Magnetic Card Readers

Introduction

The magnetic card reader is a simple, but effective device that reads data stored on cards with magnetic strips.

Magnetic card readers are easy to setup, and are a cost-effective means for added security in ECS. They can also be used to provide a secondary type of two-factor authentication for your ECS system when used in conjunction with fingerprint scanners.

Although most clients prefer to use fingerprint scanners for two-factor authentication with the system, some users may have fingerprints that are not easily or reliably scanned. For these users, magnetic card readers can provide an alternate means of two-factor system authentication.

The following documentation will detail magnetic card reading/writing devices, and how a magnetic card can be assigned to a user in ECS for system authentication.

Magnetic Card Reading Device Selection, Setup, and Testing

Selection

Magnetic card reading devices are simple and require little to no setup. They're most commonly "Plug and Play" devices in Windows 7 operating systems and above. This means that Windows should automatically download any necessary device drivers when the device is plugged in.
These are some magnetic card reader brands that are recommended for use with ECS:
- MagTek
- IDTech

Setup

Any device capable of reading magnetic cards will function with ECS. As always, the device should be compatible with whichever version of Microsoft Windows that you run ECS on, and the specific device instructions should be followed for proper setup.

Testing

To ensure the device is working properly after setup, you can test the device using the following steps:

1) Ensure that you've completed the steps for whatever device setup instructions were included with the device
2) Open any word processor or text editing program in Windows
3) Find a card with a magnetic strip
4) Click your text editor window or word processor document
5) Swipe the magnetic card through the card reader

The data stored on the card's magnetic strip should have been printed to the text editor or word processor. If your device is able to print the data to the text pad, your device should be ready for use with ECS.

If your device did not print any characters, verify the device installation instructions included with the device and repeat the steps for testing. You may also wish to try several test cards to further confirm reliability.

Assigning a Magnetic Card to an ECS User

Selecting a Card

The first step in assigning an existing ECS user a magnetic card for system access would be selecting a magnetic card that can be assigned to them.

Many states have data stored on the magnetic strips of their Identification Cards. Since that data would be unique to the user carrying that ID card/Driver's License, it represents a good option for a user looking to have magnetic card access to ECS.

Aside from selecting a card that the user already carries with them, a magnetic card writer can be utilized to encode and write data to "blank" magnetic cards that can then be assigned to a specific user.
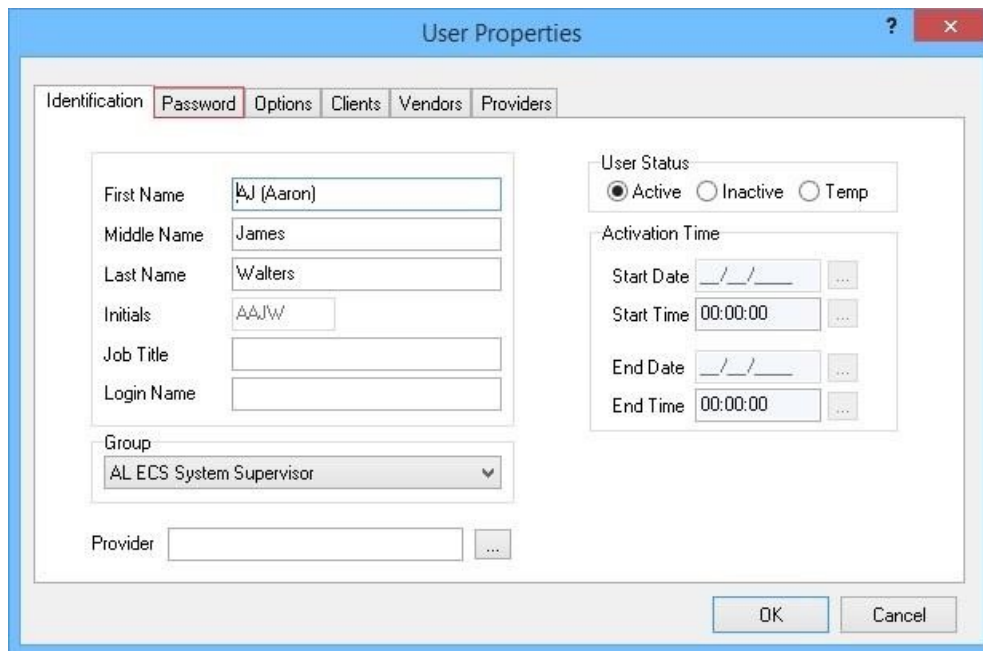
Assigning the Card to an ECS User

After you've selected or created a magnetic card "key" for the ECS user, you can move on to assigning the card to their user profile.

1) Log in to ECS as a user that has rights to Create and Edit Users and User Groups
2) Go to American Data – ECS> Setup> Security> User
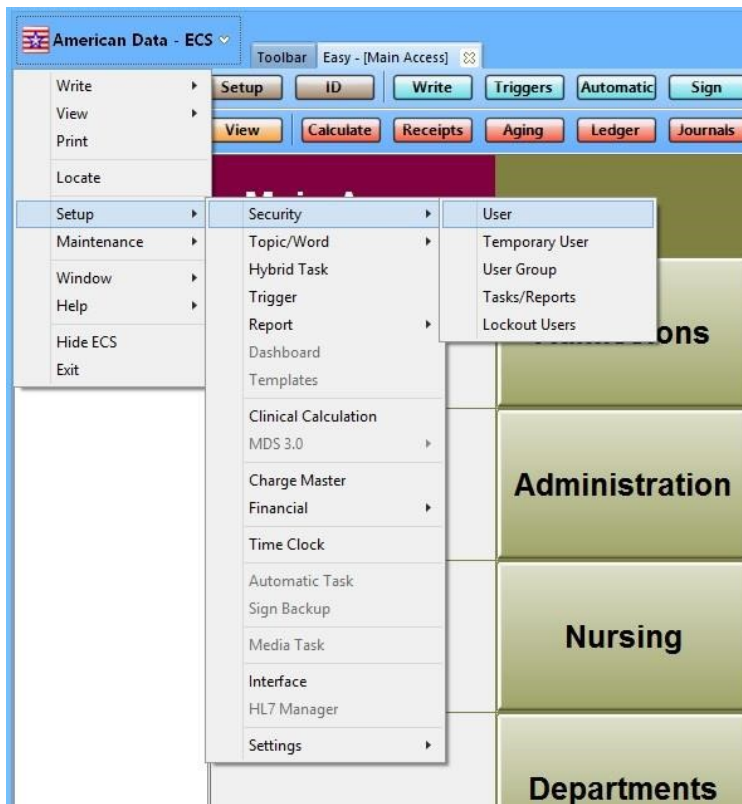
3) Select the user that you want to assign a magnetic card

4) Double-click their name to enter the User Properties and choose the Password tab
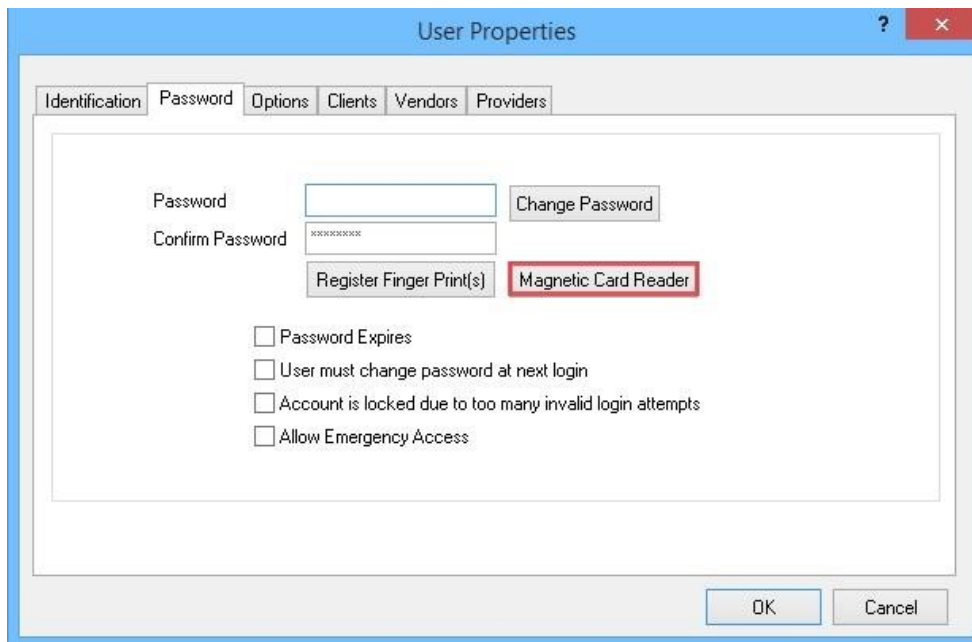
5) On the Password tab, click the Magnetic Card Reader button
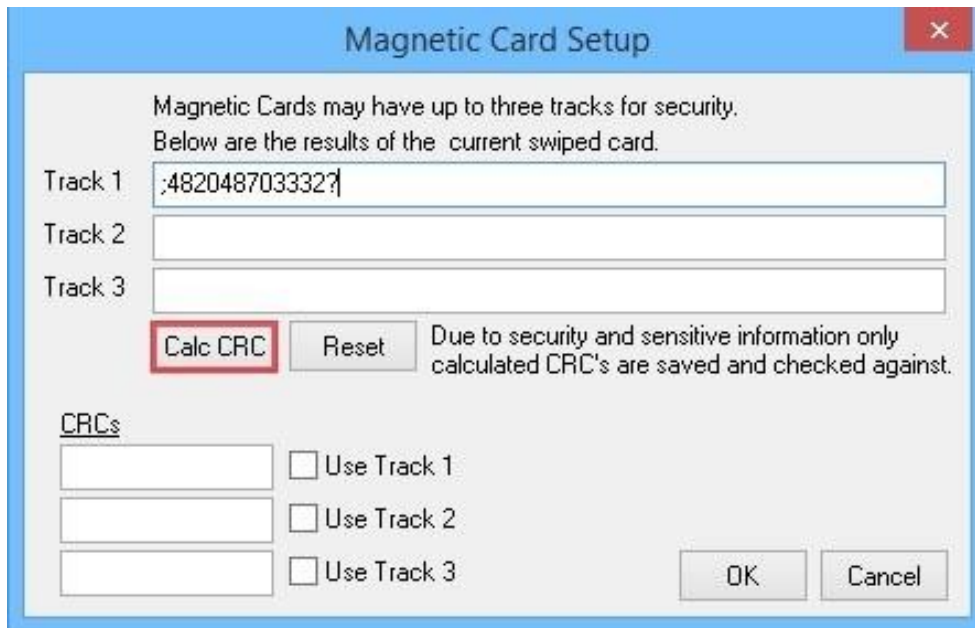
6) Once in the Magnetic Card Setup for the user, swipe the card you want to assign to the user through the magnetic card reader.
   a. You should see magnetic card data populate in one or more of the 3 tracks listed at the top of the Magnetic Card Setup window.

Magnetic Card Setup

Magnetic Cards may have up to three tracks for security.
Below are the results of the current swiped card.

Track 1: ;482048703332?
Track 2:
Track 3:

[Calc CRC] [Reset] Due to security and sensitive information only calculated CRC's are saved and checked against.

CRCs

[   ] ☐ Use Track 1
[   ] ☐ Use Track 2
[   ] ☐ Use Track 3   [OK] [Cancel]

7) Press the Calc CRC button and select one or more card Tracks to use for ECS login. Once finished, press OK.

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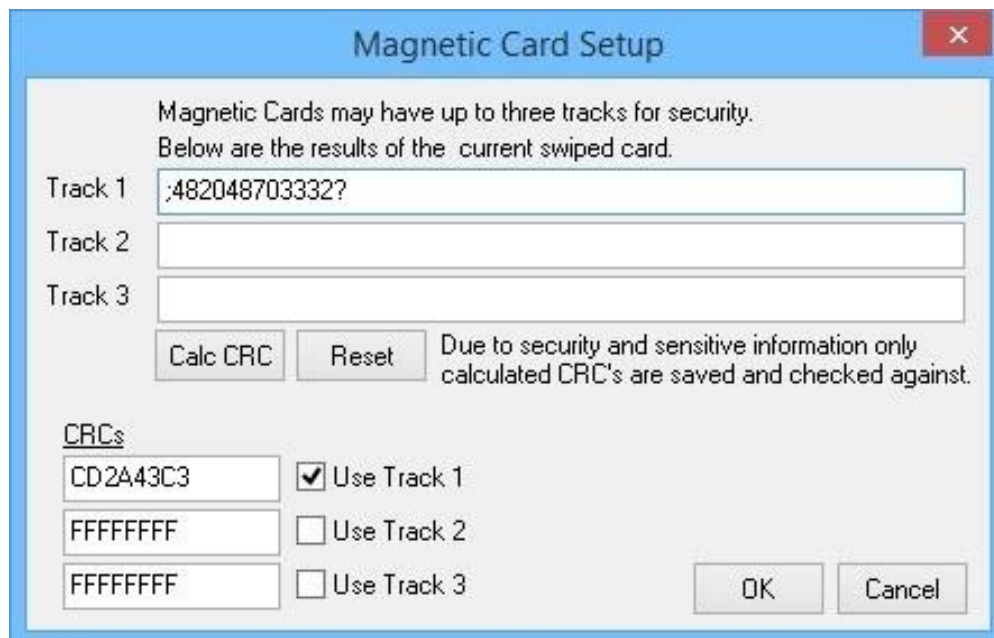
CRCs

[CD2A43C3] ☑ Use Track 1
[FFFFFFFF] ☐ Use Track 2
[FFFFFFFF] ☐ Use Track 3   [OK] [Cancel]

8) Lastly, log out of ECS and allow the user to attempt logging in with their new Magnetic Card.

       a. The user should be able to simply swipe the card at the ECS login screen to gain access to the software.

9) This method of authentication can be used in conjunction with login names and passwords to increase system security and reduce the possibility that a misplaced card could allow an unauthorized user to gain access to ECS.

       a. Magnetic Cards can also be utilized in the eMAR/eTAR for states that require a secondary form of authentication while passing meds.

If you have any questions on the setup of magnetic card readers for ECS, please contact American Data Technical Support