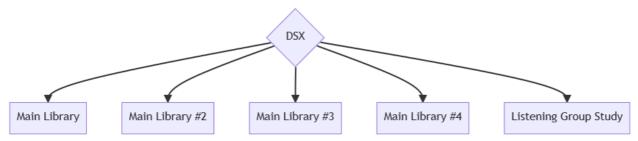
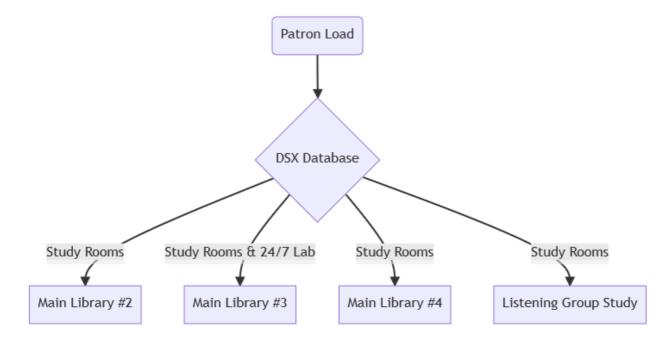
DSX Help File (updated 2022.11.22)

Overview

The DSX system monitors and secures access points throughout the Library building. In DSX, all the Library access points that must be monitored are divided into **Locations**. The Library has five locations:



With the exception of the **Main Library** location, patron data is uploaded via the DSX API on a daily basis to the DSX database. This patron data includes all active students, staff, and faculty, and non-current patrons who are deleted from the database. Once the patron data has been updated in the DSX database, DSX automatically updates user access to these four locations:



Main Library Location

The Main Library location comprises all the secure entry points in the Library building that *should not* automatically be accessible to all members updated in the patron load. This includes the staff entrance/exit, the building's east entrance, the first floor classrooms, Library offices and suites, etc. To ensure the security of the building, members of **Main Library** are added manually through the adding cardholder process outlined further down in this document.

Access to the secure entry points in **Main Library** is provided on an *individual* level using already existing *group definitions*. Since individual Library personnel have similar schedules and work requirements, it is simpler to create **one** access level and apply it to **many** users.

Creation of an access level

Creating an access level requires a **time zone** to determine what hours/days the access level should be active. That time zone is then assigned to specific access points throughout the Main Library location to create the access level.

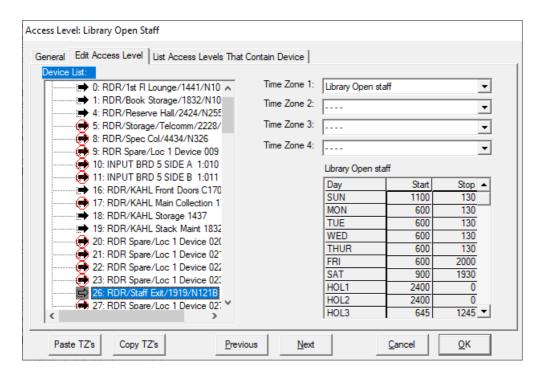
Access Services example

The opening/closing of the Library building makes the schedule for the Access Services staff unique. To provide them with the appropriate access level, their working hours are used to create the time zone *Library Open staff*:



To avoid changes, the time zone covers **all** the potential working hours the staff will see in the course of their year (regular hours, summer hours, extended hours, etc.).

That time zone is then used to create the *Library Open Staff* access level:



In the access level, every *device* (secure entry point) that the staff member will need to access is selected and the time zone applied. Once all the necessary devices are selected and the time zone applied, the access level is saved and ready for use.

The final step is to apply the access level to an individual member of the Access Services staff in Main Library.

Daily Patron Load

The daily patron load is done from the computer located in the security room in the Library office. Double-click the **patron_load_https.py** file located in the **Update DSX Feed** folder on the computer desktop. A command screen will appear and provide information about the upload process.

This is an automatic process and requires no additional input. Once the process is complete, a prompt will ask you to click the enter key to finish the load.

Troubleshooting the Patron Load

The computer is shut down or has logged off

There are times when the computer used to upload the patron load has shut down or restarted, logging out the necessary user account. If the computer has completely turned off, turn the power on. Once the computer has booted and the login screen is visible, log in with the following credentials: User: **CalPoly DSX Client** (should be automatic) Password: **calpolydsx**

Once the desktop is visible, click on the shortcut for the DSX program. In the dialog box that appears, log in with the following credentials: User: **kjallen** Password: **dragonfly**

The DSX database and workstation screens will appear. Proceed with the patron load.

Double-clicking the patron_load_https.py file does not start the patron load process

If double-clicking the Python script does not start the patron download, open up a browser window and paste the following URL into the address bar:

https://feeds.idm.cpp.edu/df.libcard/

A dialog box will open. Enter the following credentials:

Username: df.libcard

Password: 6BF63BYCqoUJBVsCrZ

Once authorized, the browser window will display the latest versions of the patron load DAT files:

Index of /df.libcard

<u>Name</u>	Last modified	Size Description
Parent Directory		-
ibcard-20221114.dat	2022-11-14 06:4	15 6.2M
ibcard-20221115.dat	2022-11-15 06:4	15 6.2M
ibcard-20221116.dat	2022-11-16 06:4	15 6.2M
ibcard-20221117.dat	2022-11-17 06:4	15 6.2M
ibcard-20221118.dat	2022-11-18 06:4	15 6.2M
ibcard-20221119.dat	2022-11-19 06:4	15 6.2M
ibcard-20221120.dat	2022-11-20 06:4	15 6.2M
ibcard-20221121.dat	2022-11-21 06:4	15 6.2M

Manually download the latest file and save to the **Update DSX Feed** folder.

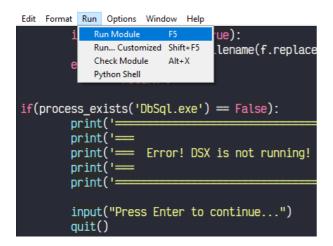
Once the latest DAT file is in the folder, follow these steps to complete the manual update of the patron load.

- Right click on the no-network-manual-patron-load.py file and select Edit with IDLE
- 2. With the Python file open in IDLE, scroll down until you see the text **# Update the patron load dates manually**

```
# Update the patron load dates manually
old_patron_load = getLatestPatronLoad('old-libcard-20221031.dat')
new_patron_load = getLatestPatronLoad('libcard-20221101.dat')
```

3. Change the dates for the *old-libcard-* and *libcard-* DAT files to the correct dates for processing.

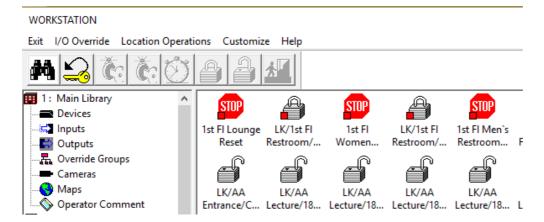
- 1. old-libcard- should be the date of the file already in the folder
- 2. libcard- should be the date of the file just downloaded
- 4. Save the changes to the Python script
- 5. From the Run option at the top of the editor, select Run Module



6. The script will run in the IDLE shell window. Once finished, press enter and exit the IDLE editor.

Reset First Floor Bathrooms

- Select outputs in the device tree under Main Library
- Select stop sign for specific door:



 Click on Grant Access (icon of door next to open padlock). Note: Stop sign must be red, not green. If green, highlight the output and click Secure Output (closed padlock)

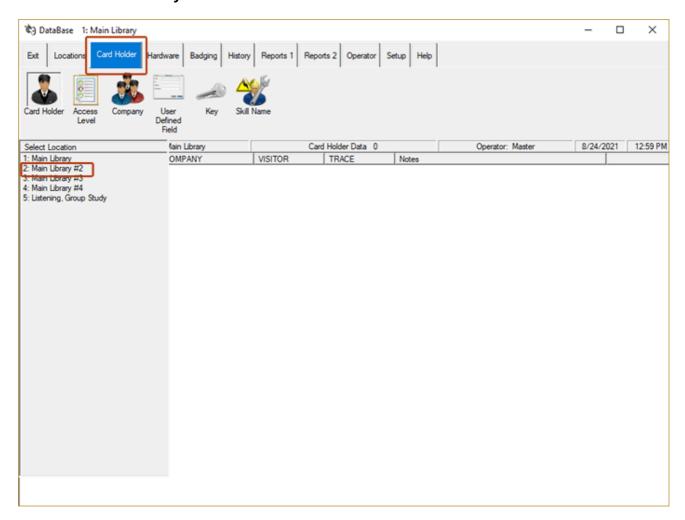
Creating Main Library Account for User

The daily patron load updates all campus members in the DSX database **Main Library #2**. Members in this database have swipe access to limited areas of the building already provided for them: Study rooms and the computer lab.

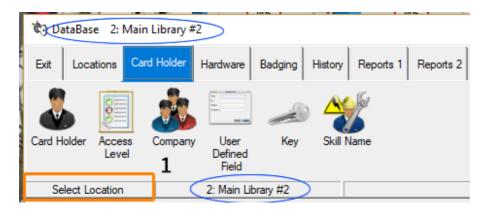
For a campus member to have additional swipe access to other areas of the Library building, their campus information must be manually added to the **Main Library** database. Examples include new Library staff and faculty who require access to the building and department, or a new student employee who requires access to specific areas of the building to perform their duties.

Search for user information

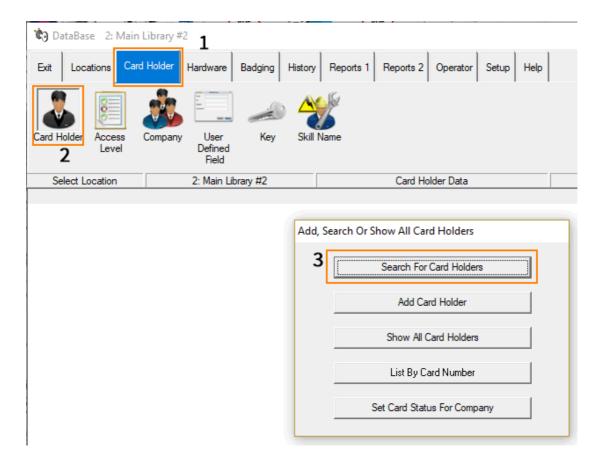
1. From the databases module, click on the *Card Holder* tab, and then right-click on *Select Location* and select **Main Library #2**:



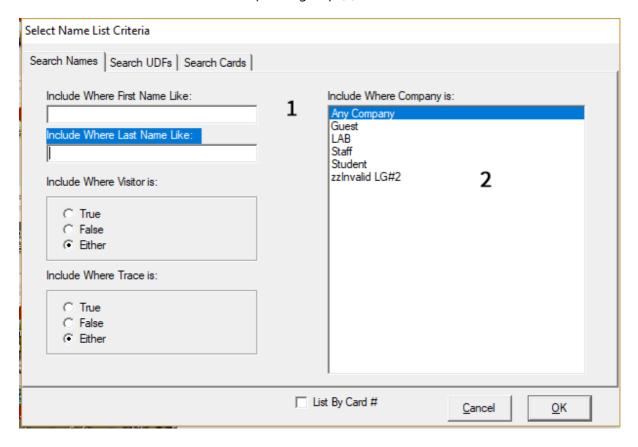
1. Make sure you are in **Main Library #2** by checking the module screen:



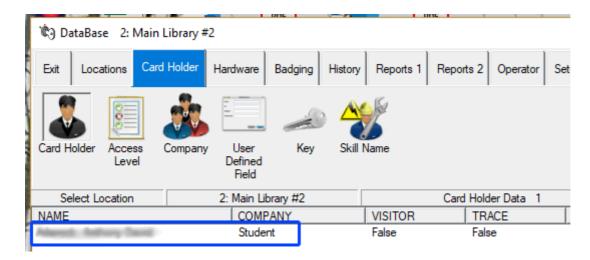
1. Click on Card Holder icon (2) and select Search For Card Holders (3)



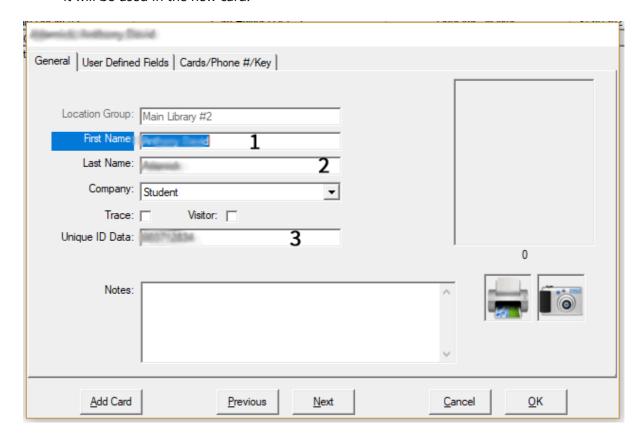
1. On the following screen, enter the first and last name (1) of the user you are searching for. You can also choose to limit the search to a specific group (2):



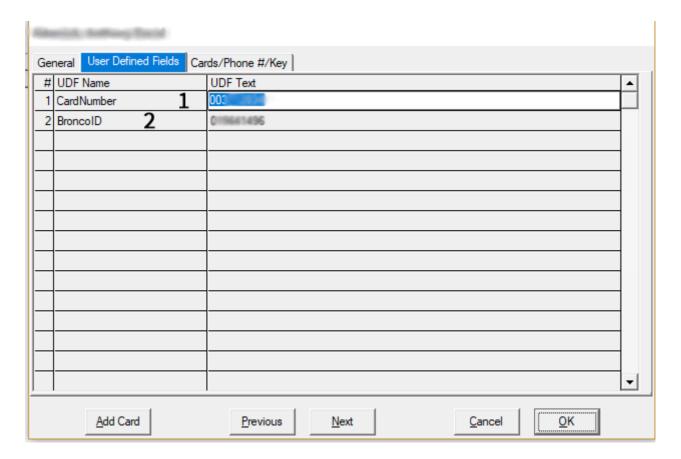
1. The following screen will present the user name. Double click the name for the next screen.



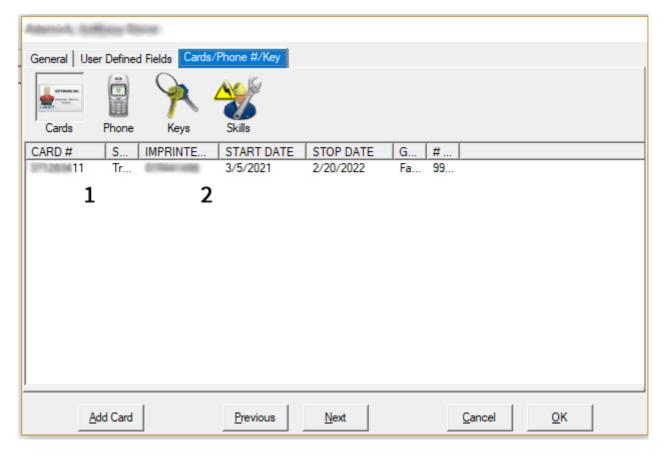
6. The first name (or first and middle name or middle initial if applicable) will be in the *First Name* field (1). Make note of how it is entered as it has to be entered exactly the same in the new card to be added. The last name appears in its field (2), and the unique ID Data (3) will be the identification number assigned to them by the University. This is not the same as the Bronco ID number. Note this number as it will be used in the new card.



1. On the next tab, *User Defined Fields*, you will see the user's Unique ID number entered in the *CardNumber* field (1) and their Bronco ID number in the *BroncoID* field. The Unique ID number/CardNumber has two leading zeros as part of its construction. Note the Bronco ID number for future use.



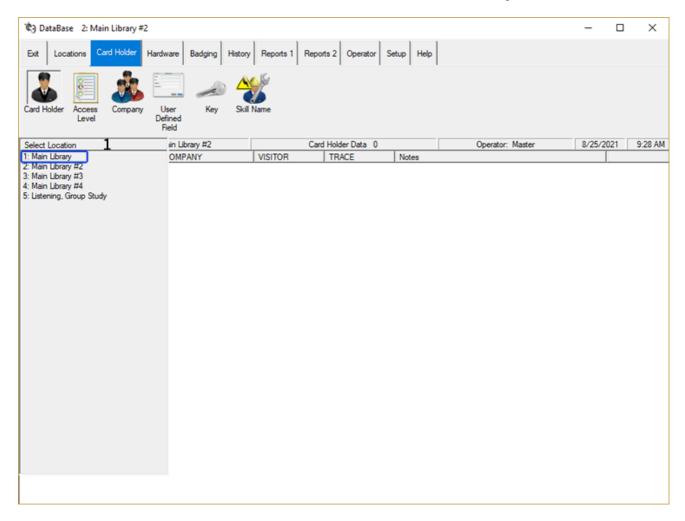
8. The *Cards/Phone #/Key* tab contains the information associated with the card for this user. The number in the *CARD #* field (1) is constructed by dropping the two leading zeros from the Unique ID number and adding the two digits *11* at the end of the number. The last two digits (11) are the attribute number. If the attribute number is 11, that is a first issue ID card. Numbers higher than 11 are for replacement cards (12 is second, 13 is third,...). The number in the *IMPRINTED CARD #* field (2) is the Bronco ID number. Note the *CARD #* for future use.



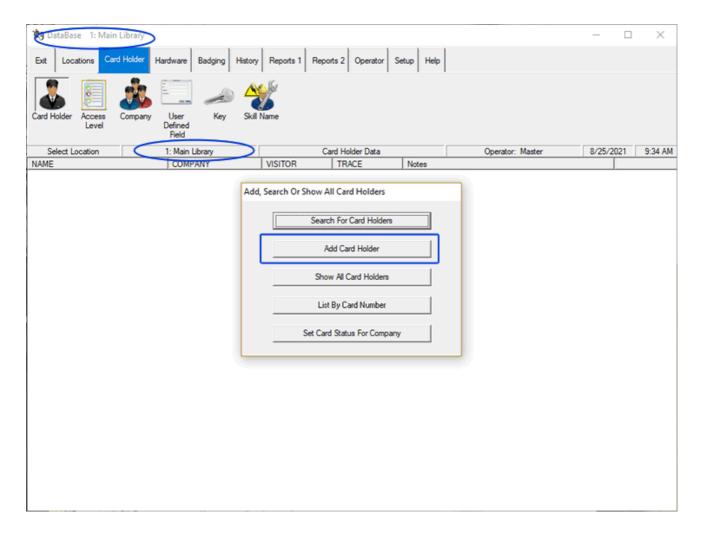
9. Once you have noted the Unique ID number, Bronco ID number, and Card number, click OK to exit the screen.

Create new card in Main Library

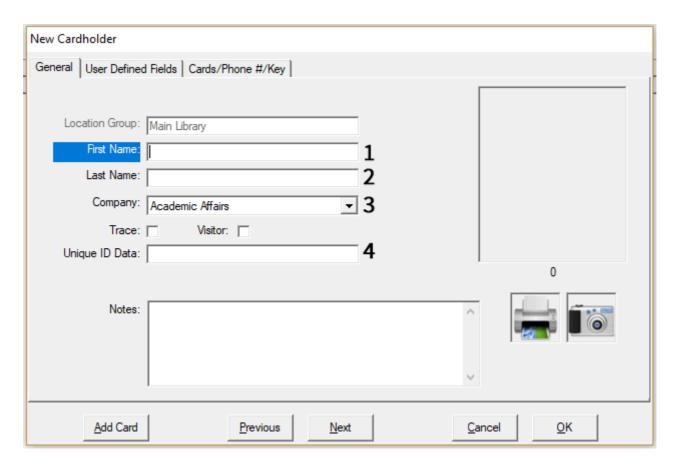
1. From the main screen, click on *Select Location* (1) and select **Main Library**:



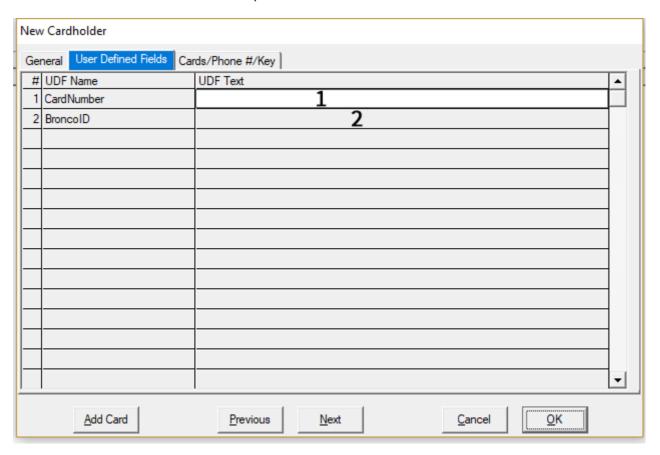
1. Confirm that you are in the correct database and click on Add Card Holder.



1. On the New Cardholder screen/General tab, enter the first name (and middle initial or name if applicable) (1); the last name (2); from the drop down menu (3), select the appropriate "company" for the user > new Library staff and faculty should be associated with *Main Library* > new Library student employees are associated with *Student Assistants* > all other users are associated with their respective campus department (eg. IT, Facilities) or company/vendor; in the Unique ID Data field (4) enter the unique ID number you noted from the initial search.Once complete, click on User Defined Fields tab.

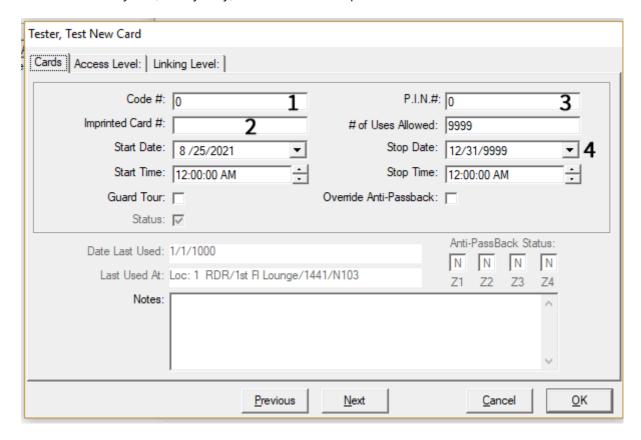


4. In the *CardNumber* field (1), enter the Unique ID number entered on the previous screen in the Unique ID Data field (include all digits); click on the *BroncoID* field (2) to enable and enter the user's Bronco ID number noted earlier. Once complete, click on **Add Card** button.

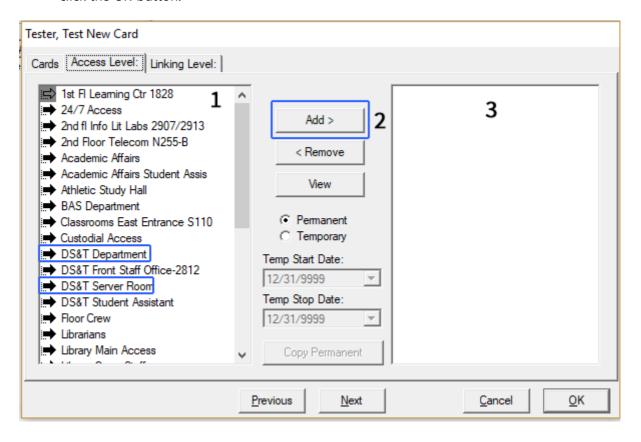


5. In the *Code* # field (1) enter the card number noted from the *Cards/Phone* #/Key tab (step 8 above) earlier; in the *Imprinted Card* # field (2) enter the user's Bronco ID number; in the *PIN* # field (3) enter

the user's choice of four-digit PIN (assuming user is with you); *Stop Date* field (4): for Library staff and faculty, campus staff (eg. IT), and other campus personnel who need long-term access, leave the stop date as is; student assistants are generally given a termination date the same as the end of the academic year (usually May) unless otherwise specified. Click on *Access Level* tab.



6. From the list of access levels on the left of the screen (1), select the appropriate level(s) required for the user and click the *Add* button (2). The added levels will appear in the right field (3). Once completed, click the *OK* button.



Editing a user in Main Library

When a user loses their Bronco card, the new card will have to be activated in **Main Library** so the user can continue with their access to the Library building.

- 1. Search for their record in Main Library
- 2. Double click their name to bring up the record
- 3. Click on the Cards/Phone #/Key tab
- 4. Double-click on the name (or click and select edit on the dialog box)
- 5. Under the *Cards* tab, you will be updating the number in the **Code #** field. This is the number created with the numbers from the unique ID number (minus the leading zeros) and the attribute number (starting with 11).
- 6. Verify the number printed on the physical card matches the number in the **Imprinted Card #** field (Bronco ID number).
- 7. Once verified, change only the attribute number by plus one (11 to 12, 12 to 13,...). In most cases, the attribute number in **Main Library #2** will still be the old one; it takes at least one patron upload to update the old card.
- 8. Confirm the continued use of the PIN with the user
- 9. Click the OK button
- 10. The **Main Library** database will take a few minutes to update. If possible, have the user test the new card at a swipe they have permission to access before leaving.

Nota Bene: It is also helpful to have the person swipe the new card at a reader before you update their record. In the alarm monitor window in the *Workstation*, you will see an access denied alarm; this will include the card number with the new attribute. You can use this to verify the correct attribute number when updating the card.

Adding a Vendor Card

The process for adding a vendor card is similar to the steps above except that the vendor card is from a supply of blank cards managed by DS&T. The blank cards come programmed with a card number. To view the card number, swipe the card at a reader. In the following example, the card number is **298249411**.

As before, select to add a new card holder for **Main Library**.

First Name: The first name should include the initials of the department that will keep the vendor card followed by *Vendor* followed by the card number. The card number is the last three digits before the *11*:

2982**494**11

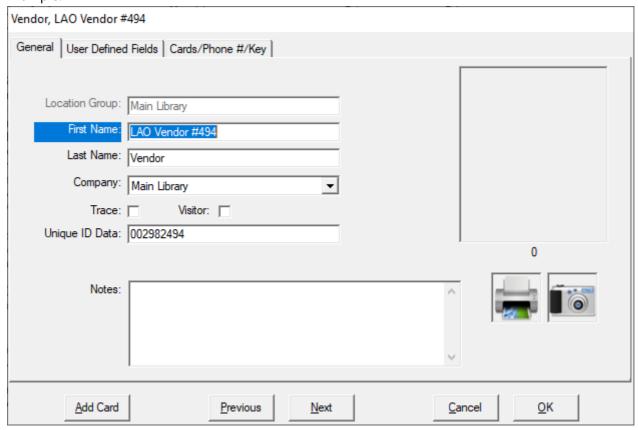
Last Name: The last name is *Vendor*. This makes it easy to view all the vendor cards in the group.

Company: The company is *Main Library*.

Unique ID Data: The unique ID data number is constructed by adding two zeroes to the first seven digits of the card number:

00 + 298249411 = 002982494

Example:



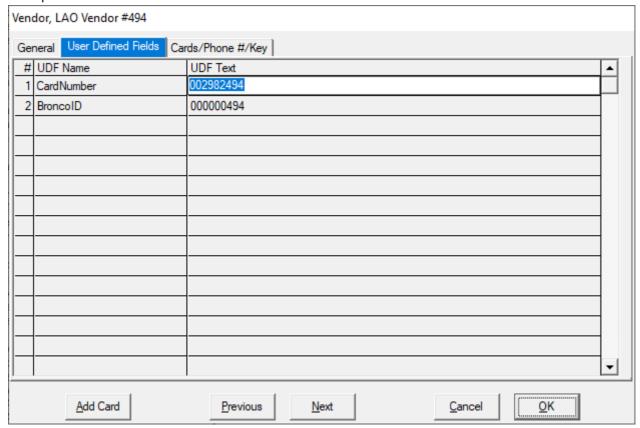
In the User Defined Fields tab:

CardNumber: The card number is the same as the unique ID data.

BroncolD: The Bronco id number is constructed by adding six zeroes to the card number included with the First Name field in the *General* tab:

000000 + 494 = 000000494

Example:



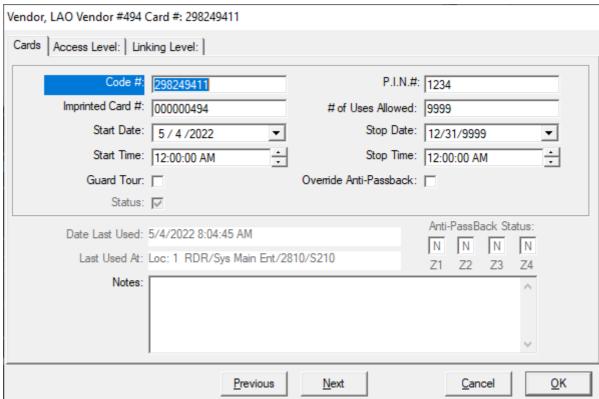
Clicking Add Card brings up the final dialog screen.

Code #: The code number is the full original card number (the one visible from the card swipe).

Imprinted Card #: This is the same number as the BroncolD from the previous screen.

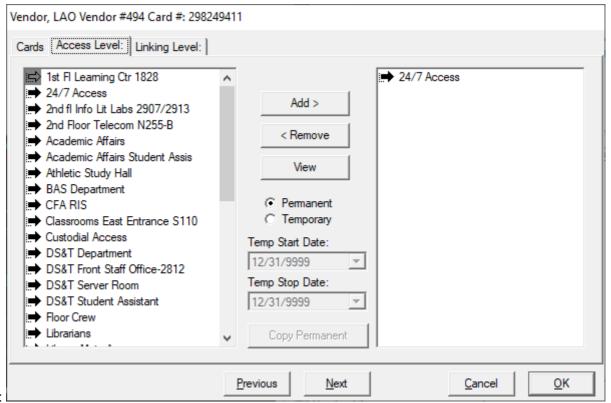
P.I.N. #: The PIN number is always 1234.

Do not change the **Stop Date** field unless specified.



Example:

On the Access Level tab, add 24/7 Access level.



Example:

Click **OK** on all dialog boxes to finish the process.

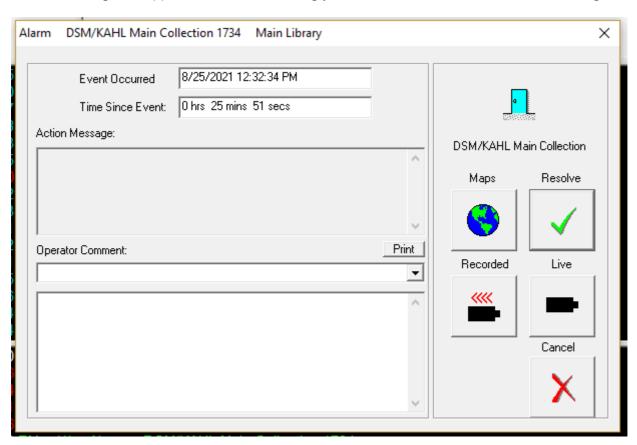
Clearing Alarms

The bottom part of the **Workstation** screen displays *Active* and *Unresolved* alarms throughout the day. *Active* alarms are coded red; *Unresolved* alarms are coded green.

To resolve the Active alarms, click on the alarm in the window:

```
8/25/2021 11:01:53 AM .. (1) .. Alarm .. DSM/KAHL Main Collection 1734
  8/25/2021 9:41:45 AM .. (1) .. Alarm .. DSM/Spec Col/4434/N326
8/25/2021 11:01:55 AM .. (1) .. Restoral .. DSM/KAHL Main Collection 1734
8/25/2021 9:41:50 AM .. (1) .. Restoral .. DSM/Spec Col/4434/N326
        /2021 7:25:53 AM
                             (1) .. Restoral .. DSM/4th Back Hall/C4200/N433B
                                   Door Open too long .. DSM/4th Back Hall/C4200/N433B
      5/2021 7:20:13 AM
   8/25/2021 5:57:47 AM
                                                           DSM/1st FI Restroom/1443/N105
                                   Door Open too long.
  8/25/2021 5:57:01 AM
                                   Door Open too long .. DSM/1st FI Restroom/1439/N104
  8/25/2021 4:02:54 AM
                                 .. Alarm .. DSM/2nd FI Slider/C2000/S244B
                                   Alarm .. DSM/2nd FI Slider/C2000/S244B
  8/25/2021 3:42:38 AM
  8/25/2021 3:42:37 AM
                            . (1) .. Alarm .. DSM/2nd FI Slider/C2000/S244B
  8/25/2021 3:02:56 AM
                                   Alarm .. DSM/1st FI Slider/C1801/S100C
  8/25/2021 2:53:19 AM
                                   Alarm .. DSM/Staff Exit/1919/N121B
8/25/2021 12:57 PM
```

A resolution screen will appear. For *Active* alarms, hitting the enter key on the keyboard or clicking the *Resolve* button clears the alarm. For *Unresolved* alarms, click the *Resolve* button. If this does not clear the unresolved alarm, a message will appear on the screen letting you know which workstation has acknowledged the alarm.



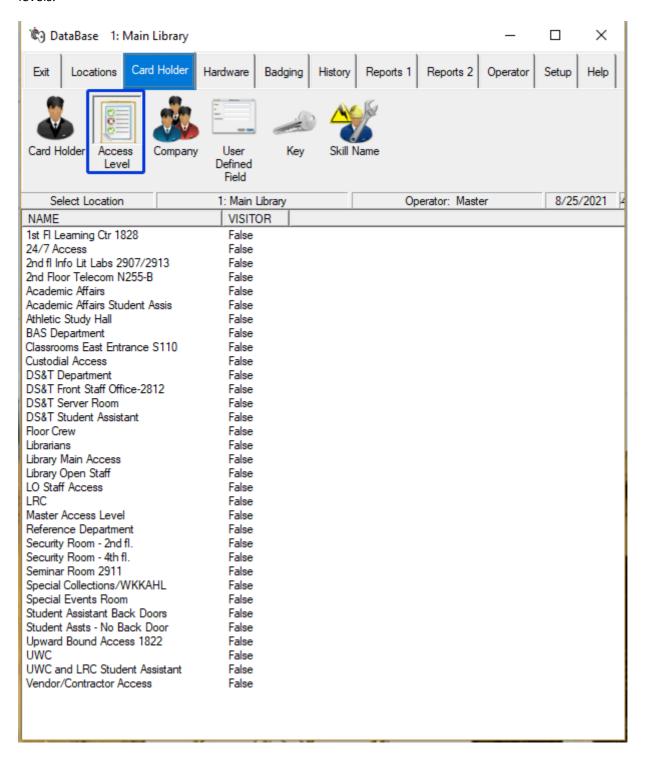
Most alarms are triggered by doors being held open too long, communication loss, or card swipe errors. In the morning, most of the alarms on the screen will probably have been triggered by cleaning staff the night before. It is important to clear the screen of alarms as the screen can only report a maximum of 99.

Nota Bene: Per past instructions, the only alarms that should concern us are alarms in stairwells (possible unauthorized entrance to fire exits), alarms at doors/swipes that are usually not accessed (eg. roof access), communication loss alarms between DSX and the databases (eg. Main Library), and alarms that don't clear.

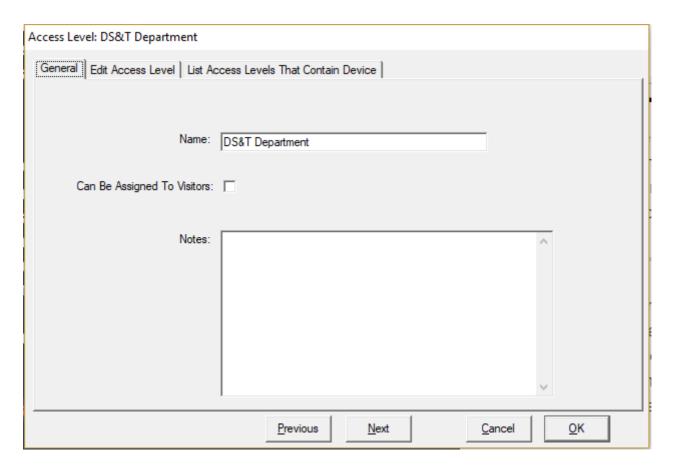
The alarms were seen more as a nuisance than as something to take too seriously. I guess we'll figure it out through experience.

Access Levels: Main Library

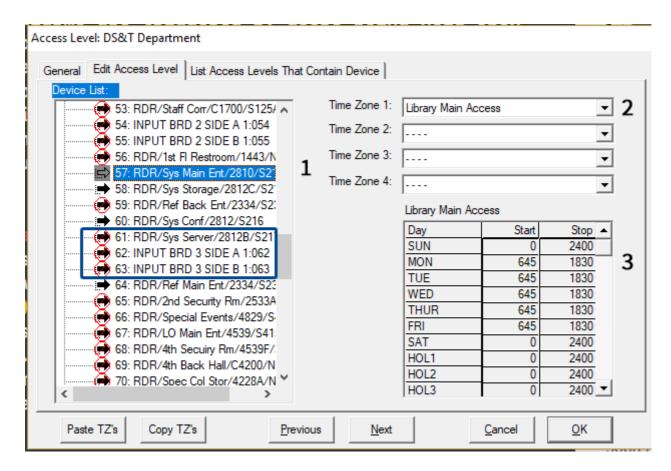
Access levels determine which specific devices a user is granted permission to access. From the **Main Library** database screen, select the *Card Holder* tab and click on the *Access Level* icon to see all the active access levels:



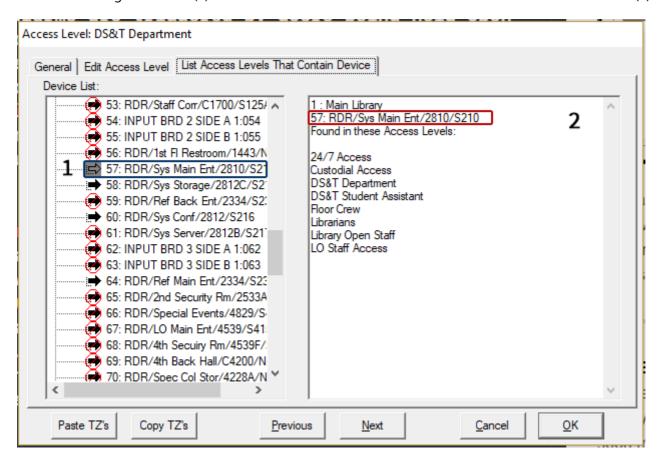
To view/edit the devices attached to a particular access level, double-click the name (or click, select edit from dialog box). The screen will open with the access level's *General* tab, which includes the name:



Click on the *Edit Access Level* tab. To view the list of devices, click on *Main Library*. All devices associated with **Main Library** are displayed. The devices that are associated with the specific access level being viewed/edited are designated by a black arrow; devices that are **not** associated with the device are designated by a black arrow with a red circle and slash (1). Clicking on an associated device will reveal the *Time Zone 1* assigned to that device (2) and the hours that device is active (3). To remove a device from an access level, select it and change the *Time Zone 1* to the four-dash option (----). To add a device to an access level, select it and assign the appropriate time zone. Click the *OK* button after any changes.

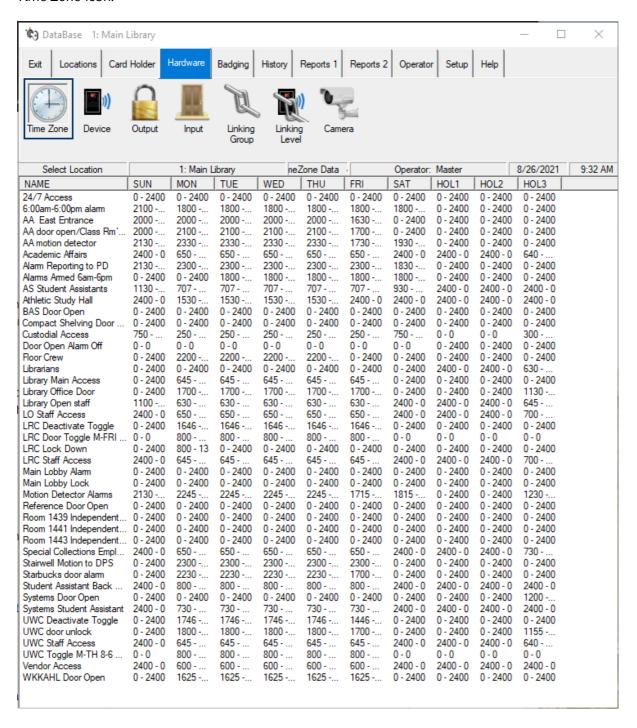


The *List Access Levels That Contain Device* tab provides a helpful and quick way to determine which access levels are associated with a specific device. This is useful, for example, when a device must be removed from service. Selecting the device (1) reveals all the access levels that must be edited to secure the device (2).

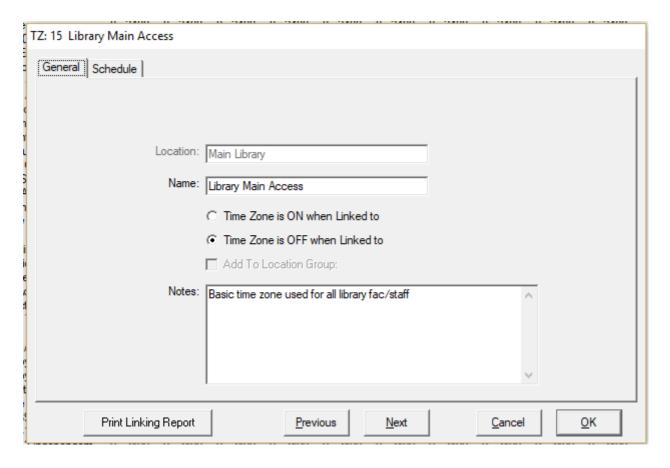


Time zones are schedules that define the start/stop times that enable/disable readers/keypads (devices) and locks (outputs). Used in combination with access levels, time zones help restrict card holder building access to specific times.

To view/edit time zones, from the **Main Library** database click on the *Hardware* tab and then click on the *Time Zone* icon:



Select the time zone by double-clicking the name (or click, edit from the dialog box). The *General* tab presents the name of the time zone and any notes.



The *Schedule* tab shows the hours that the device or output will be active (blue shading) or inactive when it is assigned to that device/output. Schedule times must be entered in military or 24-hour clock time. If a uniform Mon-Fri schedule is needed, entering the schedule on *Monday Start* and then clicking the *Set Mon-Fri* button sets the schedule for the work week.



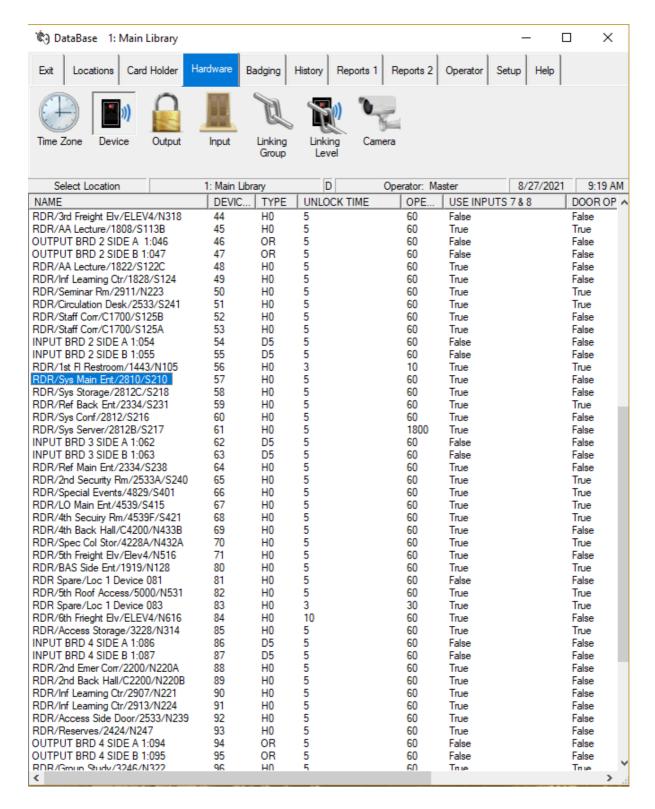
Devices/outputs can have different time zones assigned to them at the same time. For convenience, some time zones share the same name as an access level, but not always.

Time zones are used to automatically secure an output.

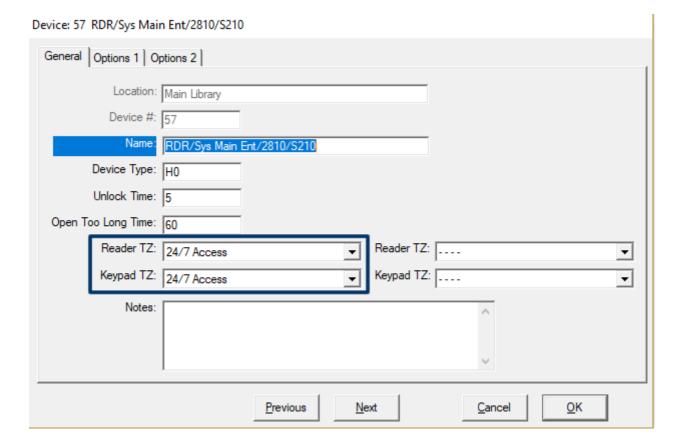
Devices and Outputs: Main Library

Devices

Devices in the Library building are the readers (swipes) and keypads attached to most doors. To view/edit the devices, select the **Main Library** database, select the *Hardware* tab and click on the *Device* icon. In this example, the device for the main entrance to DS&T is highlighted:



Double-click the name (or click, select edit from dialog box) to view the parameters. In the *General* tab you will see that the device has time zones assigned to both the *reader* and the *keypad*:



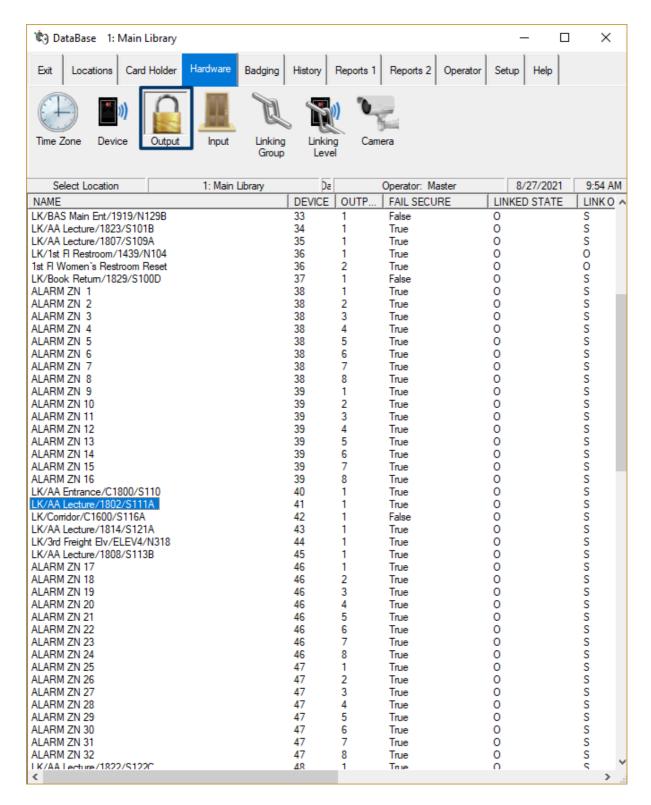
Time zones for keypads are not necessary for devices that are simply readers and are designated with the four-dash option (----).

The Options 1 and Options 2 tabs are set by Siemens and should not be changed.

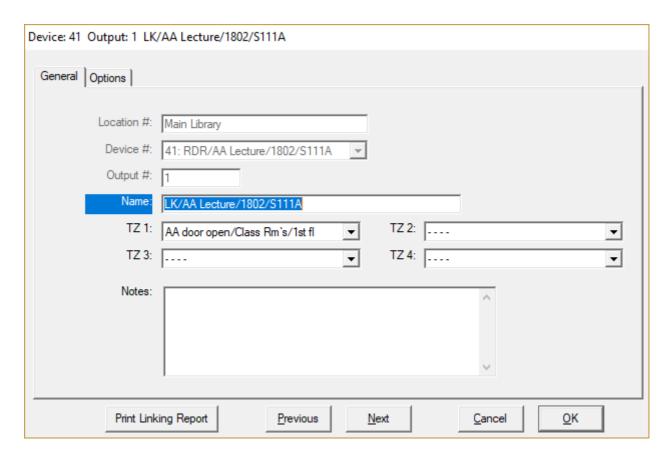
Devices in the Library building are set to the **24/7 Access** time zone so that they remain active for use at all times and will provide access for those users with the appropriate access levels.

Outputs

Outputs control the locks on the doors monitored by DSX. To view/edit the outputs, select the **Main Library** database, select the *Hardware* tab and click on the *Output* icon. In this example, the output for the lecture hall 1802 is highlighted:



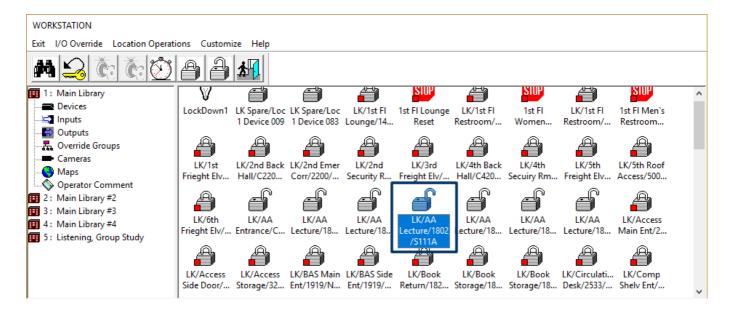
Double-click the name (or click, select edit from dialog box) to view the parameters. In the *General* tab you will see that the output has a time zone assigned:



This time zone determines when/if the output is open. Looking at the associated time zone, the output on lecture hall 1802 is unlocked during the white, inactive times shown in the schedule:



This can be confirmed by viewing the device tree in the *Workstation* under **Main Library** and selecting *Outputs*:



Access to outputs can be manually controlled through the *Workstation* screen. Outputs can be manually locked or opened depending on need by selecting the output and clicking on the locked or unlocked icons. To give a person standing at a door access (like a one-time swipe), select the output and click on the *Grant Access* icon:



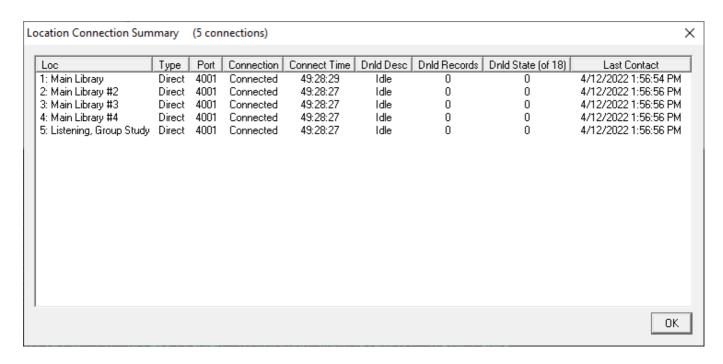
Troubleshooting DSX (Not guaranteed to work)

Output open in DSX but door locked

In the DSX Workstation, select the correct output and then click the clock icon (Back to TimeZone) to have DSX reset the time zone on the lock.

Issues with multiple swipe access readers (inputs)

Review the Connection Summary by selecting it from the **Location Operations** menu in the Workstation.



- 1. Check to make sure the location is connected.
- 2. Check to see if the location is downloading patron records. This can lead to access issues for specific patrons if their card information has not been updated yet in the location.