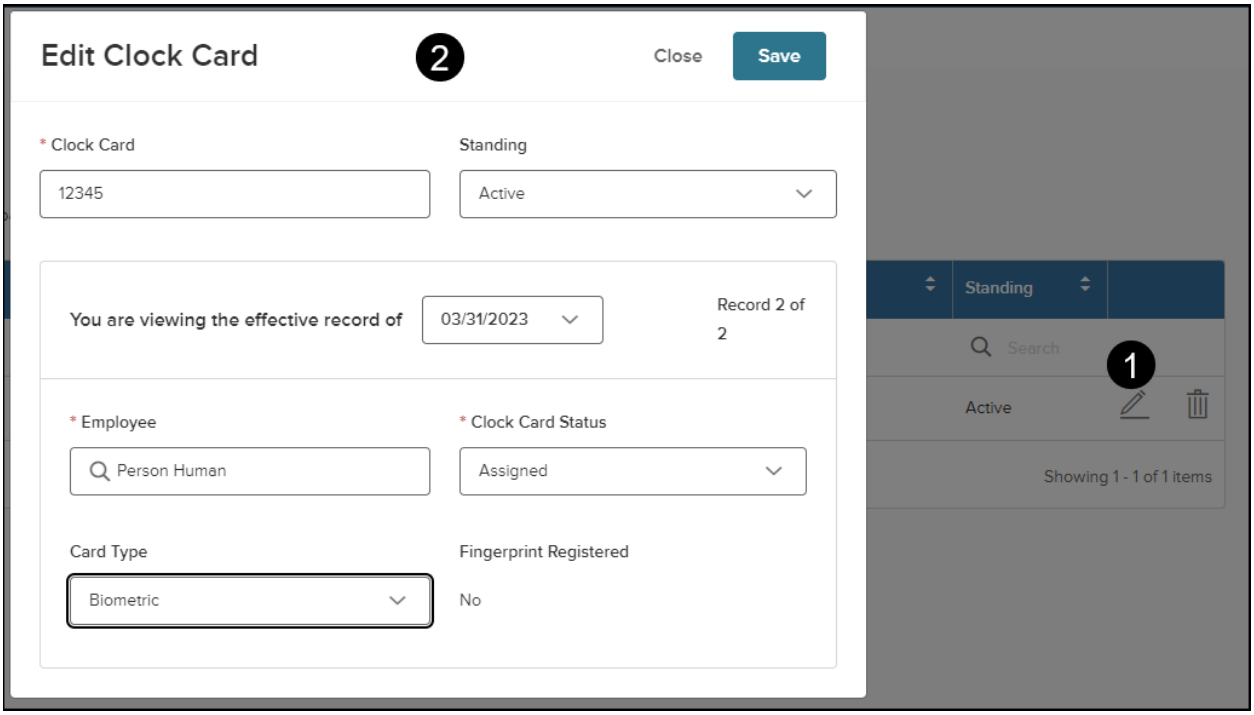
Field	Notes
Clock Card	• If using **HID** (proximity) or **Swipe** cards, enter the number embedded on the card by the manufacturer. • If using **Biometric** (fingerprint), enter the employee number.
Standing	Select **Active**.
New effective as of date	Select the date the clock card is active.
Employee	Select the employee who will use the card.
Clock Card Status	Select **Assigned**.
Card Type	Depending on the card type, select **Biometric**, **HID** (proximity), or **Swipe**. If manually entering, select **Key in EE Number**.
Fingerprint Registered	For **Biometric** cards, the default is **No** when adding the card here. Dynamically updates to **Yes** after enrolling and storing the employee's fingerprint on the clock. (Always appears as **No** for **HID** (proximity) and **Swipe** cards.)

After saving, NEOGOV displays the clock card in the table.

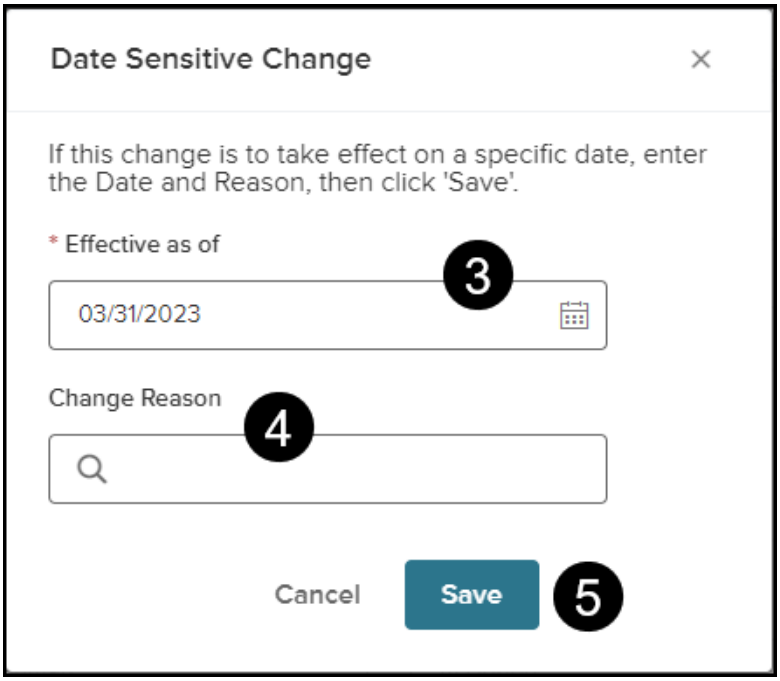


To edit a clock card:

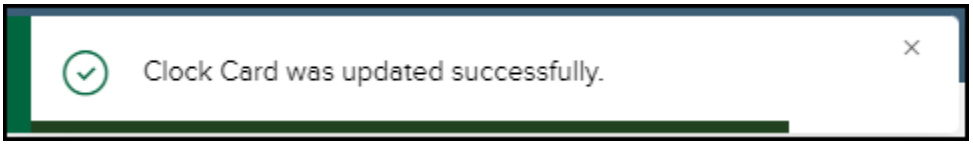
1. Click the pencil icon (**Edit Clock Card**).
2. Edit the information and click **Save**. The **Date Sensitive Change** dialog appears.



3. Select the **Effective as of** date.
4. (Optional) Select a **Change Reason**.
5. Click **Save**.

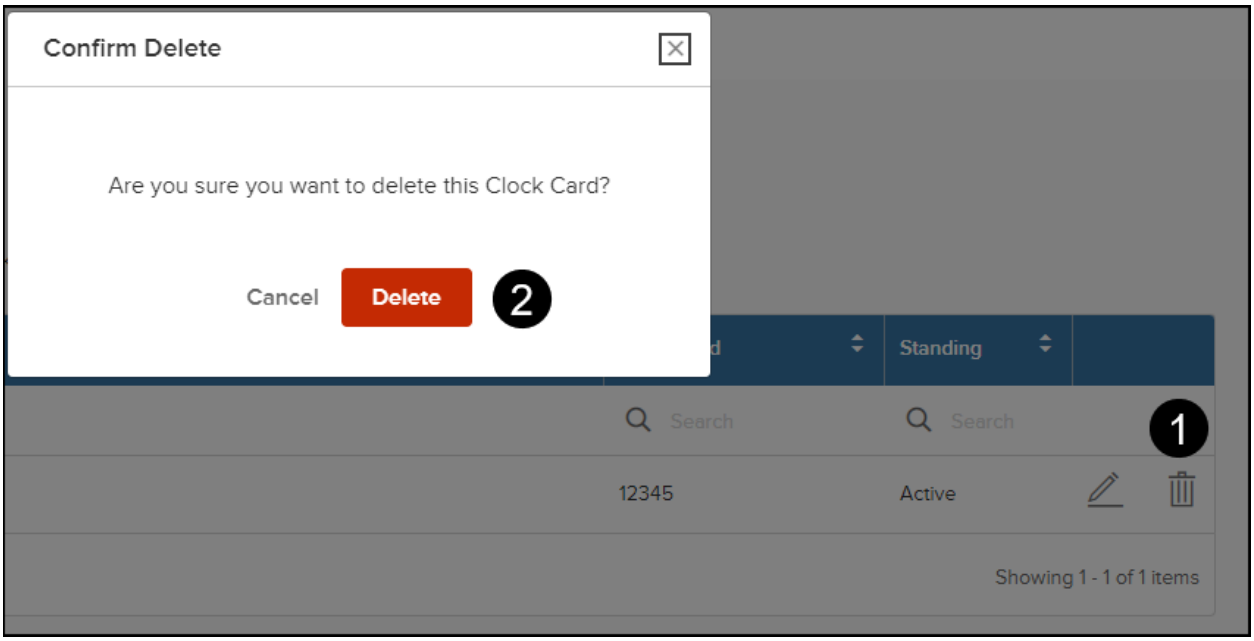


NEOGOV displays a confirmation and updates the clock card.

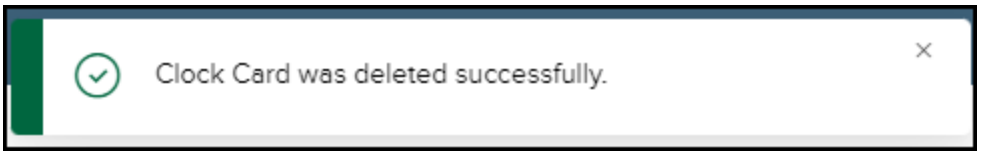


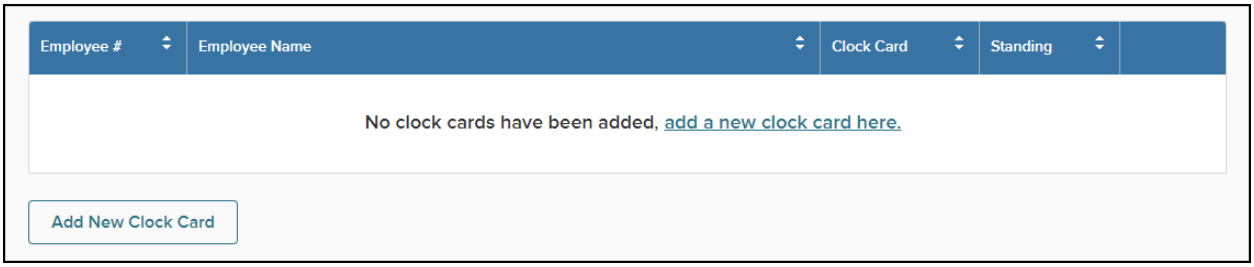
To delete a clock card:

1. Click the trash can icon (**Delete Clock Card**).
2. Click **Delete**.



NEOGOV displays a confirmation message and removes the clock card from the table.





Adding Clock Cards - Import

For clients with large volumes of clocking employees, clock card records may be imported from a CSV file rather than manually entering them one at a time. Your NEOGOV Implementation Consultant can assist with this process.

Setup - Configuration File

The TT3 has an application configuration file named **app.conf** with settings that determine many of the clock's capabilities and operations. This is the basic flow for applying the file's settings to the clock:

1. On your local computer, open the file in a text editor (e.g., Notepad).
2. Enter the attributes in the file per the instructions in this document and save.
3. Copy the file from your computer to the clock so that the settings are stored locally for the device to read.
4. Reboot the clock for the updated file to take effect.

File Template

The starter template will be provided by your NEOGOV Implementation Consultant.

File Attributes

Most attributes are pre-populated and do not need to be touched. To simplify the setup, the following sections of this document focus on just the attributes which typically need to be entered.

Environment

The clock connects with the NEOGOV server to push data (punches) and pull data (employees). Define the environment address to establish connection. This may depend on where you are in the implementation process.

For the **HOST_URL** attribute in the file, enter the relevant URL:

- Training environment: https://hr.training.neogov.com/selfServiceADF/clock.process
- Production environment: https://hr.neogov.com/selfServiceADF/clock.process

In terms of how that would actually look in the file when entered, this example is for training.

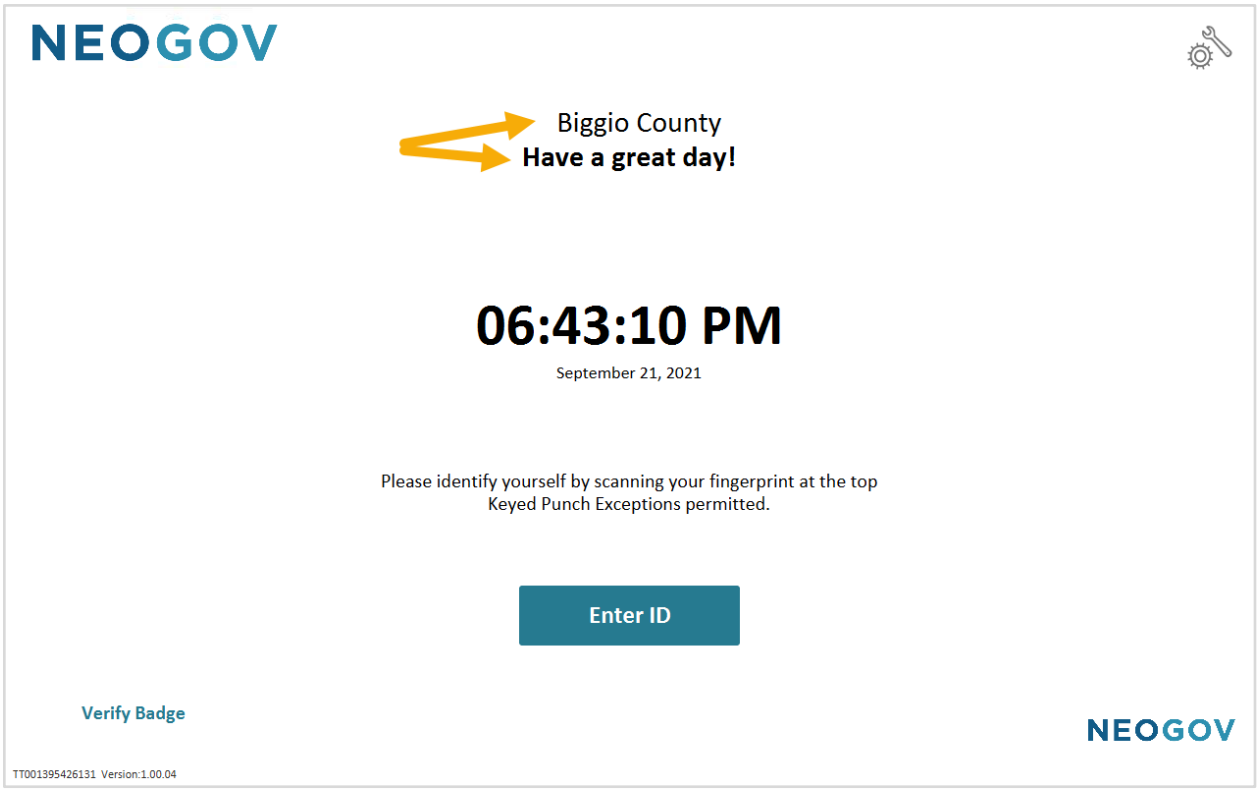
```
HOST_URL = https://hr.training.neogov.com/selfServiceADF/clock.process
```

This example is for production.

```
HOST_URL = https://hr.neogov.com/selfServiceADF/clock.process
```

Home Screen Text

The clock displays a home screen, which appears when it is not in use by an employee to clock in or out. You can change some of the displayed text.



Use **TITLE** and **WELCOME_MESSAGE** to change the text.

The example above reflects these settings:

```
TITLE = Biggio County

WELCOME_MESSAGE = Have a great day!
```

The TITLE will display a maximum length of 20 characters, and the WELCOME_MESSAGE will display a maximum length of 86 characters.

Employee Identification

When an employee approaches the clock to punch, the first interaction is identification; the clock must know who is clocking in or out to associate the transaction with the right person.

Key in an Employee Number

To allow employees to key in an employee number at the clock, set **ALLOW_KEYING** to **true**.

```
ALLOW_KEYING = true
```

Use a Proximity (HID) or Swipe Badge

No special setting is required in the config file to enable this method.

Use Biometrics

If you want employees to scan fingerprints at the clock, set **USE_BADGE** and **STORE_BIO** to **true**.

```
STORE_BIO = true
```

Some employees are unable to scan a fingerprint due to a condition, injury, or any other reason. If you are primarily using biometrics but want to define specific exception employees who can key in their employee number instead, set **ALLOW_KEYING** to **false** to disable keying as a global rule.

Then add the employee numbers for the exception employees to **VALID_KEYED_VALUES**. Separate the values using a comma and no spaces between. In the example below, only employees #102 and #103 can key in their number at the clock.

```
ALLOW_KEYING = false

VALID_KEYED_VALUES = 102,103
```

Clocking Overrides

After identifying at the clock, an employee will always be presented with options to clock in and clock out. You can also enable various overrides, which will appear to all clock users (it is not selective). This means that as part of the clock in process, the employee will also be prompted to enter additional information to be captured with the punch.

Cost Center

If employees should not be prompted to enter a cost center when clocking in, set **ENTER_COST_CENTER** to **false**.

```
ENTER_COST_CENTER = false
```

If employees should be prompted to enter a cost center, set **ENTER_COST_CENTER** to **true**. And then list the available cost centers for **VALID_COST_CENTERS**. Separate the values using a comma and no spaces between.

Based on the example setup below, all employees will be prompted to enter a cost center when clocking in, and only codes of 1000, 2000, or 3000 will be accepted.

```
ENTER_COST_CENTER = true

VALID_COST_CENTERS = 1000,2000,3000
```

Job Code

By default, the job code on the employee's primary assignment is associated with the clock in punch. If employees should not be prompted to override that default and select a different job when clocking in, set **ENTER_JOB** to **false**.

```
ENTER_JOB = false
```

If employees should be prompted to select a job from an assignment other than the primary one, set **ENTER_JOB** to **true**. This is only relevant to employees with multiple active assignments, though it will appear to all employees each time they clock in.

```
ENTER_JOB = true
```

Loading the File

After the config file is edited, it must be copied to the clock(s) so it will be stored locally on the device(s) and can be read and applied.

This is the overall process:

1. Edit the config file per the instructions on the previous pages.
2. Save it with the same file name of **app.conf**. The file must have this name to work with NEOGOV. *Do not rename the file to anything else.*
3. Copy the file to the device (as identified by its unique IP address) and place in this specific path: **\ramdisk\emulator\config\app.conf**. Each client's IT department will likely have their own preferred file transfer utility.
4. Restart the clock. When the clock is back online, the config file's attributes should be in effect.

Biometrics

For employees to use fingerprints at the clock, the following setup must be in place:

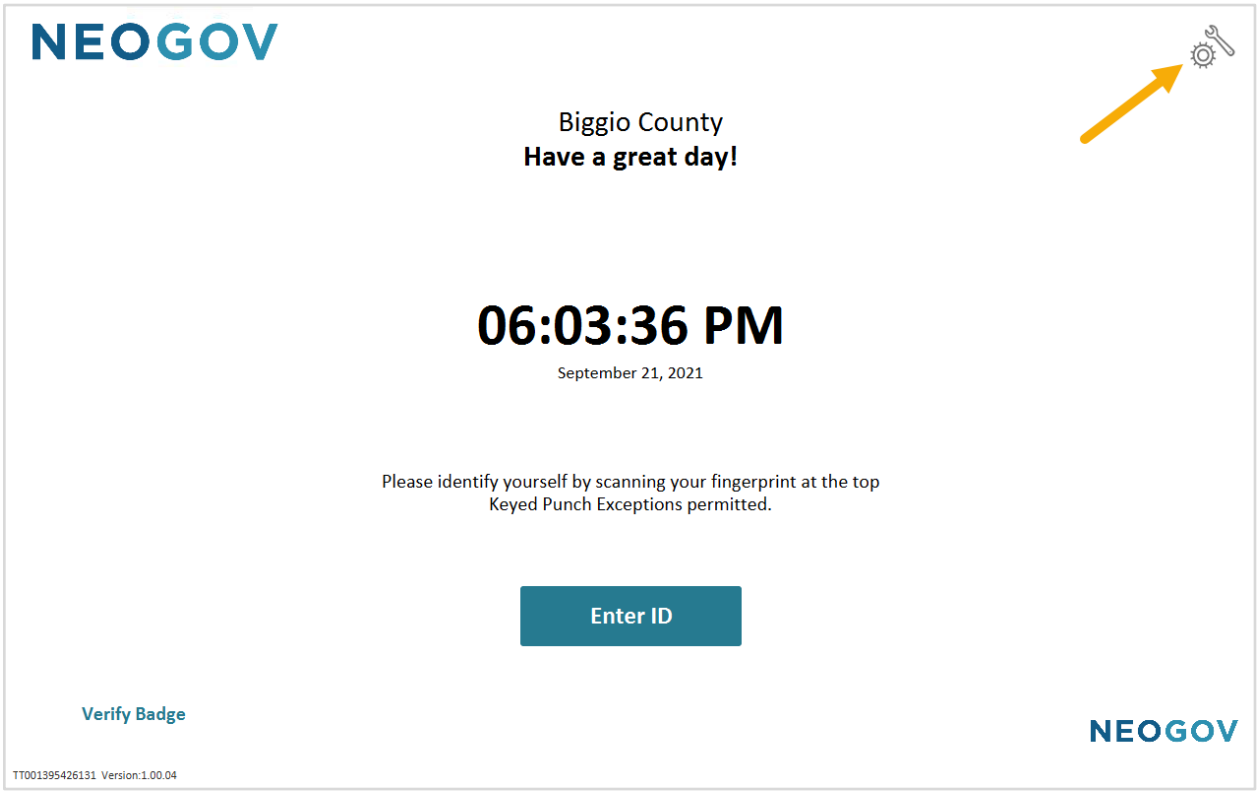
- The config file must be defined to enable biometrics.
- The employee must have a clock card record on the **Clock Cards** screen with **Card Type** set to **Biometric**.

Enrollment

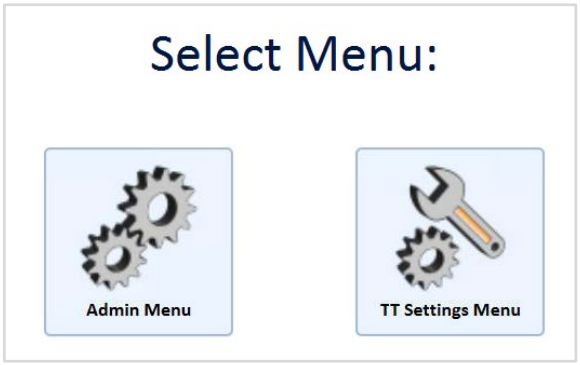
If using biometrics, the employee's fingerprint must be initially captured before the employee can be identified at the clock. This often is done during the employee's new hire orientation. The employee cannot perform this action alone; it requires a clock administrator.

To capture fingerprints, follow these steps.

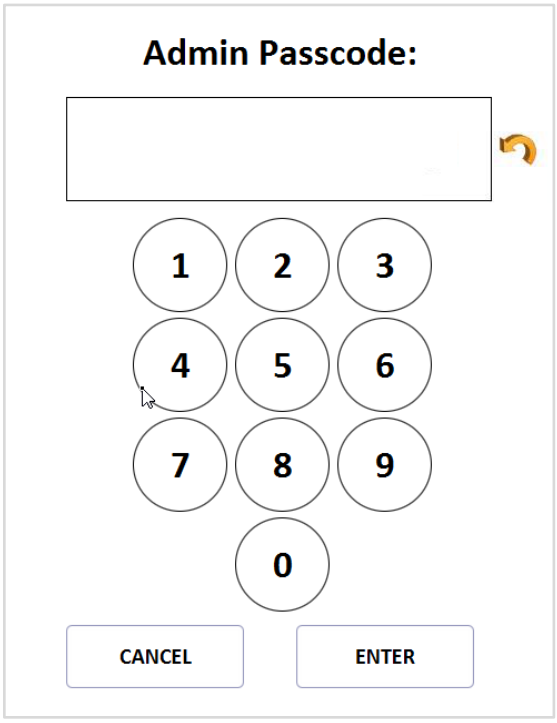
1. Tap the tool icon in the upper right of the screen.



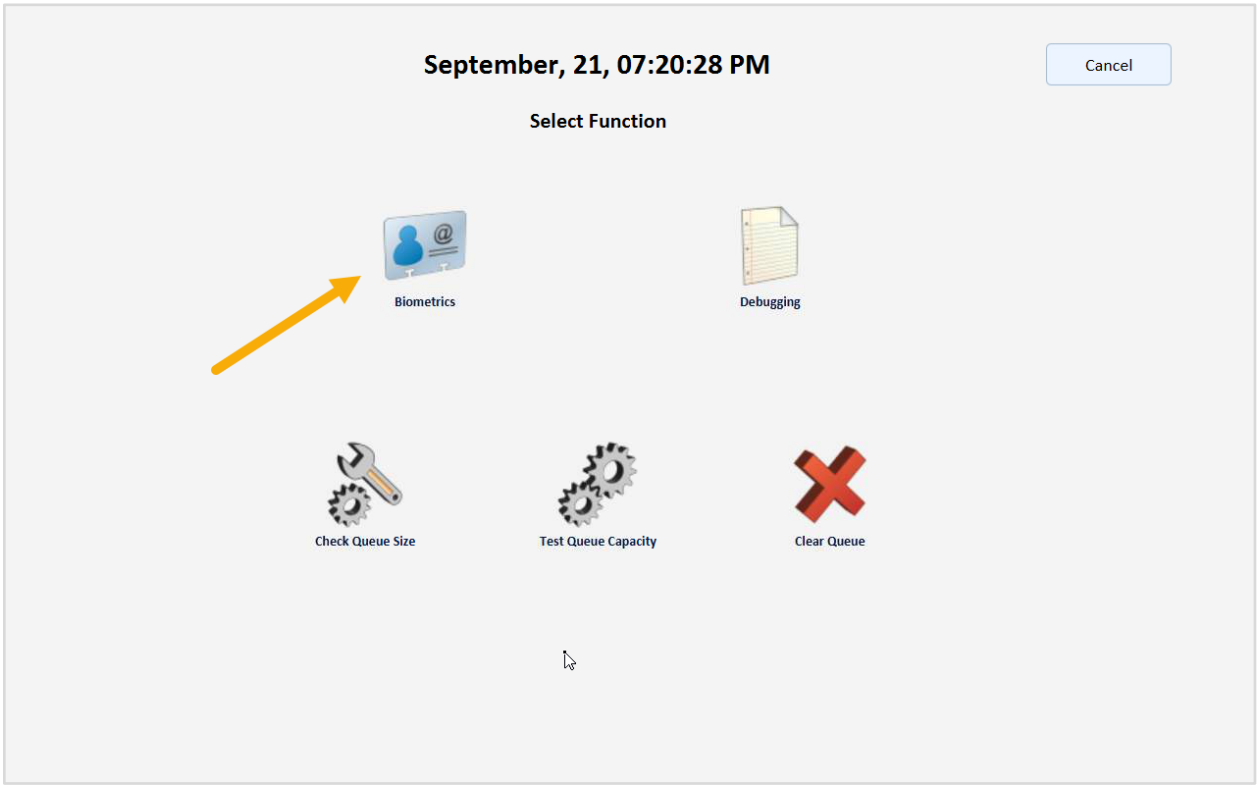
2. A pop-up displays two buttons. Tap **Admin Menu**.



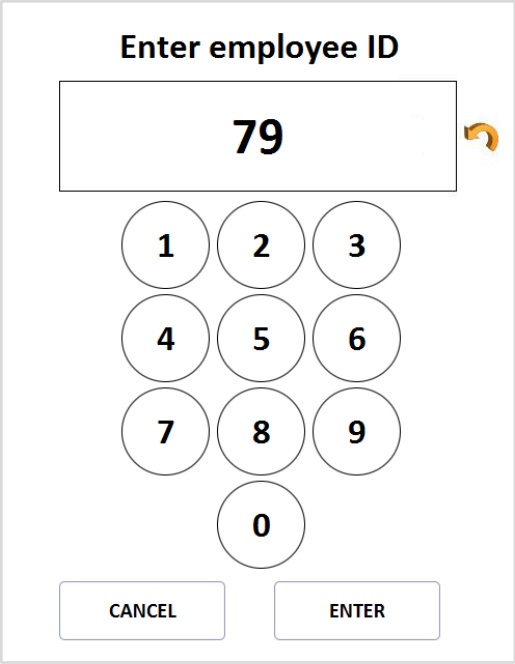
3. The **Admin Passcode** screen appears. Enter the default passcode **9** (this is defined in the configuration file and can be changed there if desired).



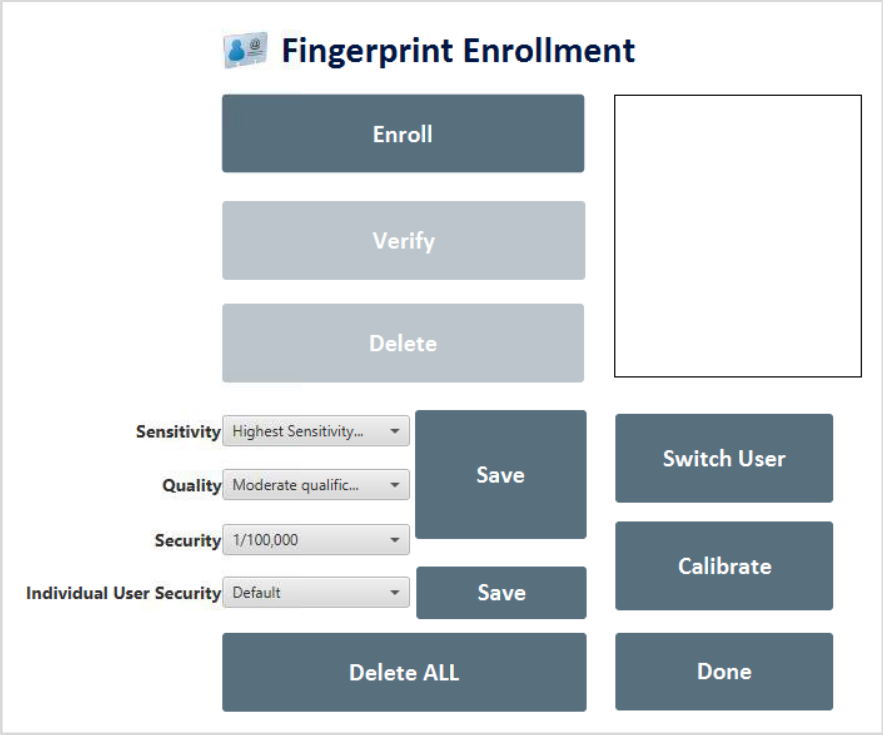
4. On the menu screen, tap **Biometrics**.



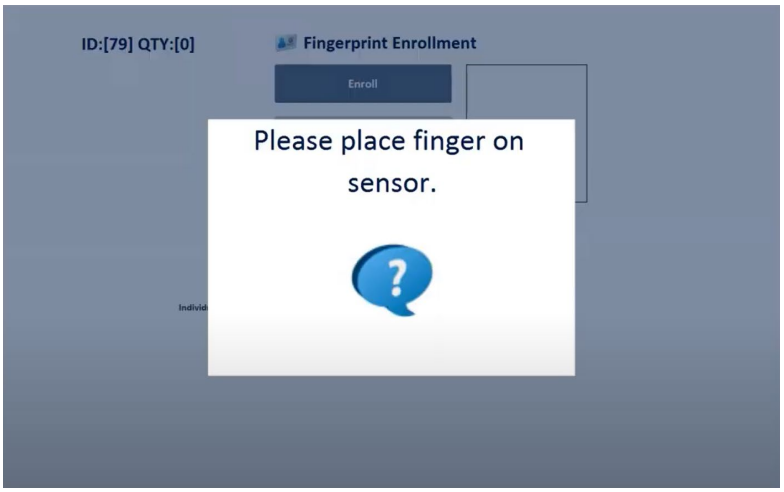
5. Enter the NEOGOV person code (employee number) of the individual enrolling a fingerprint.

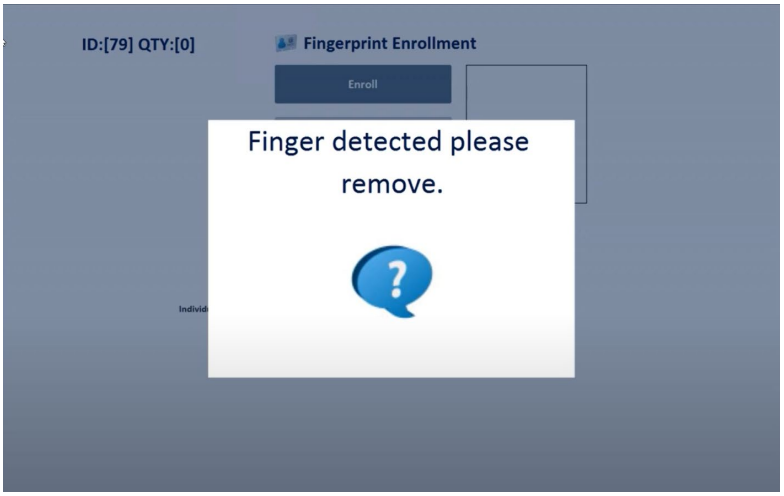


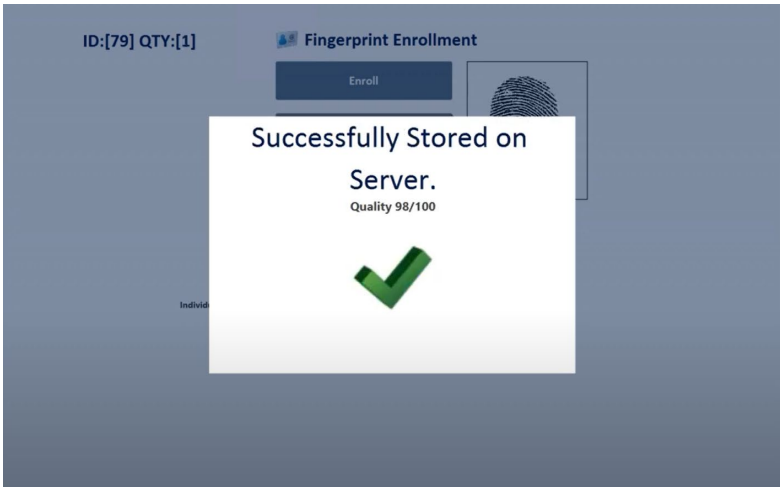
6. Tap **Enroll**.



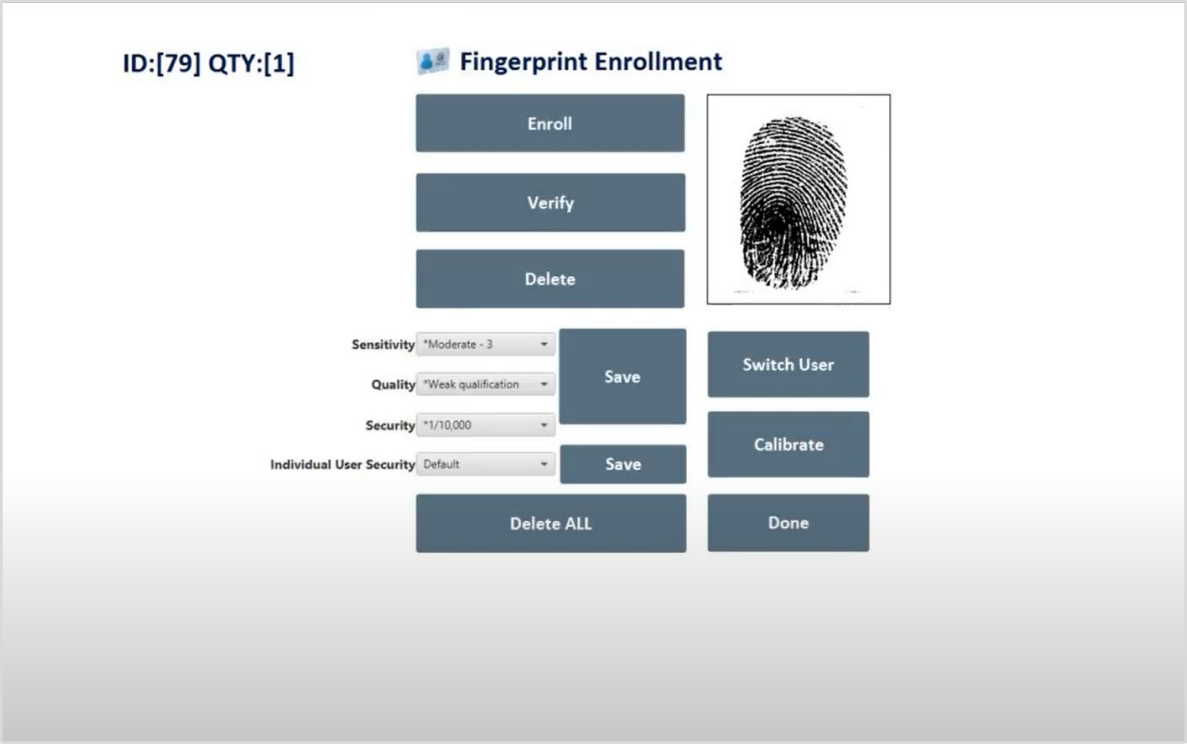
7. Instruct the employee to follow the on-screen instructions to capture the fingerprint, using the sensor on the top of the clock.







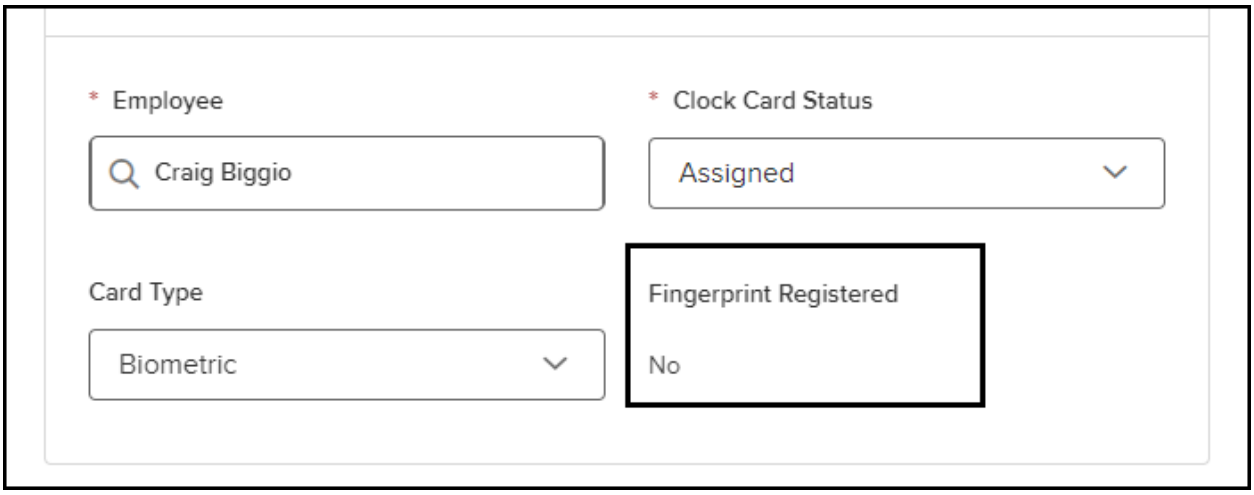
8. After successfully capturing the fingerprint, an image will appear, and the **QTY** in the upper left corner will change from 0 to 1.



The **Switch User** button allows the admin to quickly switch to another employee to enroll. If enrollment is happening during an orientation with multiple employees, this is the quickest way to pick the next one while already in the biometric area of the clock.

9. To validate that the enrollment communicated successfully from the clock to NEOGOV, navigate to the **Clock Cards** screen and check the **Card Details**.

During clock card setup and *before* capturing the fingerprint, **Fingerprint Registered** displays **No**.



After enrolling the fingerprint, **Fingerprint Registered** changes to **Yes**.

Sharing Fingerprints Between Clocks

When employees enroll fingerprints on the clock, the fingerprint is stored locally on that clock and uploaded to the server. If desired, fingerprints can be used on multiple clocks (e.g., an employee clocks in at clock A in the morning and clocks out at clock B in the evening, scanning her fingerprint at each for identification).

If the clocks are on the same network, this option is automatically available.

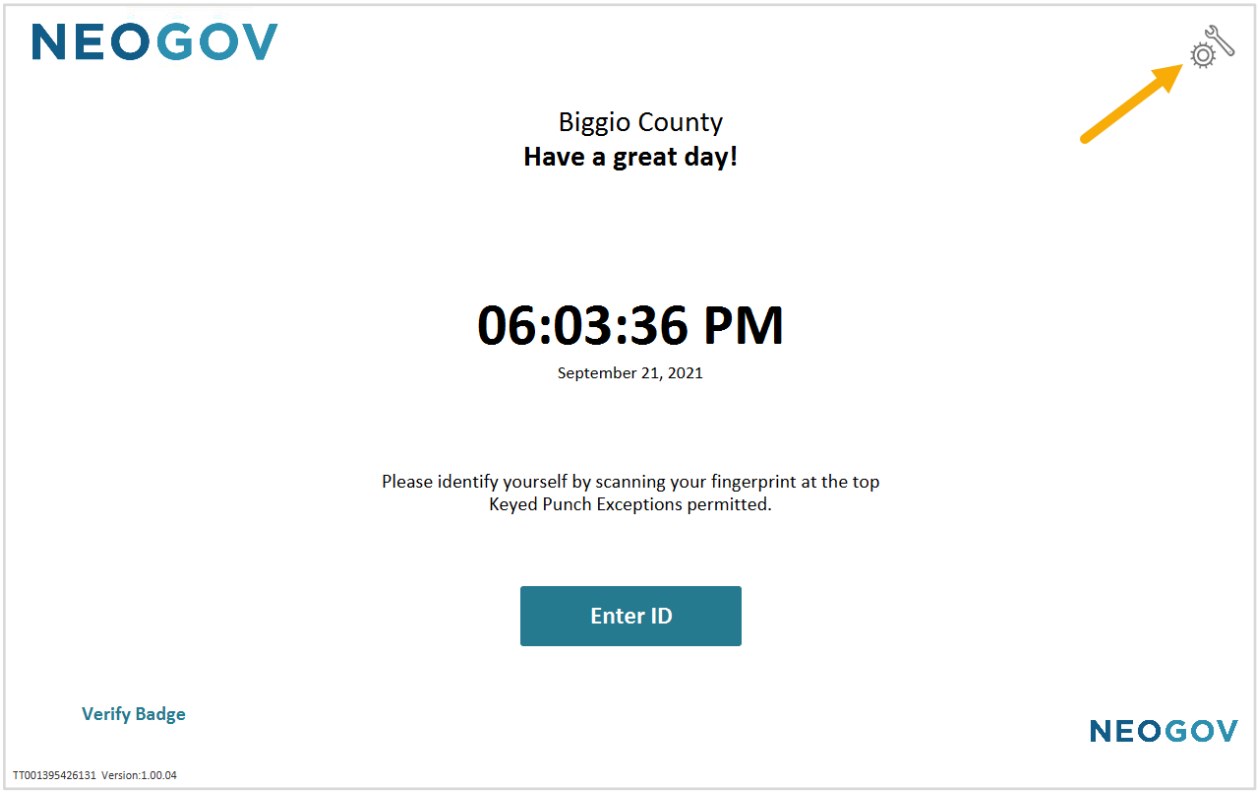
The first time an employee uses a second clock (not the one where the fingerprint was initially captured), it pings the server, locates the fingerprint, and stores it locally on the second clock. After that, it is always available on the second clock too.

Time Zone Setting

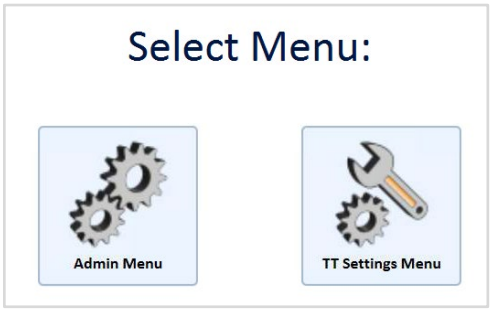
Perform these steps **only** if the time displayed on the clock does not match the local time zone where the clock is installed. (**If the time matches correctly, skip this configuration**).

Perform these steps on all clocks that require adjustment.

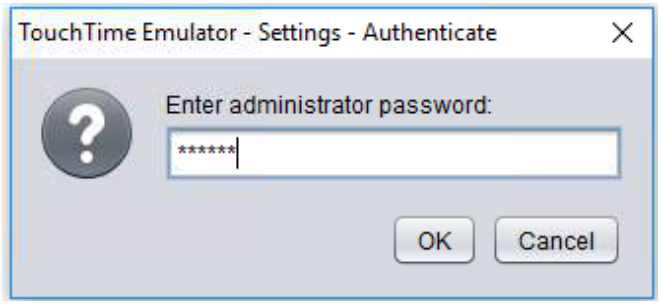
1. Tap the tool icon in the upper right of the screen.



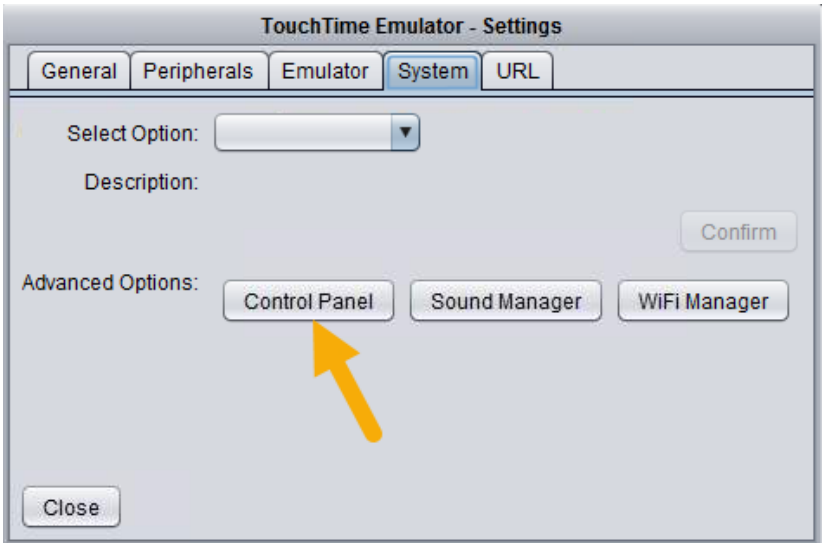
2. A pop-up displays two buttons. Tap **TT Settings Menu**.



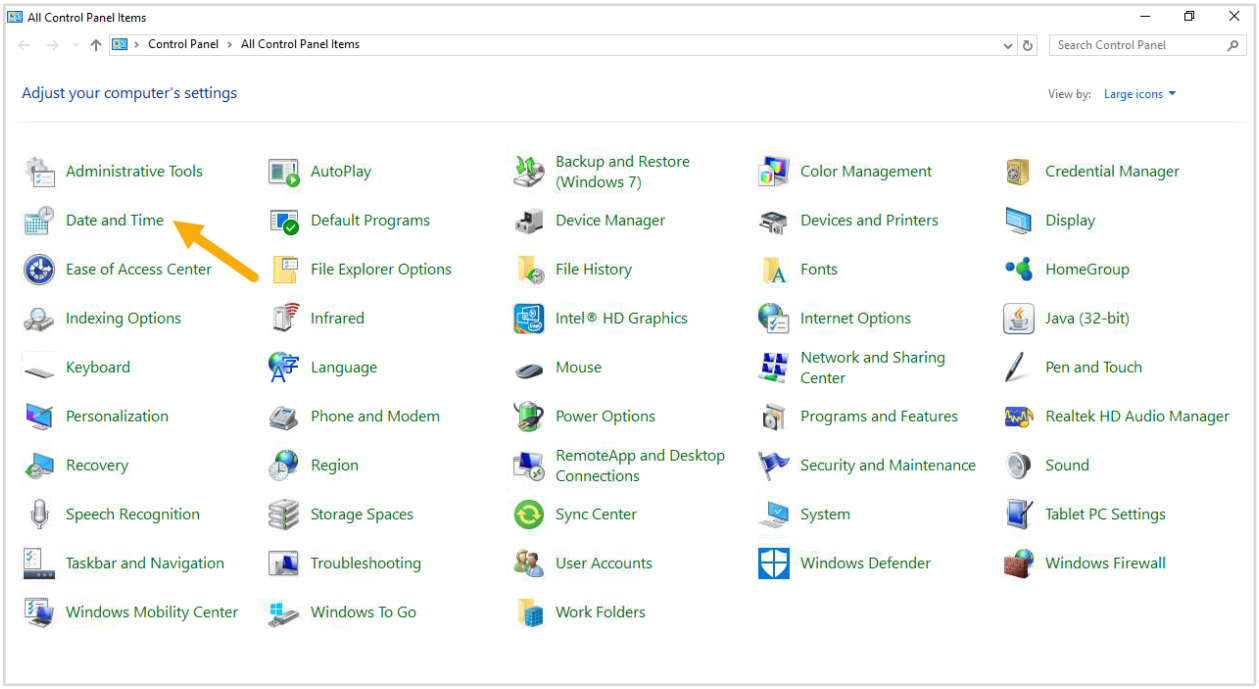
3. The **Admin Passcode** screen appears. Enter the default passcode **123456**.



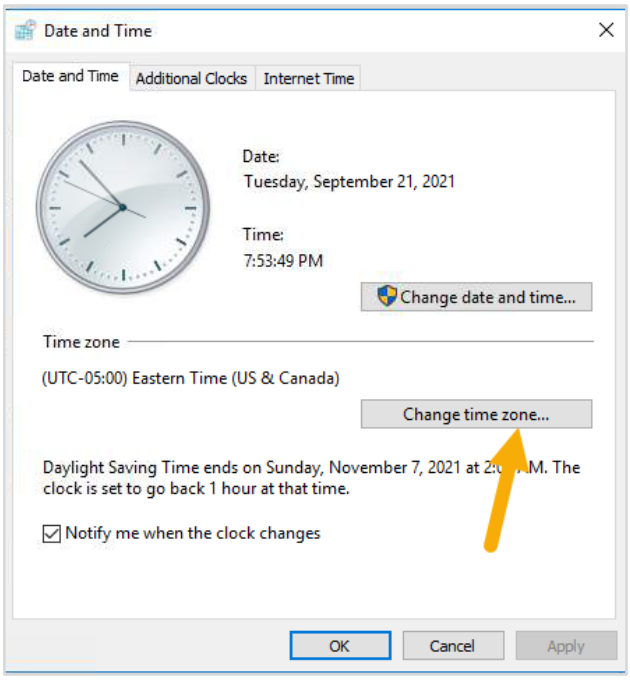
4. Go to the **System** tab and tap the **Control Panel** button.



5. From the list of icons, tap **Date and Time**.



6. Select the correct time zone for the clock's location, and the clock time will adjust after you restart it.



Employee Experience

Once the clock is set up, it is ready to use and test. This document covers the primary experiences as the employee uses the clock.

Employee Identification

When an employee approaches the clock to punch, the first interaction is identification; the clock must know who is clocking in or out to associate the transaction with the right person.

Biometrics

Place the finger on the scanner on the top right of the clock.

Proximity (HID) Badge

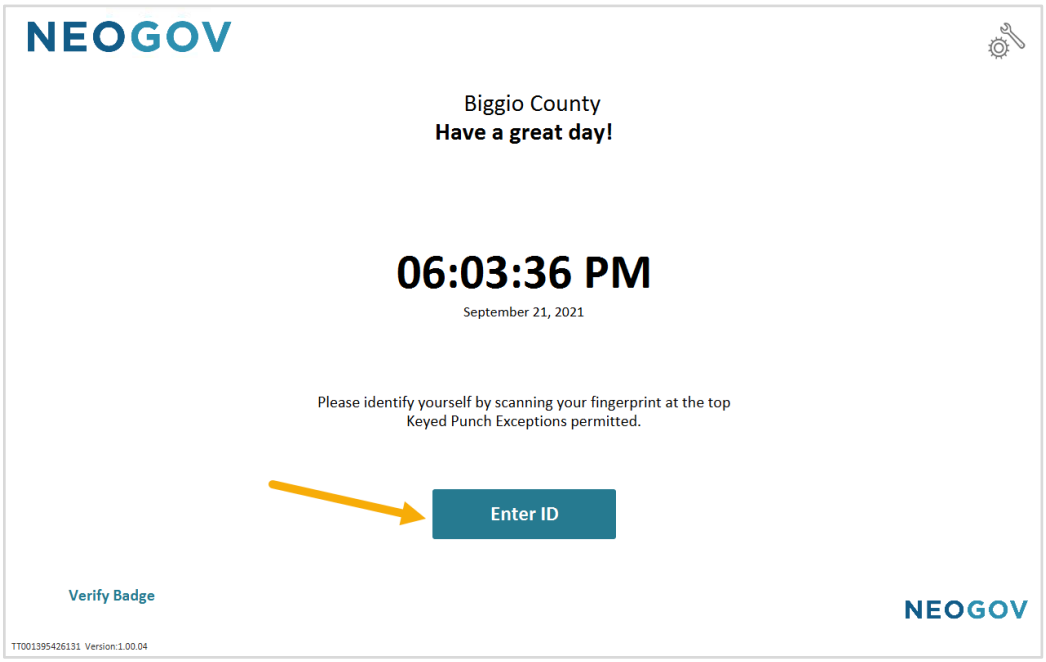
Hold the badge above the reader on the top left of the clock.

Swipe Badge

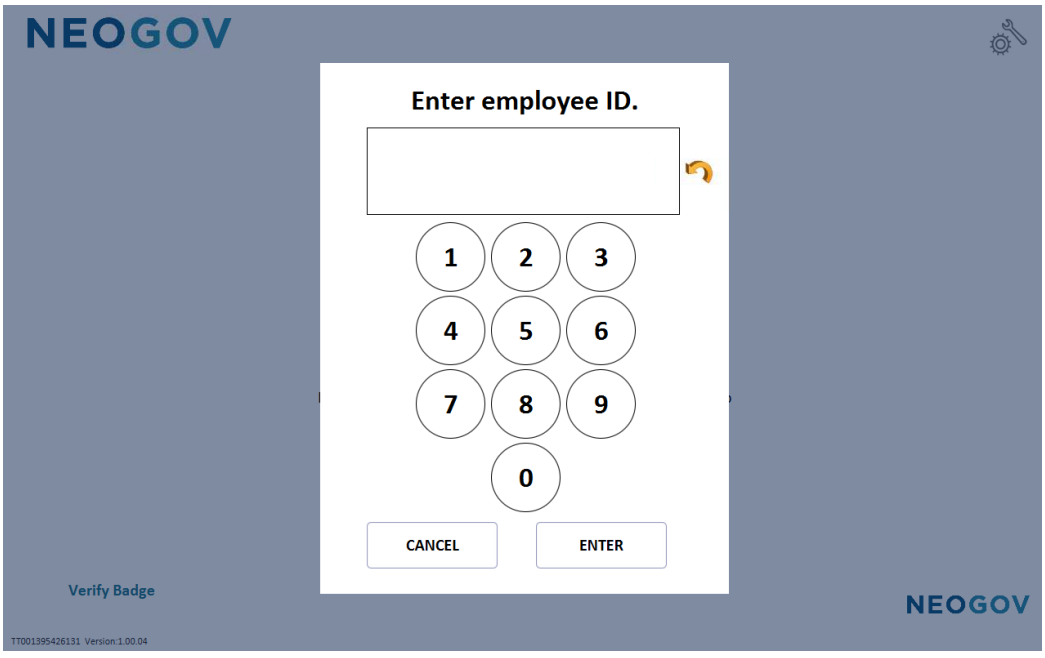
Run the badge through the slot reader on the right side of the clock.

Key in Employee Number

First, tap the **Enter ID** on the clock's home screen.

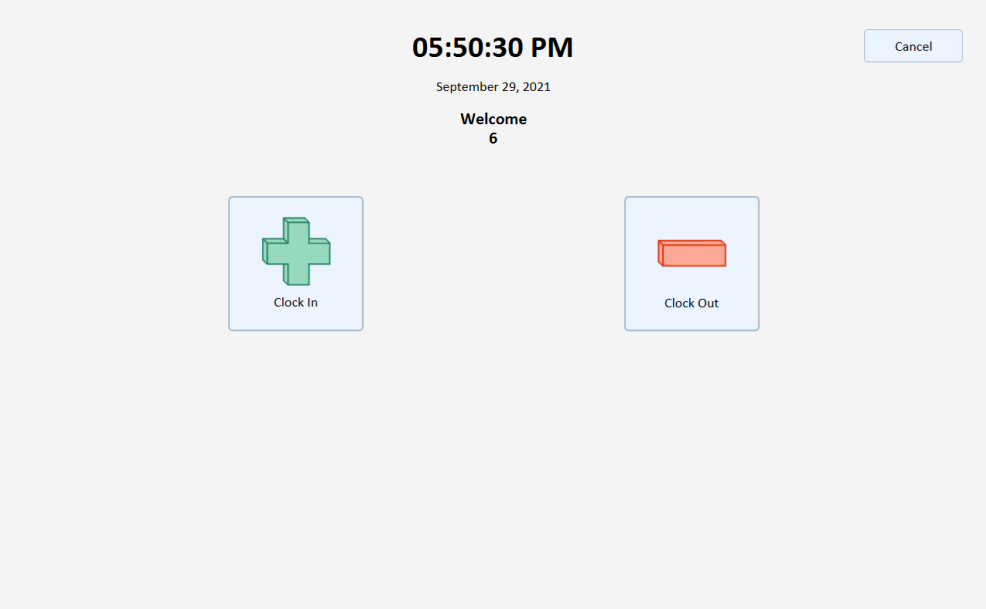


When the prompt appears, enter the employee number and click **Enter**.



Clocking In and Out

Once the clock identifies the employee, the screen below appears with clocking buttons and the employee's number (**6** in this example) displayed at the top.



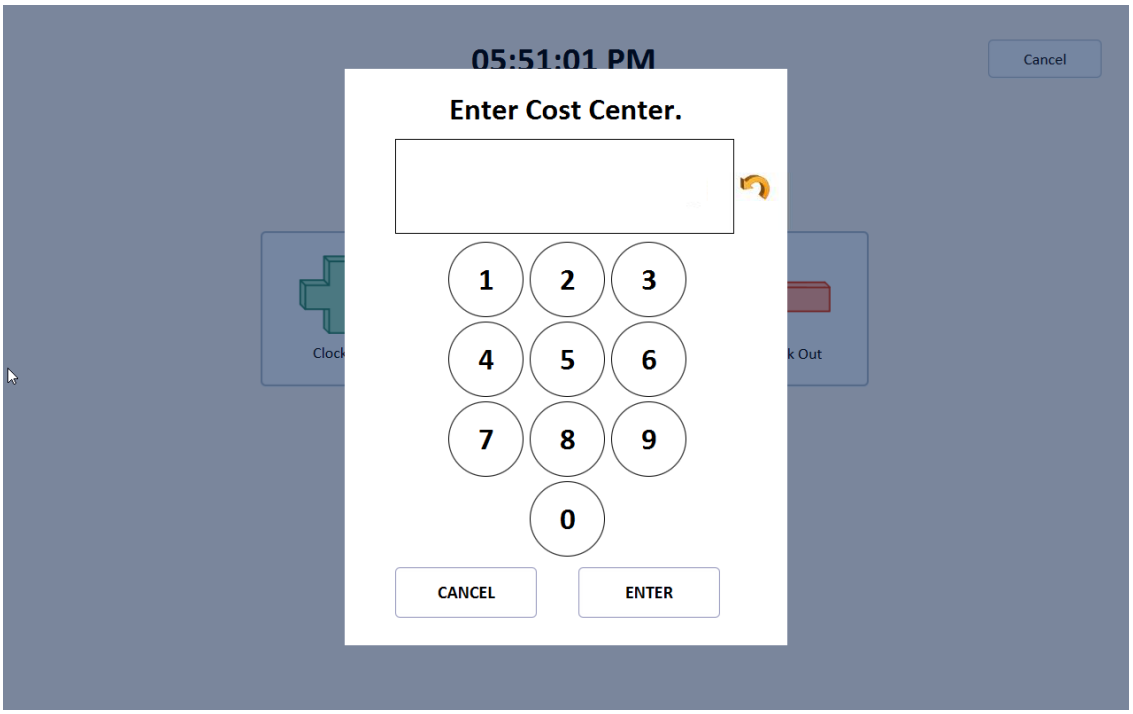
After clocking in or out, the confirmation appears.

Clock In Overrides

After identifying at the clock, an employee will always be presented with options to clock in and clock out. Using the config file, you can also enable various overrides, which appear to all clock users. This means that as part of the clock in process, the employee will also be prompted to enter additional information to be captured with the punch.

Cost Center

If cost center overrides are enabled, the **Enter Cost Center** screen appears immediately after tapping **Clock In**.

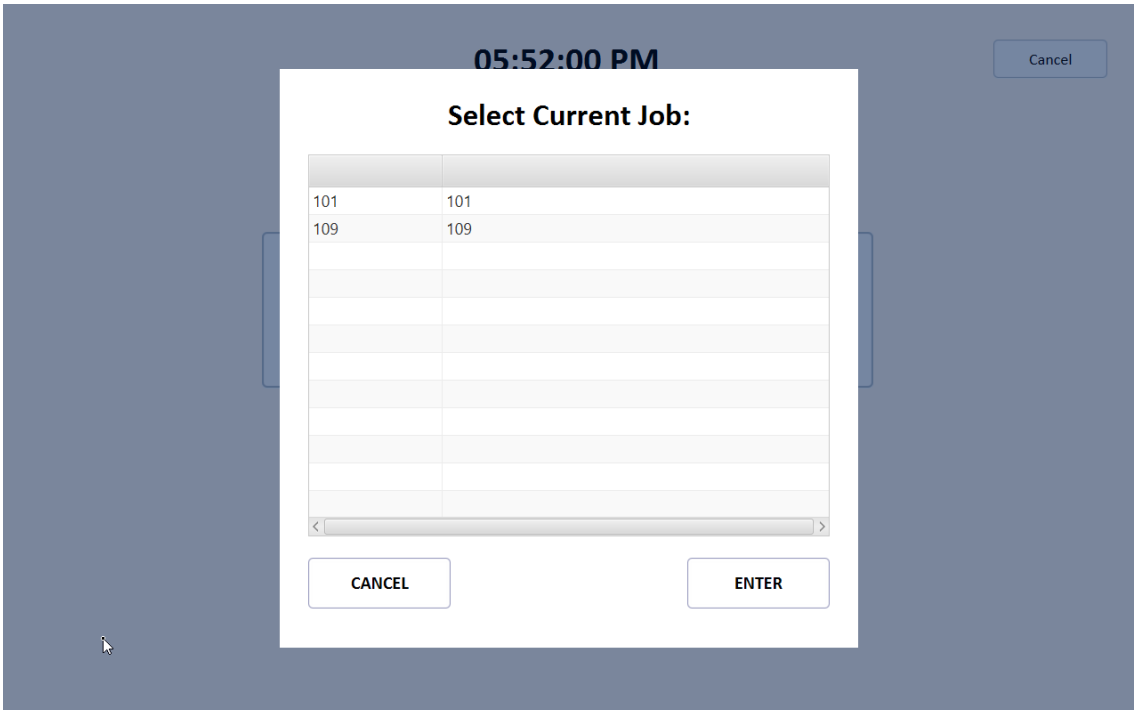


When using this override, consider:

- This keypad only accepts numbers, not letters. So when defining cost centers on **IDCC** and in the **app.conf** file, ensure that all codes are numeric if the client intends to have employees enter them on the clock.
- This feature does not provide a drop-down list; the employee must know the code to enter.
- If the employee enters an invalid value that is not defined in the configuration file, an error message appears.
- If the cost center screen appears and the employee does not need to enter a cost center, tap **Enter** to skip the step. (Tapping **Cancel** will cancel the punch transaction).

Job Code

If the configuration file enabled job overrides, the **Select Current Job** screen appears immediately after tapping **Clock In** (or after the **Cost Center** screen if those overrides are also enabled).



When using this override, consider:

- The clock provides a drop-down list, and shows the job code, not the full title.
- The clock shows jobs for the employee's active assignments only, not all job codes for the client.

Troubleshooting

When an employee is using the clock, a few types of errors could potentially occur:

- The employee tries to identify at the clock either through biometric scan, badge use, or keying in an employee number, but the clock does not recognize the employee and displays an error message.
  Result: The employee is not able to clock in or out.
- An employee tries to clock in or out, but the clock displays an error message.
  Result: The punch is not captured.
- The punch appears to be successful on the clock, but the corresponding record never appears on the **Clock Entries** screen. Something fails with the punch being passed successfully from the clock device to Time & Attendance.
  Result: The punch is not processed and thus does not flow to the timesheet.

Setup Confirmation

This section revisits some of the key setup points covered elsewhere in documentation. See those other sections for more field-by-field detail as needed.

Time & Attendance

Clock Cards

- Is there a clock card record linked to the correct **Employee**?
- Does the clock card have a **Standing** of Active and a **Clock Card Status** of Assigned?
- If the clock card is biometric, does the **Fingerprint Registered** display as true?
- Are all of the expected values current as of the effective date?

Time Clocks

- Is the clock the employee is trying to use added with a **Status** of Active?
- Are the correct **Clock ID Number** and **IP Address** entered?

Work Rules

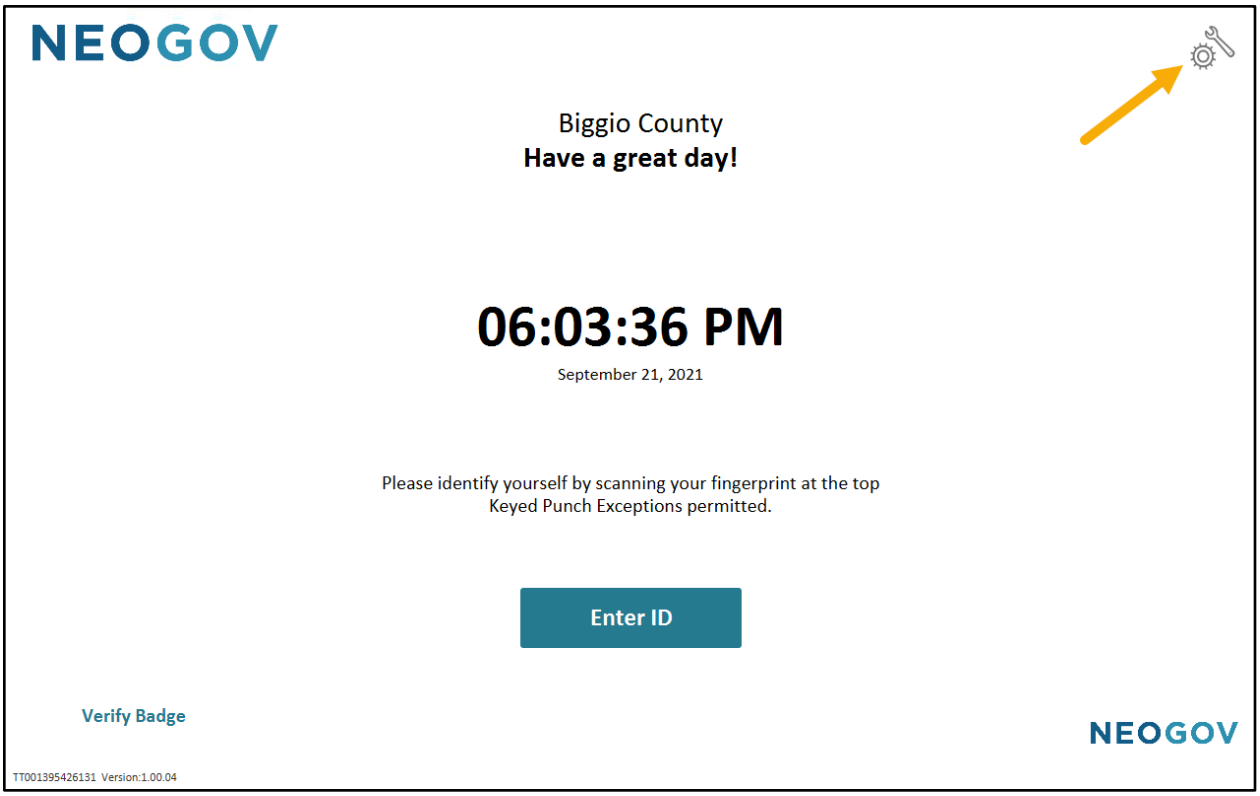
- Does the work rule assigned to the employee have a **DFLT TIME CODE** rule added on the **Time Rules** tab with a code added in the **Time Codes** tab?

Biometric Enrollment on the Clock

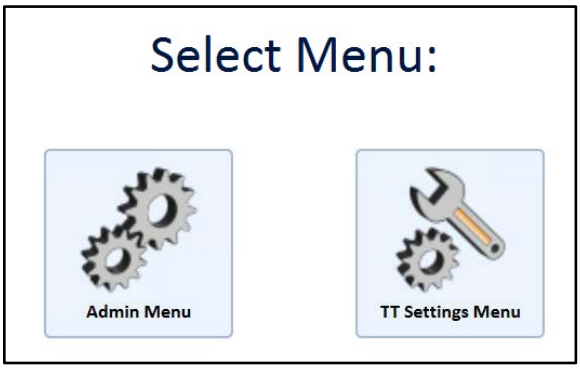
If the employee is using fingerprint scanning to identify at the clock and the clock is not recognizing, confirm the fingerprint is successfully stored.

Follow these steps.

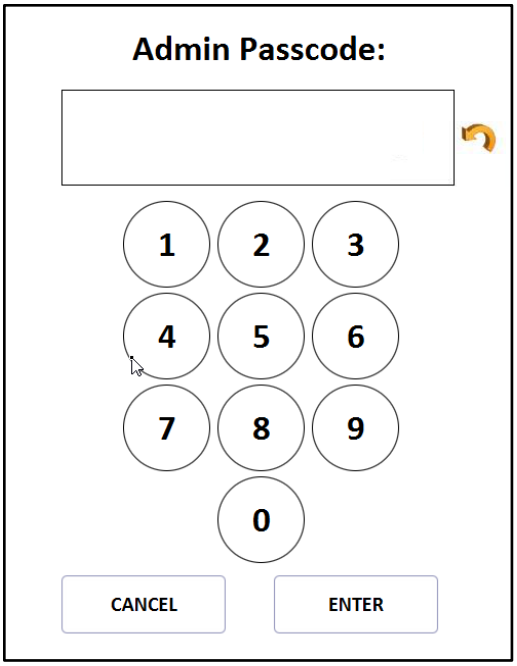
1. Tap the tool icon in the upper right of the screen.



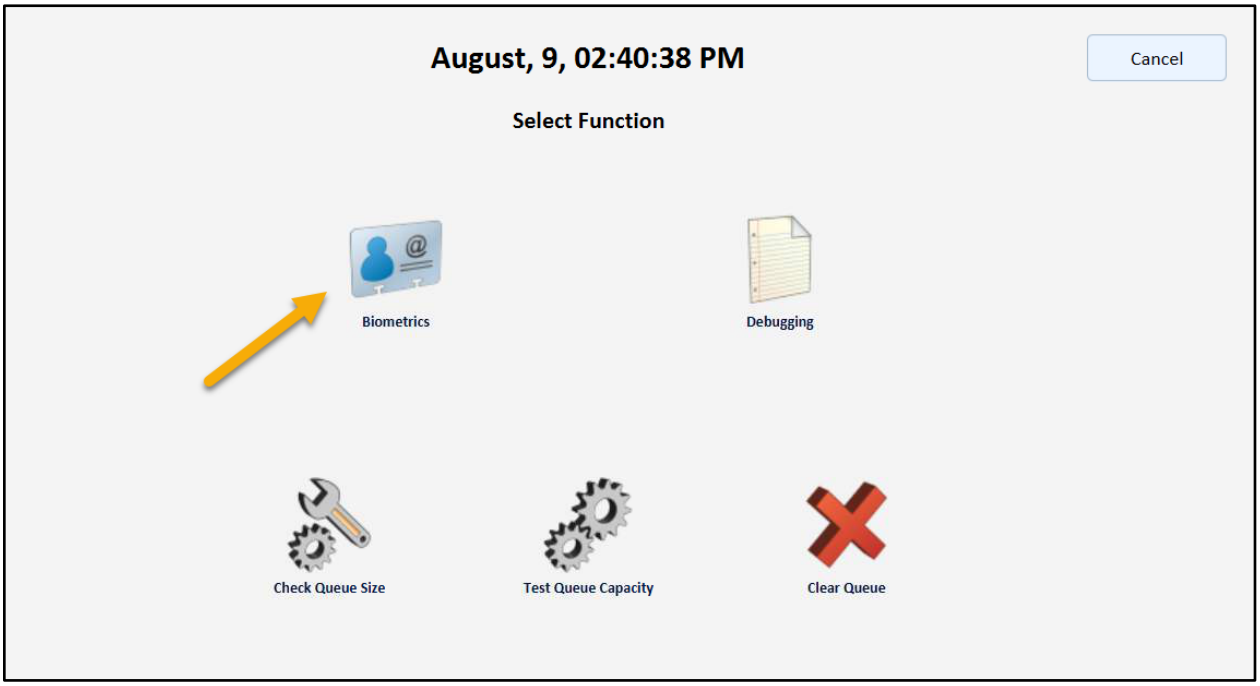
2. A pop-up displays two buttons. Tap **Admin Menu**.



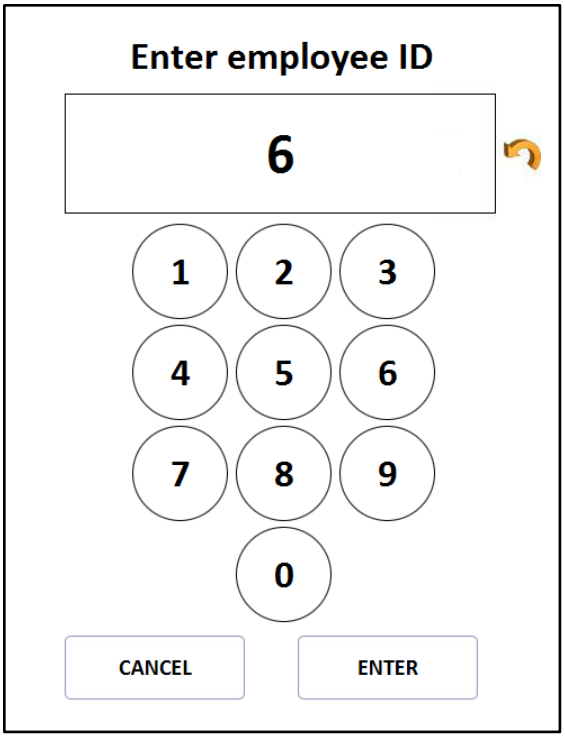
3. The **Admin Passcode** screen appears. Enter the default passcode **9** (this is defined in the configuration file and can be changed there if desired).



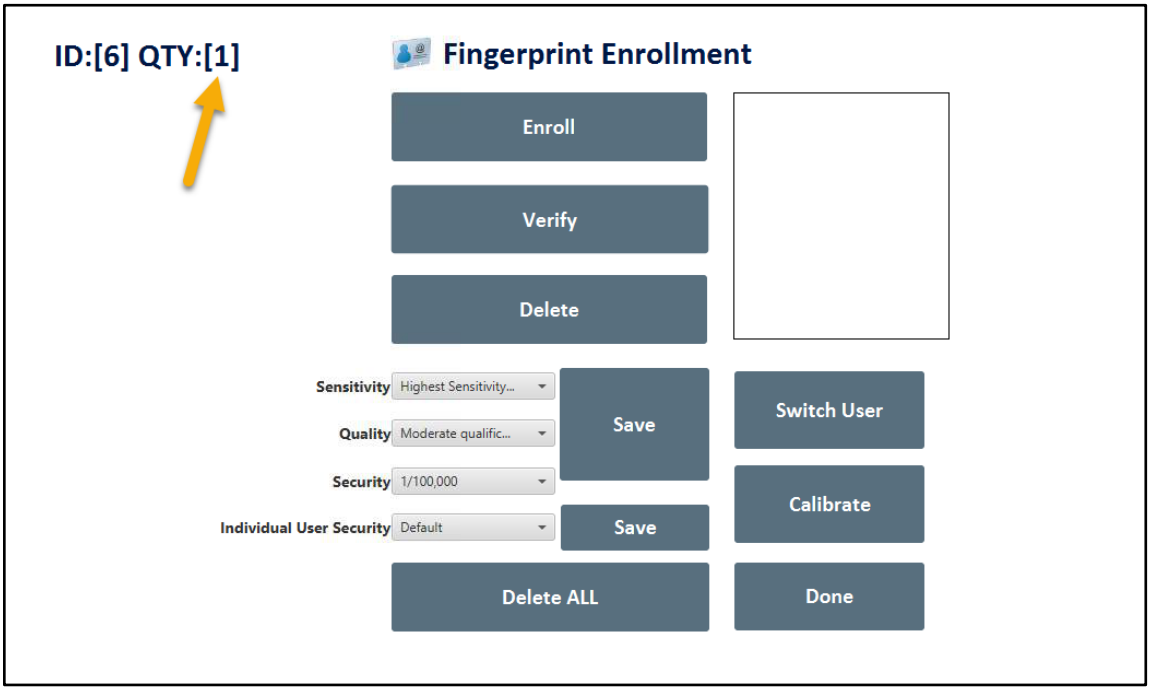
4. On the menu screen, tap **Biometrics**.



5. Enter the NEOGOV person code (employee number) of the individual to check and tap **Enter**.



6. Ensure the Quantity indicates **1**. (If it indicated **0** instead, enroll the employee again).



Configuration File

- Is the **HOST_URL** setting pointing to the correct URL (e.g., if you are using the Training environment, is it defined for the Training URL? Or if you are using the Production environment, is it defined for the Production URL?)?
- If using fingerprint scanning, is the **STORE_BIO** setting defined as true?
- If allowing employees to key in an employee number, is the **ALLOW_KEYING** setting defined as true?
- Was the **app.conf** file with your latest settings entered successfully loaded to the clock(s)?
- Was the clock restarted after loading (or reloading) the **app.conf** file?

Errors Log

The clock has a transaction audit file which continuously adds records as the clock is used. This includes successes and failures. In many cases when an issue is encountered, this log file will record helpful details about exactly when and why something failed which can be instrumental in troubleshooting.

Enabling the Log

There are few steps to generate the log and optimize the information it presents.

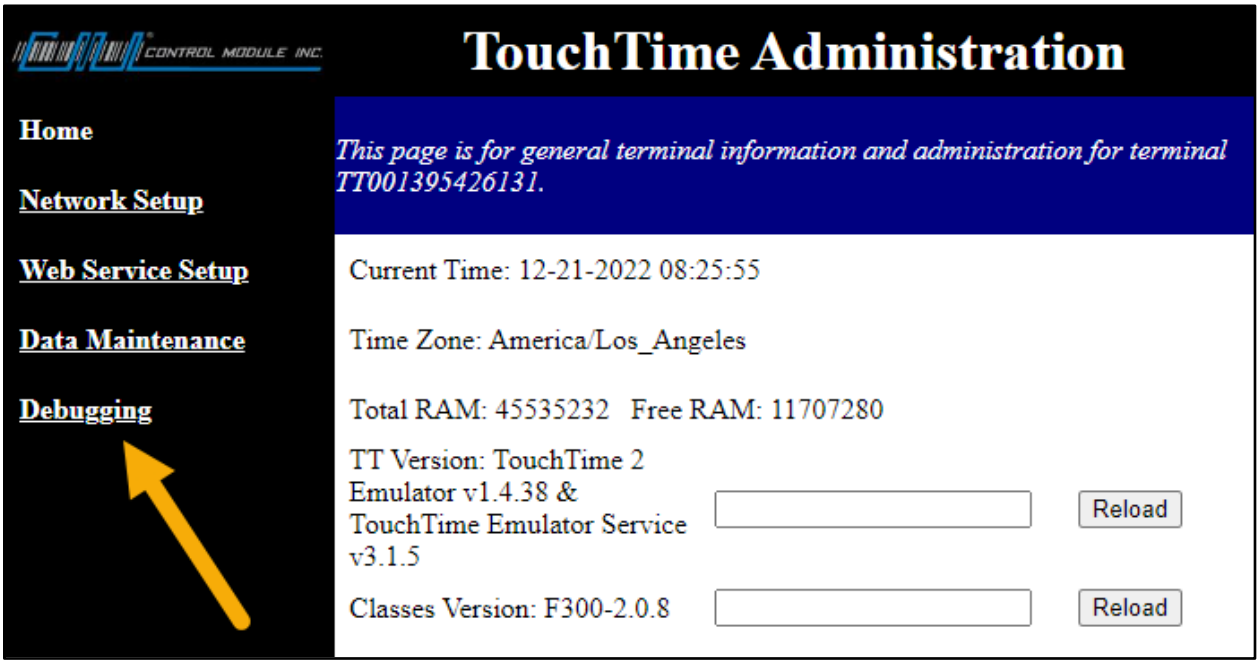
Configuration File

Ensure the **DEBUG** setting is true.

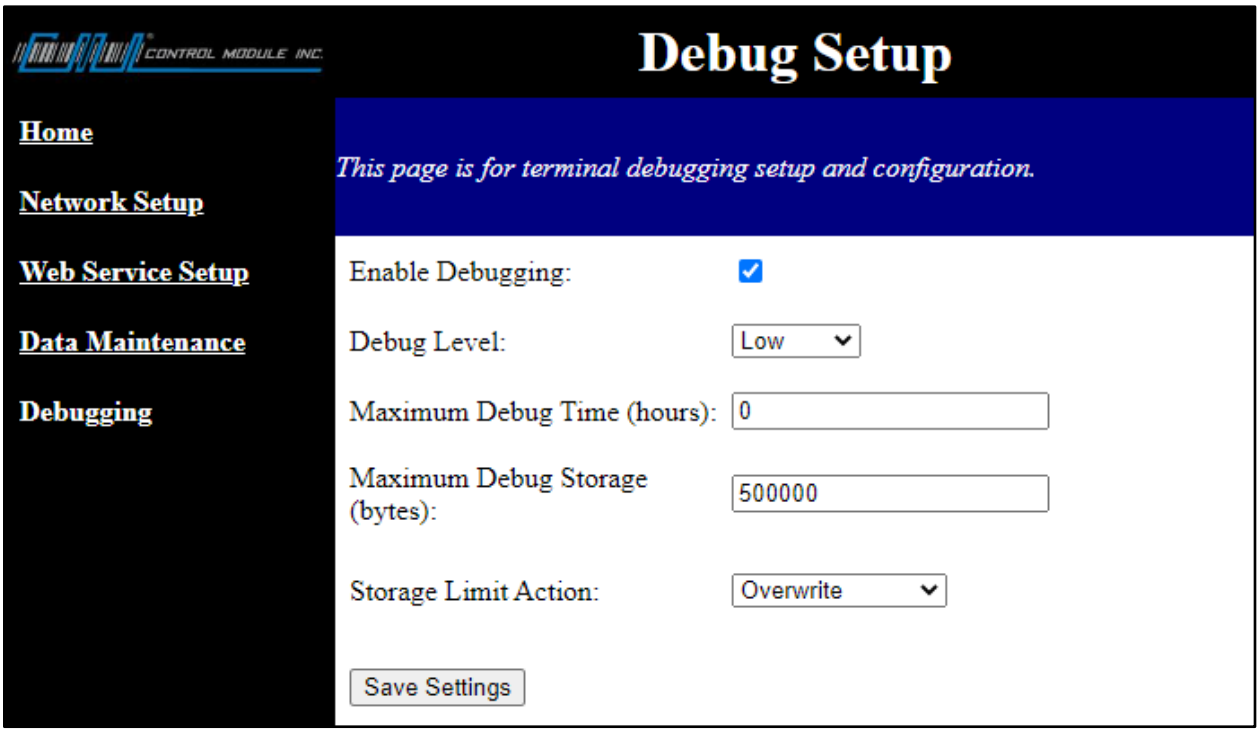
Web Terminal

In a browser, enter the clock's IP address as the URL and press Enter to load the site. The **TouchTime Login** screen will appear. Enter admin as the Username and pass as the Password and click the Login button.

After logging in, click the **Debugging** link in the left menu:



On the Debugging page, complete the fields and click the **Save Settings** button.



Field	Notes
Enable Debugging	Checked
Debug Level	Low
Maximum Debug Time	0
Maximum Debug Storage	500000
Storage Limit Action	Overwrite

Retrieving the Log

The file sits locally on the clock, and it must be copied to a computer to open and read it in any standard text editor (e.g., Notepad).

Because the error log is continuously recording activity, it overwrites itself fairly quickly since it can only store a finite amount of data. So if an issue is encountered on a clock, the log should be retrieved asap so that it still includes the transaction of interest.

Each client will likely have their own preferred file transfer utility. Consider these notes:

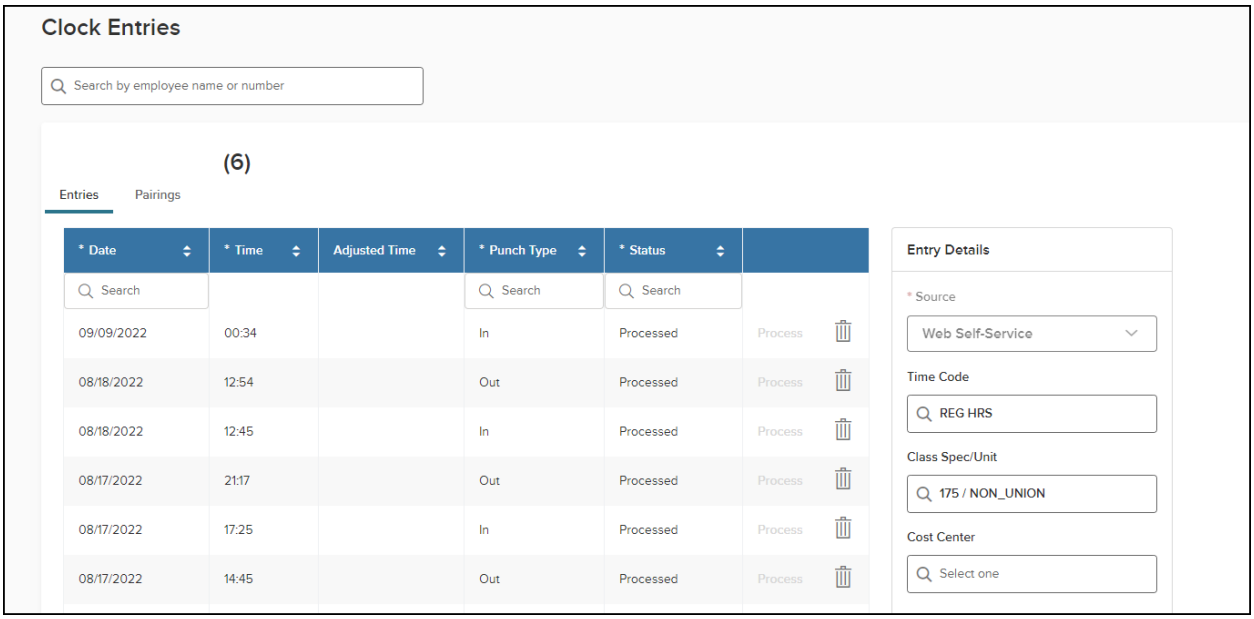
- Each clock has its own IP address, and that is how the clock will be identified to connect
- The file is named **errors.txt** and resides in the **\ramdisk** folder in the clock's file directory, so the client needs to locate that file in the clock's directory and copy it to a PC for reading.

Reading the Log

After opening the log in a text editor, you will see that it includes a lot of information, and not all of it is useful or intuitive. Let's look at the key areas to focus.

For example, an employee punched in on August 9, 2022 at 1:38 PM.

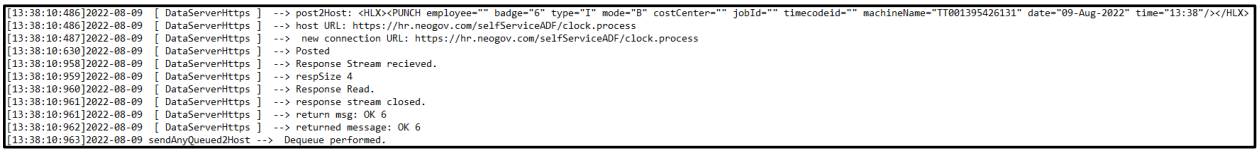
On the **Clock Entries** screen, the record appears successfully.



Notice some of the key attributes of the record:

- **Date** and **Time** of the punch.
- **Type** of the punch is **In**.
- **Source** is **Clock** (to indicate it was done on a clock and not the mobile app or Unified Self-Service).
- The **Clock** section at the right of the table is only populated when the punch was entered on a clock.
- **Clock Card** is the specific record from the **Clock Cards** screen, used for the punch.
- **Clock Used** is the specific clock on the **Time Clocks** screen, that was used.
- **Reference Info** includes the **Punch Mode**, which will be one of these values:
    - **B** if biometric.
    - **K** if keyed in employee number.
    - **3** if used a badge to scan or swipe.

Now, look at the exact same punch as recorded in the clock's error log.



```
[13:38:10:486]2022-08-09  [ DataServerHttps ]  --> post2Host: <HLX><PUNCH employee="" badge="6" type="I" mode="B" costCenter="" jobId="" timecodeid="" machineName="TT001395426131" date="09-Aug-2022" time="13:38"/></HLX>
[13:38:10:486]2022-08-09  [ DataServerHttps ]  --> host URL: https://hr.neogov.com/selfServiceADF/clock.process
[13:38:10:487]2022-08-09  [ DataServerHttps ]  -->  new connection URL: https://hr.neogov.com/selfServiceADF/clock.process
[13:38:10:630]2022-08-09  [ DataServerHttps ]  --> Posted
[13:38:10:958]2022-08-09  [ DataServerHttps ]  --> Response Stream recieved.
[13:38:10:959]2022-08-09  [ DataServerHttps ]  --> respSize 4
[13:38:10:960]2022-08-09  [ DataServerHttps ]  --> Response Read.
[13:38:10:961]2022-08-09  [ DataServerHttps ]  --> response stream closed.
[13:38:10:961]2022-08-09  [ DataServerHttps ]  --> return msg: OK 6
[13:38:10:962]2022-08-09  [ DataServerHttps ]  --> returned message: OK 6
[13:38:10:963]2022-08-09 sendAnyQueued2Host -->  Dequeue performed.
```

All lines begin with a date and time stamp. Besides that, the transaction is captured in a set of lines that is similar for all punches:

Line	Text	Notes
1	post2Host: <HLX><PUNCH employee="" badge="6" type="I" mode="B" costCenter="" jobId="" timecodeid="" machineName="TT001395426131" date="09-Aug-2022" time="13:38"/></HLX>	• Badge = card used from **Clock Cards** screen • Type = I for In, or O for Out • Mode = B for biometric, K for keyed employee number, or 3 for badge • Cost Center = null unless entered when clocking • Job ID = null unless entered when clocking • MachineName = clock used on the **Time Clocks** screen. • Date = date of punch • Time = time of punch
2	new connection URL: https://hr.neogov.com/selfServiceADF/clock.process	URL entered in the app.conf config file for connecting to NEOGOV Time & Attendance
3	Posted	Entry sent to Time & Attendance
4	Response stream received	Message back from Time & Attendance
5	respSize 4	Size of message
6	Response read	Message read from clock to confirm Time & Attendance received the punch
7	Response stream closed	Closing connection
8	Return msg: OK 6	Identifies employee number with success message
9	Returned message: OK 6	Identifies employee number with success message
10	Dequeue performed	Transaction complete

Troubleshooting

The above log entry reflects a successful clock interaction; this is how it should look.

If an employee encounters an error with using the clock, or with the punch successfully making it to the **Clock Entries** screen, consider the following.

First, you can use the standard search capability of any text editor to quickly look for the employee's record(s) in the file. For example, if you are troubleshooting an issue for employee #100, search the file for '100' to locate that specific employee's information.

If there is no information in the file for the searched employee, likely the errors.txt file was retrieved too long after the punch was attempted, and the information was overwritten with more recent transactions; this can be checked by knowing the date/time of the attempted punch and looking at the range stored in the file.

If the employee's attempt is included in the file, look for anything that deviates from the above successful transaction. It could be something missing, or there could be an explicit error message like 'Badge does not exist' which will point in the right direction for setup to check.