AC8000 ACCESS CONTROL SYSTEM

PC Access Control System for single, double or multi door installations via LAN or WAN connection providing Time Attendance and Access Control Monitoring Solutions

Easy setup within 15 minutes

Windows Server, Windows 7, XP, Windows Vista, Windows 8 & Windows 10 compatible as well as SQL



AC8000 Access Control System

Single door to multi door controlled

LAN and/or WAN connection

Plug 'n' Play directly in to a laptop, desktop or tablet

Windows Based

Instant adding/deletion of users

20,000 users

100,000 offline transactions

Multiple Reports to Excel

Multiple Users

Password Management

Access monitoring (Entry/exit)

Time & Attendance

Timed Profiles

Timed Door Open

Real Time Monitoring

Fire Alarm Input

Keypad Operation

Master PIN Code

Instant Lock Out

Anti-Tail Gate

And much more......

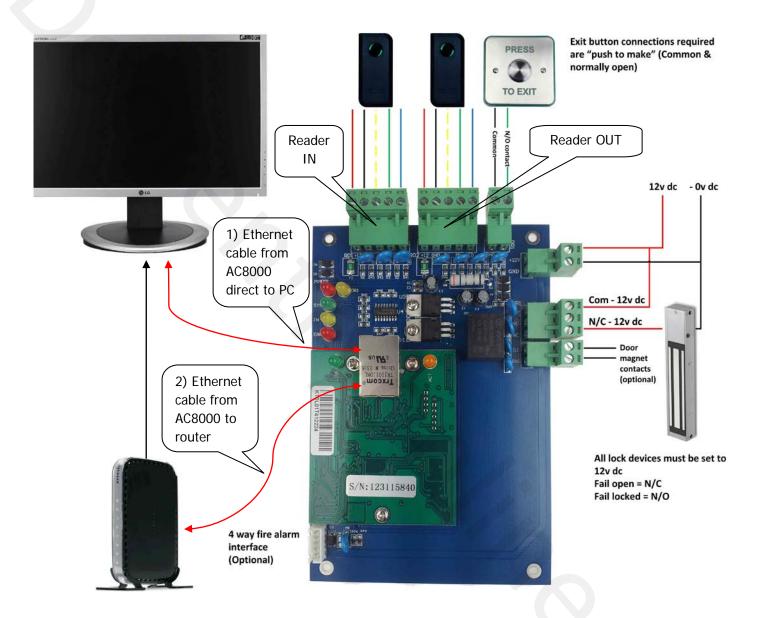
Index

Connection & Drawings	Pages 2 - 5
Login & main software interface layout	Page 6
Changing login password & Software registration	Page7
Add controllers	
Basic (Without hub or router required), LAN or WAN connection	Pages 8 – 10
Access Control	
Check/test controller communication	Page 11
Edit/rename doors & lock status	Page 12
Adding users and/or departments	Pages 13 – 15
Creating access privileges for users	Pages 16 – 17
Editing access privileges for users	Page 18
Amending lost cards/fobs	Page 19
Query card/fob user records	Page 20
Monitoring user access & location of users	Pages 21 – 26
Database backup & restore	Page 27
Extended functions (Password required)	Pages 28 – 30
Time profiles for users, departments & doors	Pages 31 – 33
Peripheral configuration (Fire alarm interface & regulations)	Pages 34 - 42
Keypad operation	Pages 43 - 46
Anti-passback	Page 47
Interlock	Page 48
Task list (Automatic door control opening)	Pages 49 - 50
Attendance (Time & Attendance & reports)	Pages 51 - 57
Meal setup	Pages 58 - 62

Typical Layout Drawing

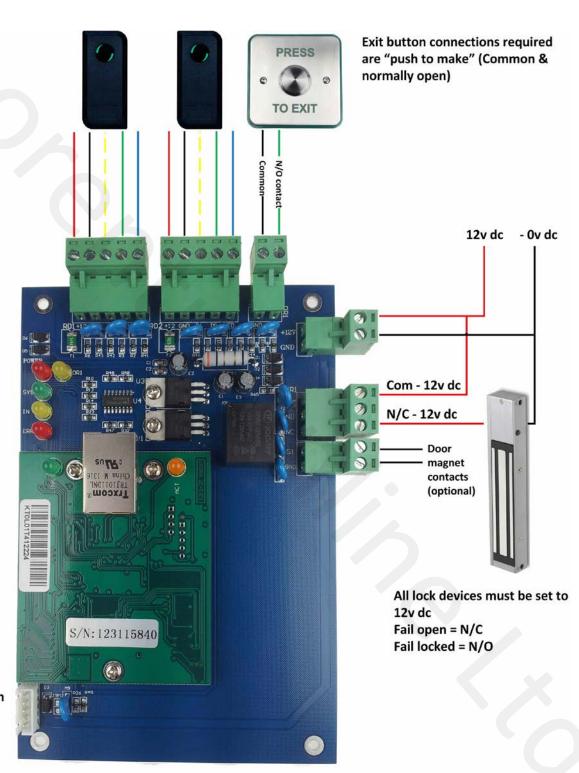
Two options for connection, either directly to a PC or via a router

For illustration purposes, the yellow wire for the door reader/s is white



AC8001 (One) Door Controller

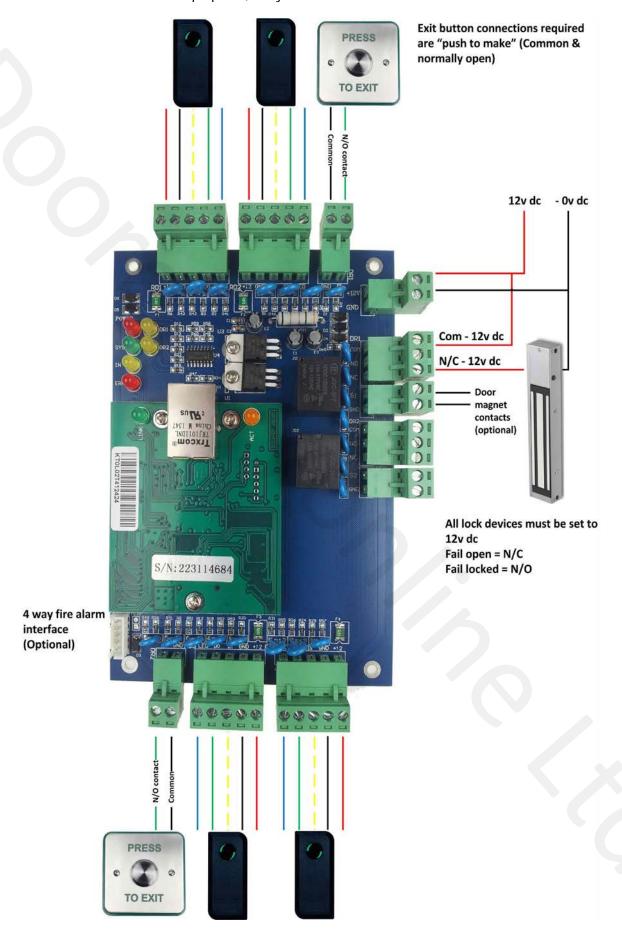
For illustration purposes, the yellow wire for the door reader/s is white



4 way fire alarm interface (Optional)

AC8002 (Two) Door Controller

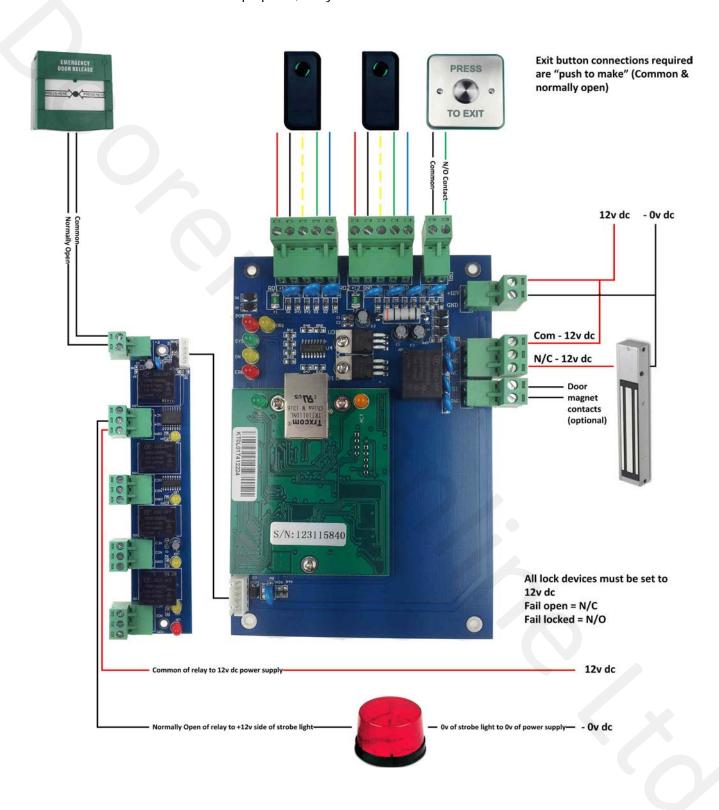
For illustration purposes, the yellow wire for the door reader/s is white



AC8001/2 Door Controller

Standard connection of a fire alarm input (AC-FAB - Optional Fire alarm Board)

For illustration purposes, the yellow wire for the door reader/s is white



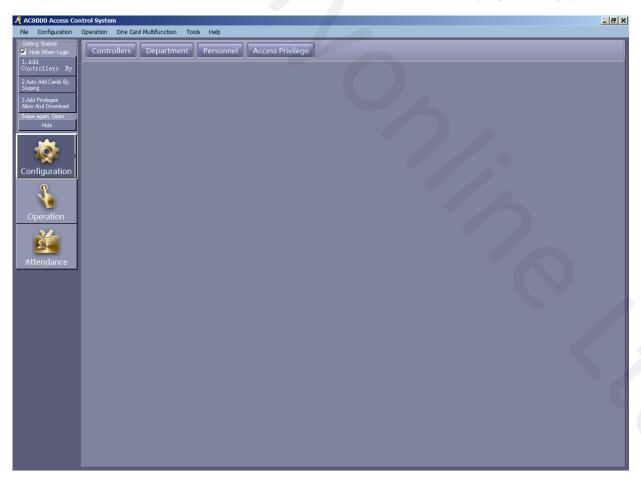
Login

When you first activate the software, it will ask you for a **User Name** and **Password**, by default the user name is "abc" and the password is "123" (without speech marks)



Once the user name and password have been entered correctly, you will be displayed with the main interface screen. At the top left hand side you will see the three main "Getting Started" buttons to set you up and running in less than 15 minutes. This particular interface can be hidden or deactivated at any time by clicking Tools/Auto Login

A majority of the main buttons also have short cuts to their relevant features by right clicking your mouse button



Change Password

Tools/Edit Operator

If you wish to change the user name and password, click Tools/Edit Operator

You can also bypass the manual login procedure by clicking Tools/Auto Login





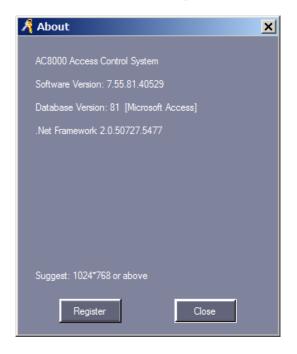
Forgotten user name and password

In the event that you cannot remember your user name and password to login in to the software, please contact you supplier who will give you full instructions as to what is required. It may take up to 24hrs to reset your software and a charge may be incurred for this service

Software Registration

Help/About

The software provides a timed evaluation period of approximately three months before it expires, in order to continue the full use, please ensure you register the software. Enter the relevant details and registration code which can be obtained from your supplier





Add Controller/s - LAN or WAN Connection

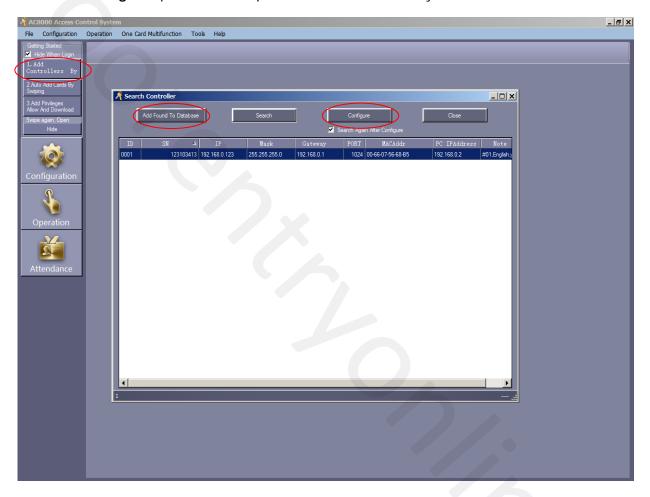
LAN Connection - Local Area Network via hub, router or directly to a PC or laptop

In order to add the access controller/s to the software, simply Click **Add Controller By Searching** located on the top left hand side. The software will then locate the controller and provide the required details for you automatically. This procedure is also required if/when adding additional controllers

You will then be displayed with this screen confirming the controller information. Click **Add Found To Database** followed by **Close** to confirm

Click Configure if you require WAN Connection

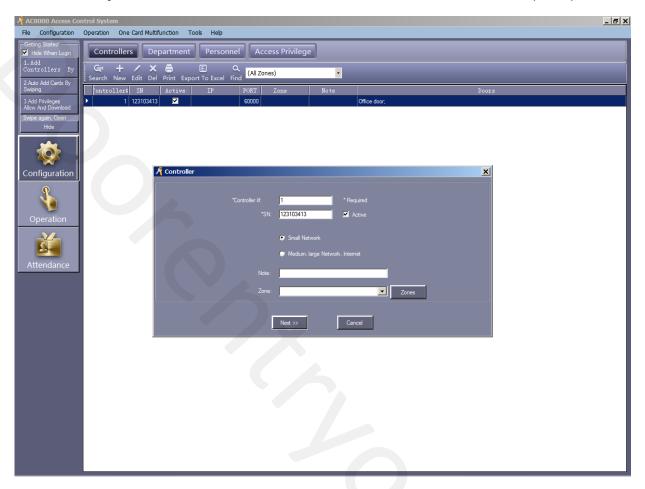
Port Forwarding is required to be setup for WAN Connection via your hub or router



LAN Connection (Local Area Network)

Revert to the main screen and click **Configuration/Controllers/Edit** and choose Small Network for LAN communication or Medium/Large Network if you require to control the system via Internet communication

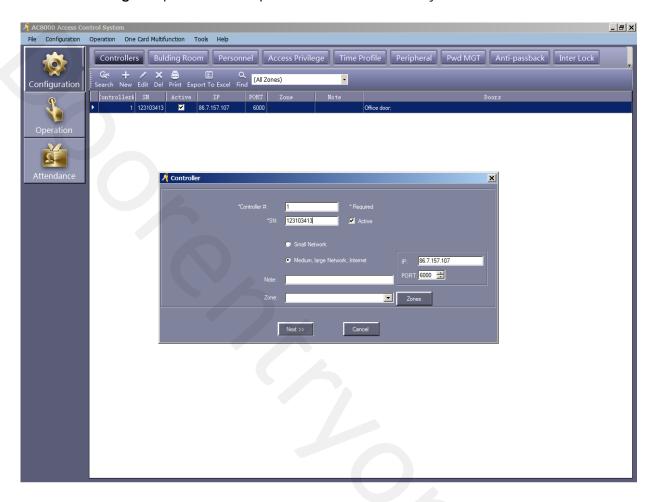
Click Next and you can edit the door names and control status of the doors. When complete, press OK



WAN Connection (Wide Area Connection)

Revert to the main screen and click **Configuration/Controllers/Edit** and choose Medium/Large Network for WAN communication via Internet connection

Port Forwarding is required to be setup for WAN Connection via your hub or router



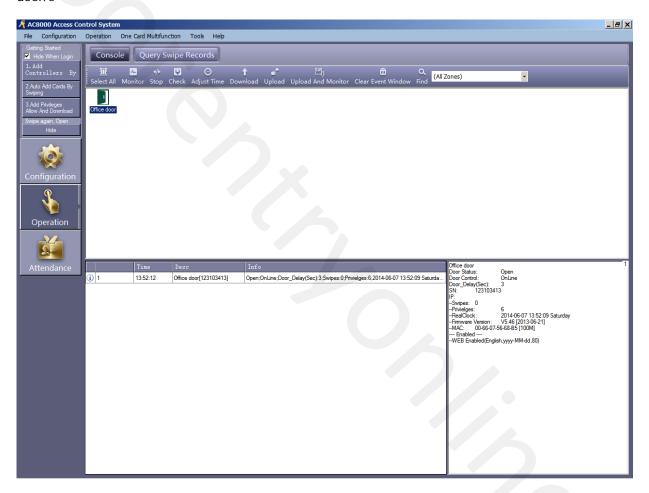
Check Communication

When the controller/s have been added to the software click **Operation**. Right click on the door icon and choose **Check** to test the communication between the software and the access controller. You will see a similar image as below. Click on the **Clear Event Window** to clear the screen if required. Click **Adjust Time** followed by **Download** to ensure time sycnronisation is correct between the computer and the access controller

Upload/Download - ! Important !

Operation/Console/Download

Ensure that you download any changes/edits made to users, door settings or any other setting to the controller Whilst the changes will be stored within the software database, the controller will not respond to these changes unless you download them to it. To do this, click **Operation/Console/Download** Don't forget to highlight the door/s

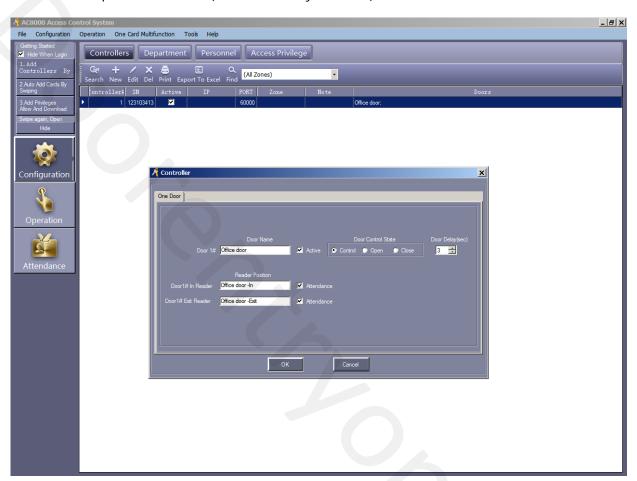


Edit door names & Lock status Configuration/Controllers/Edit

Edit the door names and control status of the doors

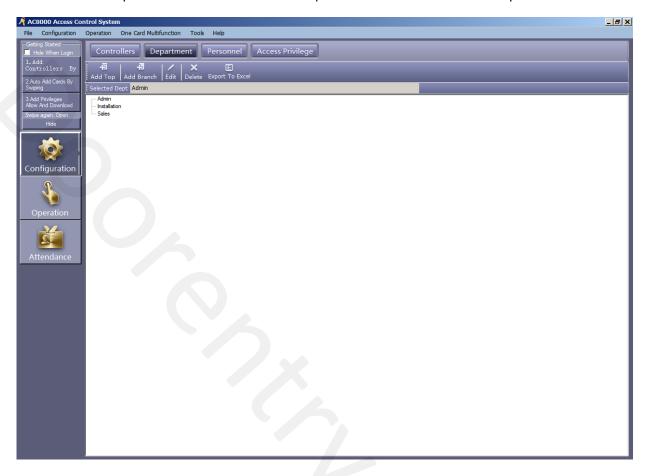
Control: Is normal PC control status

Open: Will keep the door open (Treat this facility with care) **Close:** Will keep the door locked (Treat this facility with care)



Adding Departments/Branch/Users/Access Privilege Configuration/Departments/Add Top

You can create departments and/or branches if required. Enter the name for the department/s and then click **OK**



Adding Personnel

Configuration/Personnel

There are four ways in which users can be added to the system, this can be undertaken individually, via a USB desktop reader, the door reader itself or manual batch input (Manual batch input requires sequential card numbers)

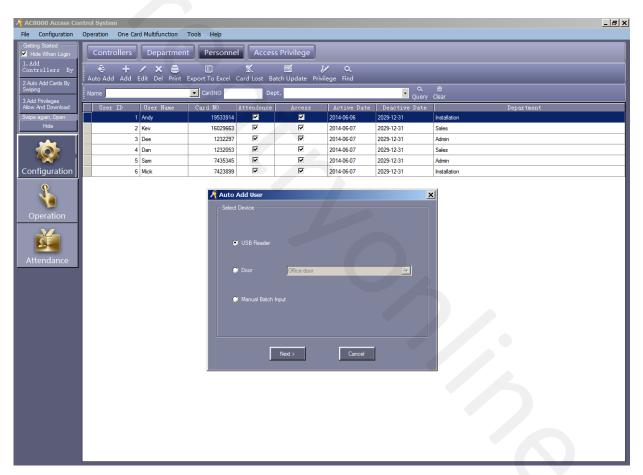
- * USB desktop card reader or door reader Must be used if adding key fobs
- ** You must issue all new card users **Access Privileges** before they can access any door/s

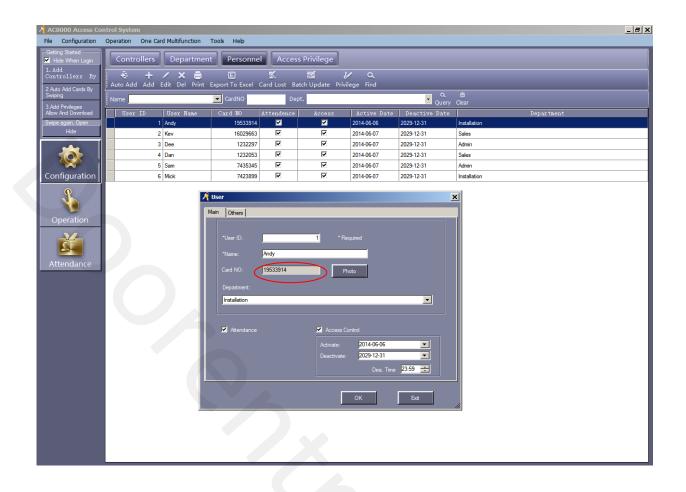
To manually enter a card, Click the **Add** button and insert the 8 digit Wiegand number printed on the right hand side of the card in to the **Card No** box and a photo of the user if required

Click on Auto Add if using a USB desktop card reader or door reader to enter a card

Click Others to allow you to add extra information for the user if you wish

Click OK to exit or Add Next to add more users



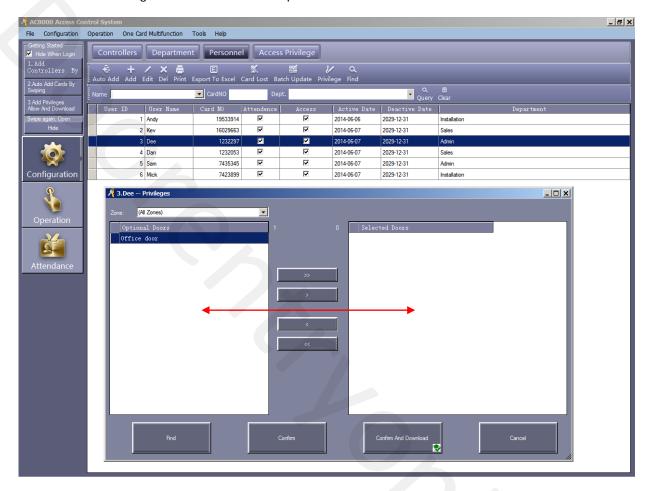


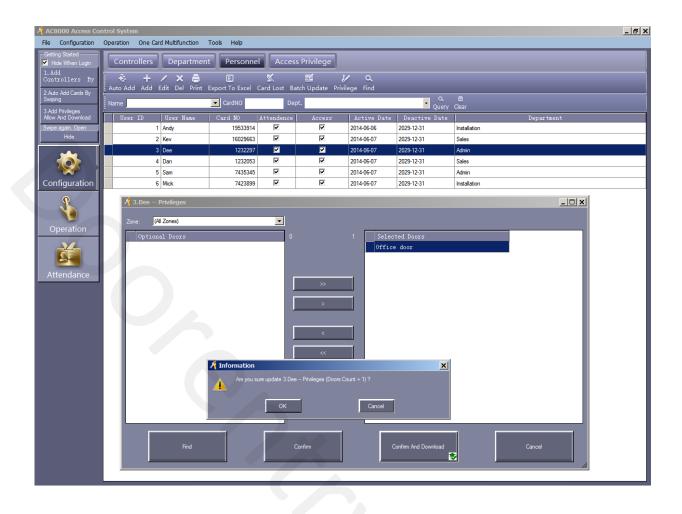
Access Privileges

Configuration/Personnel

In order to allow users through the door/s you need to allocate an **Access Privilege** There are two ways to do this, individual users, multiple users and/or by departments

Highlight a user and click **Privilege**. Using the >> arrow button/s, select the door you wish the user to access and move it to the right hand side. Once complete, click **Confirm And Download**

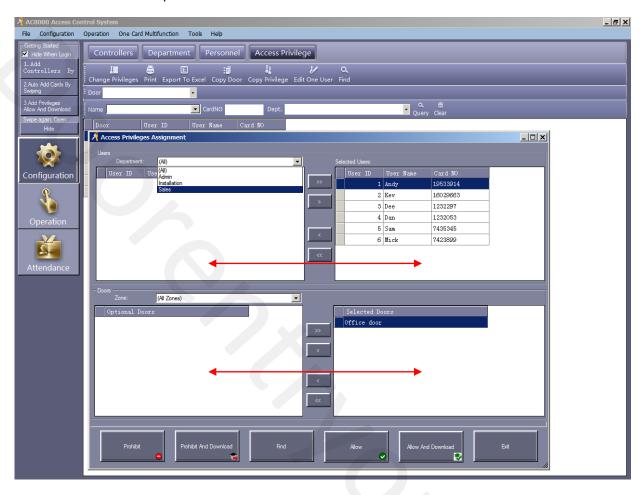




Configuration/Personnel

To change the privileges of multiple users and/or by departments, click Access Privilege/Change Privileges

Using the >> arrow button/s, select the user/s or department and move them to the left hand side. Do the same for the door/s. Once complete, click **Allow And Download**



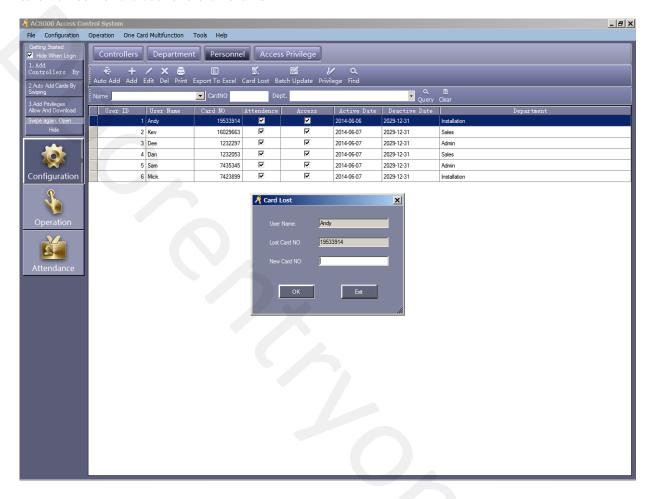
Lost User Card

Configuration/Personnel/Card Lost

It is very easy to locate and rectify a lost user card, navigate to the main software interface screen and click on

Configuration/Personnel/Card Lost

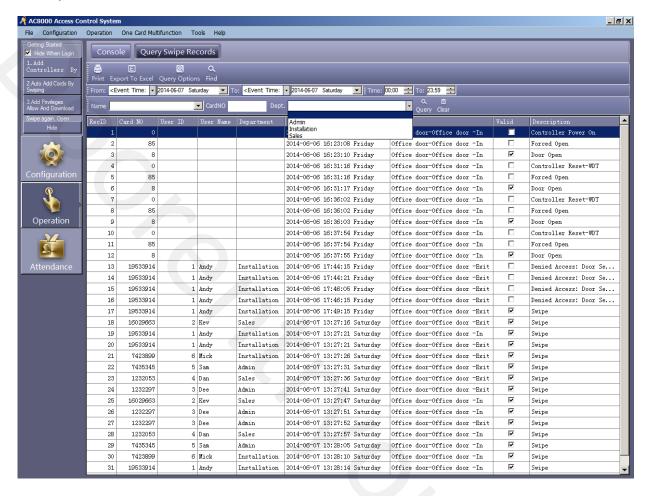
This screen will appear and you simply choose the card user or department for the lost card, issue and enter a new card number for the user and then click \mathbf{OK}



Query Swipe Records

Operation/Query Swipe Records

Query Swipe Records will maintain **100,000 OFFLINE** transactions for all activity. You can filter this information by users, departments or date/time. This record cannot be deleted, however, it can be printed or exported to an Excel spread sheet

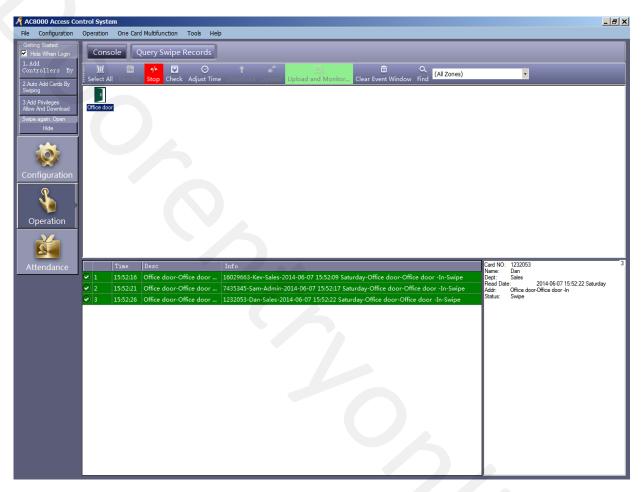


Monitoring

Operation/Console/Upload and Monitor

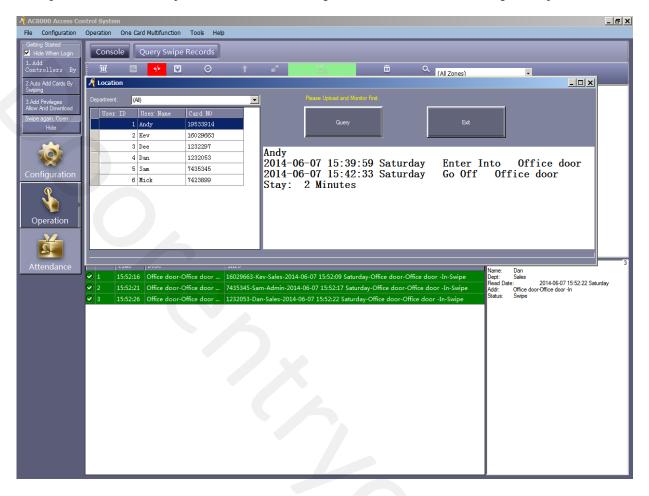
Highlight a door and click **Upload and Monitor**. This will allow you to monitor real time activity and also upload the very latest transactions to your computer that can be viewed by clicking **Query Swipe Records**

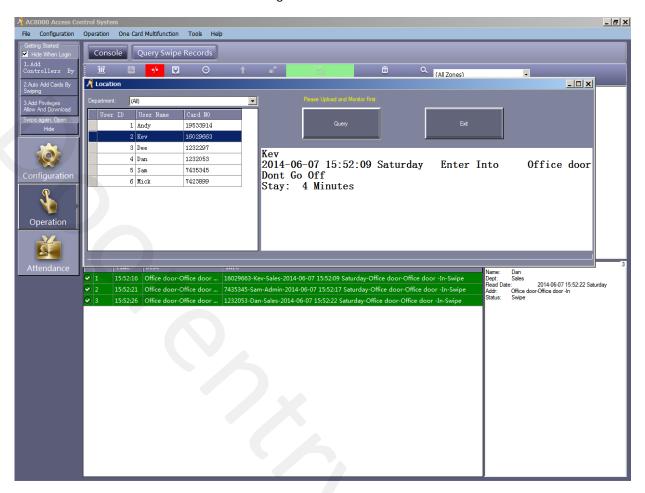
You can click on any user for individual information that will be displayed on the right side of the screen, however, if you want to find the exact location of each user or even who is presently inside or outside the building, right click the door and choose **Location or Persons Inside**



Location

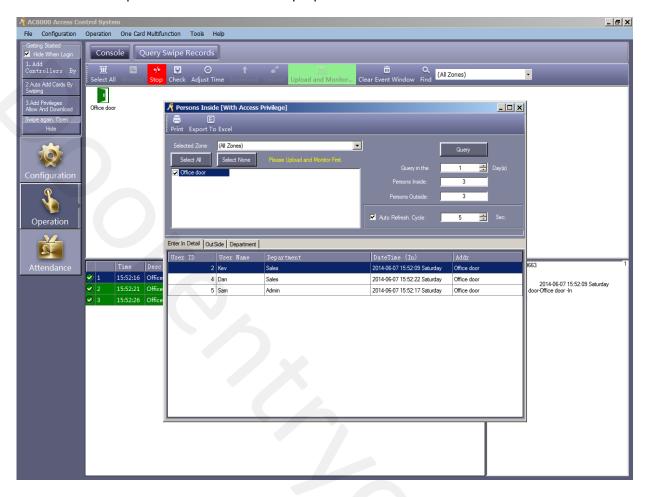
The Location box will appear and you can filter this by either a user or department. Highlight a user and click **Query.** We know that Andy had entered the building and exited and also how long he stayed for



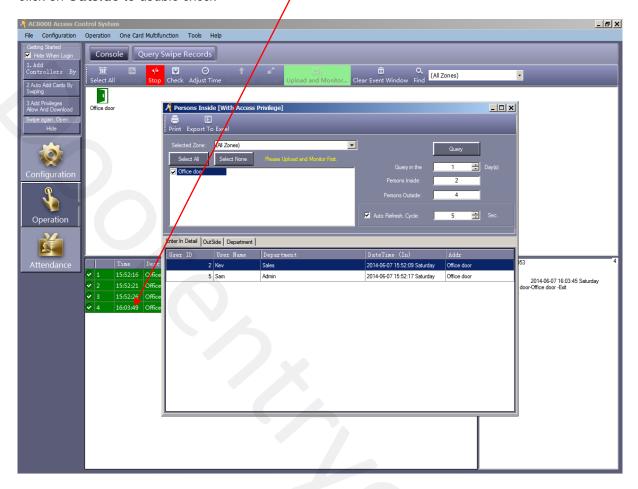


Persons Inside

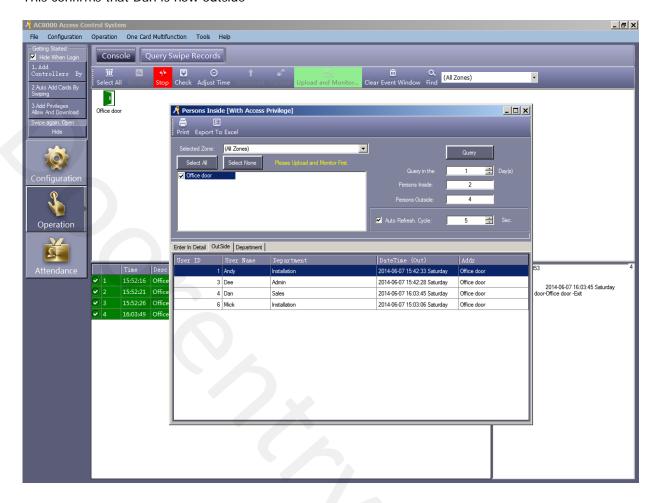
The Persons Inside box will appear box. You can **Auto Refresh Cycle** this and find out who is inside, who is outside or via a department. This shows three people inside



However, Dan has just exited the building which is displayed via the **Auto Refresh Cycle** of **Persons Inside** and **Persons Outside** which is transaction number 4 and also confirmed by the right hand screen in the back ground Click on **Outside** to double check



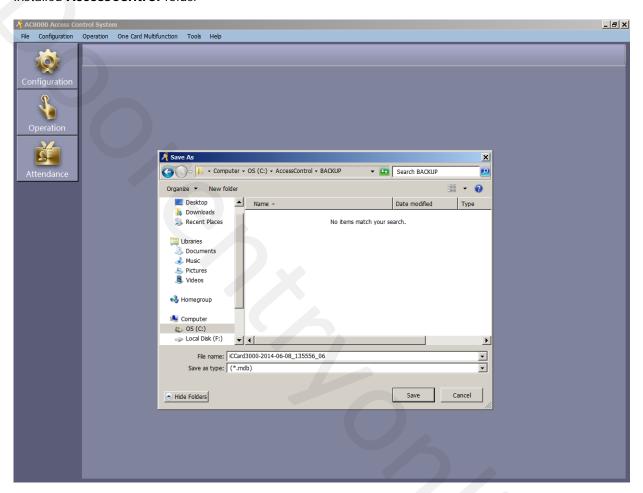
This confirms that Dan is now outside



Backup Database & Restore File/DB Backup

The software will auto backup the database when you exit the software, however, it is recommended to manually backup the database by clicking **File/DB Backup** and choose your required backup folder

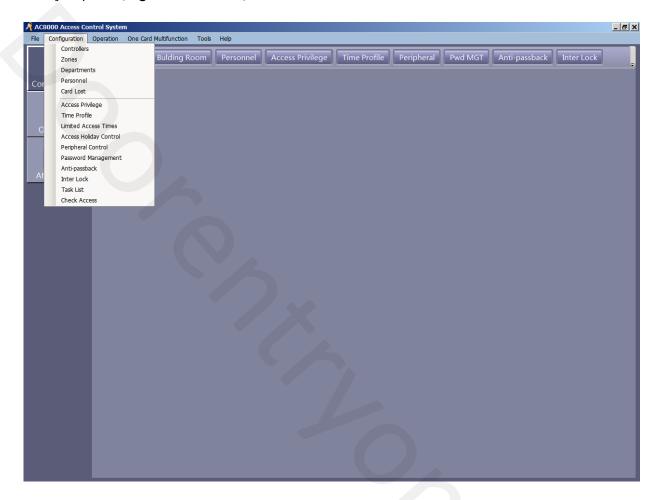
This will be required in the event you need to re-install the software but do not wish to re-enter all the user data You would simply copy and paste the database called **iCCard3000** from your backup folder in to the newly installed **AccessControl** folder



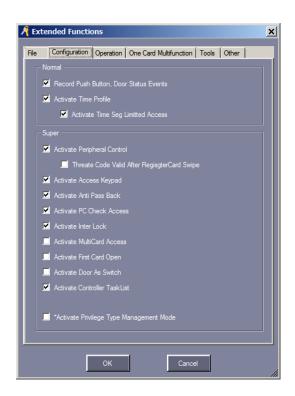
Extended Functions

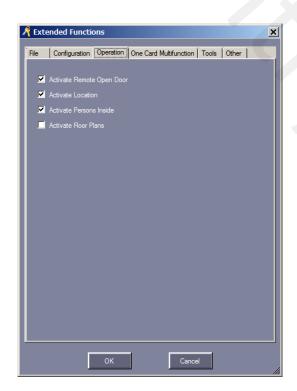
Tools/Extended Functions (Password is 5678)

The extended functions provide six sections offering a multitude of additional options to suit your own requirements as can be seen below. When you have chosen the options, you will be required to restart the software and the new options will be displayed. Under the main head sections will also display the shortcuts to the facility required (Right click mouse)



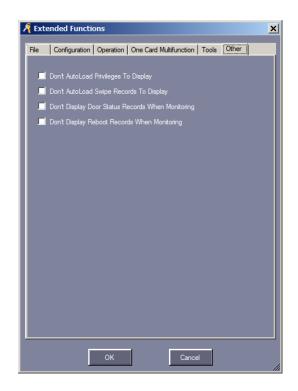










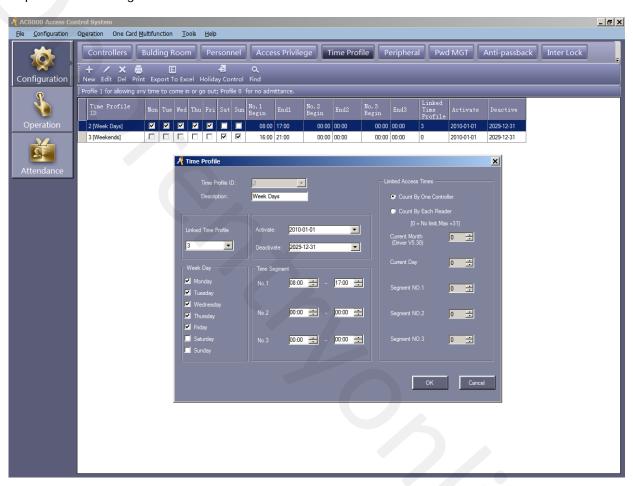


Time Profile

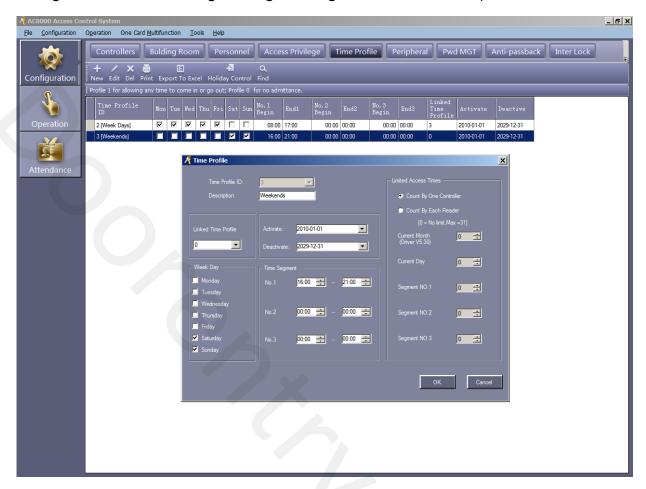
Configuration/Time Profile/New

Time Profile provides up to 255 time profile ID's with three timed segments which can be allocated to individual controllers, door readers, users, or departments. The example below shows how to link one profile to another Enter the name of the profile in the **Description** box and choose an **Activate/Deactivate**, **Time Segment** and **Week Day** as required

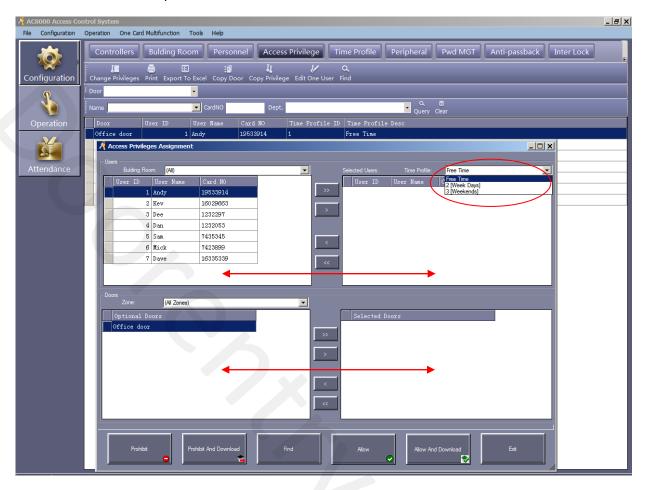
You will notice that our **Time Profile ID 2** is linked to **Linked Time Profile** 3. This is because users will also require access during the weekend



Note that you do not need to link **Time Profile ID 3**. When complete, click **Configuration/Access Privilege/Change Privileges** to allocate the timed profiles



Using the >> arrow button/s, select the user/s or department and move them to the right hand side. Do the same for the door/s. Once complete, click **Allow And Download**



Fire Alarm Board (interface)

**Fire Regulations

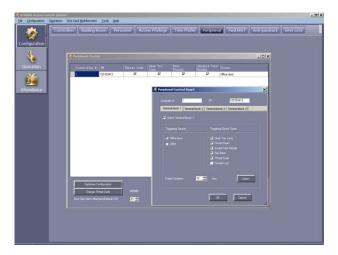
Please ensure you contact your local Fire Officer with regards to the inter-connection of access control equipment to your fire alarm system. More often than not, it will be acceptable to connect the fire alarm output to an independent auxiliary relay or double pole emergency break glass switch in order to deactivate the locking devices

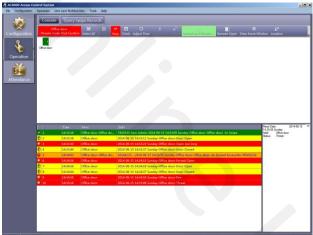
The fire alarm panel manufacturer should always be contacted to ensure the auxiliary relays contained within the fire alarm panel, which will release the door, are of a suitable quality for life safety. Relays connected to any locking device must be energised in the non-alarm condition, i.e. the relay/s will be de-energised on alarm and will therefore tend to fail safe all devices connected

The AC-FAB (Fire Alarm Board interface) is an add-on module for the AC8000 PC Access Control System designed to accept a Normally Open contact input which then provides an alarm signal output via the software and/or activating any of the four timer relays provided in addition to ensuring the door/s are held in the unlocked state for as long as the alarm input is present (Certain features of the AC-FAB will also require an RFID keypad and locking device fitted with door monitoring contacts) It can also accept additional inputs to activate individual relays as and when required

It has a simple software interface that can be configured to your own requirements supporting one manual Normally Open trigger input from an alarm system or emergency break glass switch, four timer relay outputs from 0 – 6000 seconds (1.66hrs), all providing Normally Open and Normally Closed outputs that can be connected to external sounders, flashing beacons or any other device requiring a volt free contact input. Six triggering options are available that can be programmed to activate one or all four relays

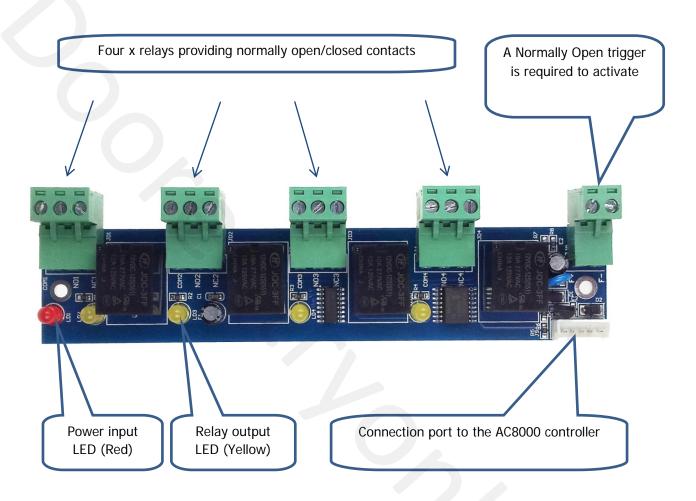
It supports and registers via the software an emergency threat PIN code *(RFID Keypad is required for this)*, if the door is open too long, door forced open, invalid card used, fire alarm and forced lock





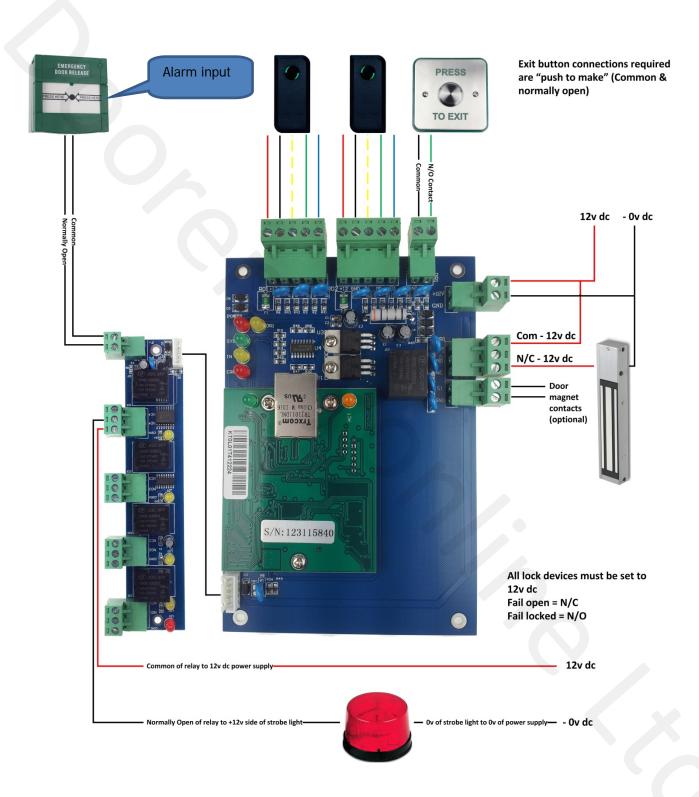
Fire Alarm Board (interface)

158l x 43w x 15h



Example of the AC-FAB being activated by the alarm input, but also triggering one of the four relay outputs to activate a strobe light from 0 - 6000 seconds (1.66hrs)

The alarm input will keep the door/s unlocked until it has been reset (Providing the Normally Open input is not removed)



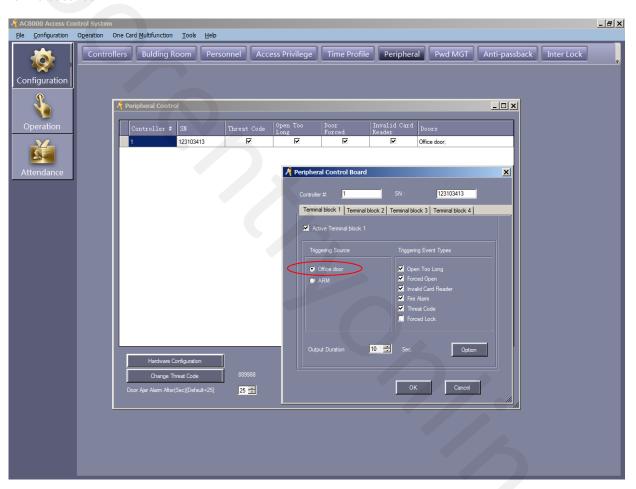
Peripheral

Configuration/Peripheral

The auxiliary relay board (Fire Alarm Board interface) has one manual Normally Open trigger input, two triggering sources (**Door or ARM **)** and four timer relay outputs from 0 – 6000 seconds (1.66hrs), providing Normally Open and Normally Closed outputs that can be connected to external sounders or flashing beacons etc. In addition to this, there are six triggering options that can be programmed to activate one or all four relays

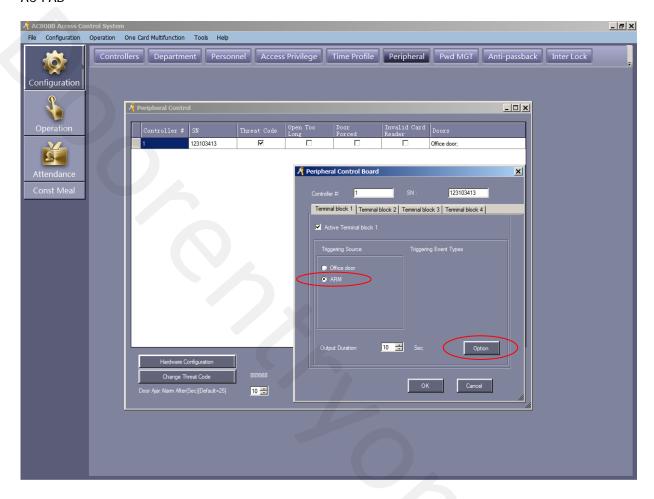
The example below shows the standard **(Door)** configuration setup requiring the software to display when the door is open too long, if the door has been forced open, if an invalid card is being used to gain entry, if the alarm input has been activated and if a threat code has been used

In order to program the relay outputs, click **Hardware Configuration**. We have set relay output one to activate for 10 seconds



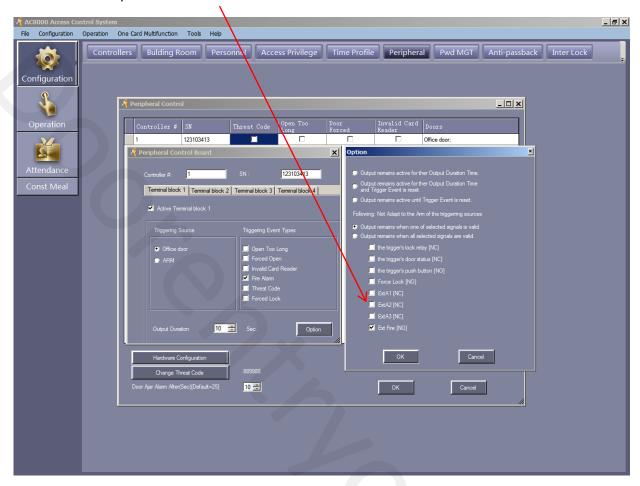
ARM **

The **Auxiliary Relay Method** option allows for additional inputs that can be used in conjunction with the standard **DOOR** cofiguration setup or independently to trigger the relay outputs (Non timed) and hold them open until the input has been reset, all of which can be configured by clicking the **OPTION** button This example will trigger a Fire Alarm event via the software only and no relays will activate on the AC-FAB

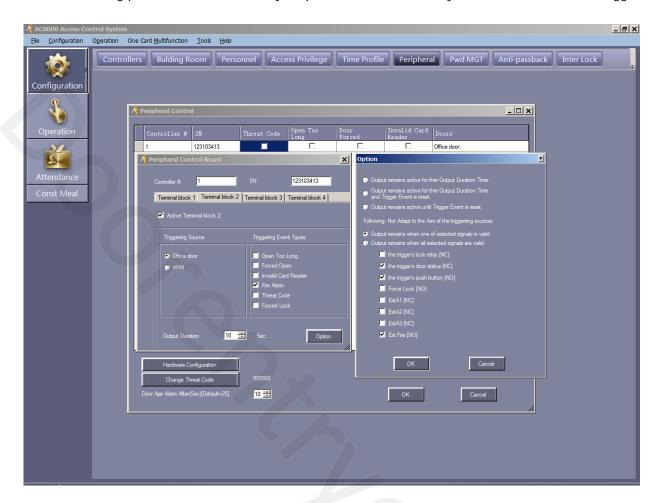


This configuration will trigger a Fire Alarm event via the software and also activate relay output number 1 indefinitely on the AC-FAB until the trigger is reset

Please note that options EXTA1/2/3 do not function on the AC-FAB

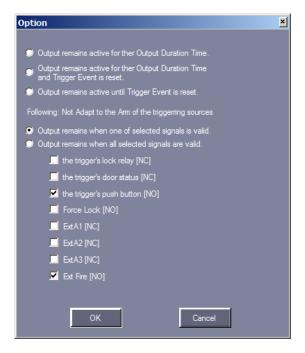


This configuration will trigger a Fire Alarm event via the software, the door status (Open or closed) as well as the exit button being pressed and activate relay output number 2 indefinitely on the AC-FAB until the trigger is reset



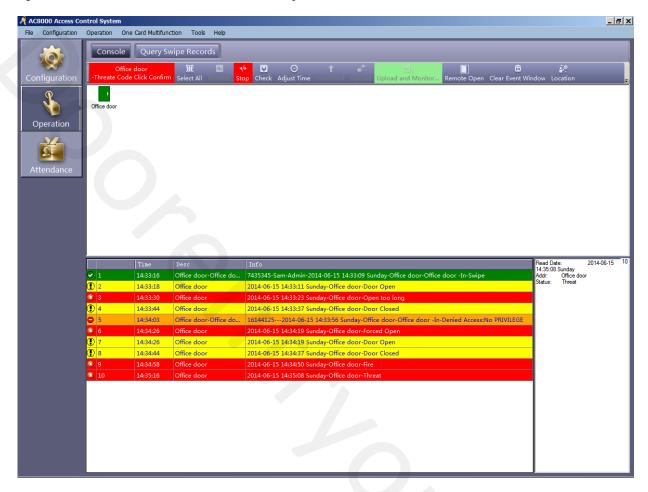
Option Button

An additional three options are provided as to what the relay output does for the timed duration which can be set from 0 - 6000 seconds (1.66hrs) or if using the ARM option, there are five possible signal inputs available



Here you can see the relevant 'Trigger' input is displayed via the software

This example shows that Sam has entered the building, the door opens, but it is open for too long. We close the door, however, an invalid card is then presented to the door, followed by a forced entry. We then close the door again. The fire alarm then activates followed by the threat code



Change Threat Code

A keypad is required for this and in the event of a threat or emergency access is required, the user would enter this number exactly without any prefix or suffix in order to gain entry. The threat code can be changed to any 6 digit number required

All users can enter this number. It cannot be 'Privileged' to individual users or departments, therefore, treat this function carefully and who you issue the code number to



Once you are happy with the settings, ensure you download to the controller. Click **Operation/Console/Download**. If you wish to monitor the results, click **Upload and Monitor**

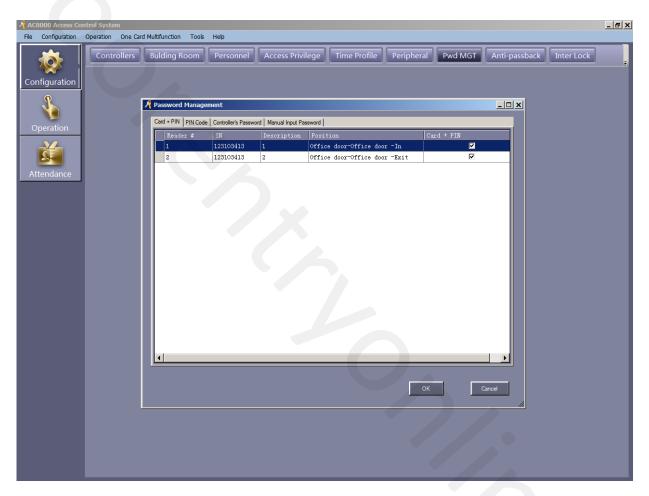
Keypad Operation (PWD MGT)

Configuration/PWD MGT

A Wiegand keypad will provide more stringent access for all users and/or staff which can be used in four ways:

Card + PIN code Card only Wiegand PIN code Master PIN code

Within the **Password Management** screen are four sub-sections, Card + PIN, PIN Code, Controller's Password and Manual Input Password. Tick each door required for keypad operation



PIN Code

The PIN Code screen will display all users or you can filter this to individual departments. The default PIN code for all users/departments is **345678** and displayed as **'UnChanged**'

Change PIN will of course allow you to enter a new 4-6 digit PIN code for each user and will be displayed as '**Changed**'. If you do not enter anything at all, it will display '**No Password**'

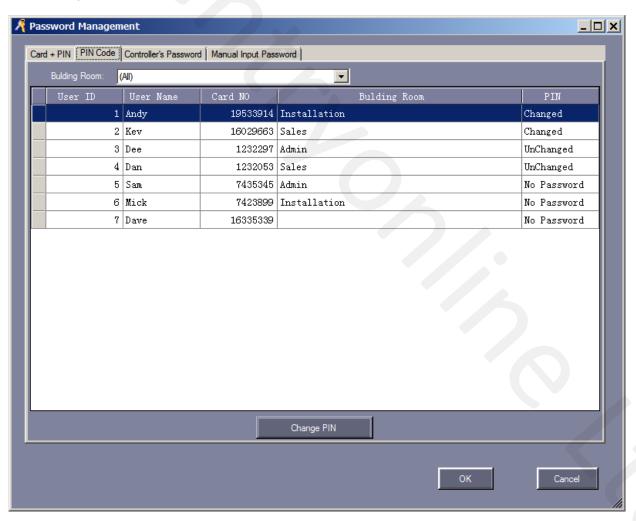
! Important!

Please ensure you make a note of all allocated PIN numbers for users. The software will not display the user PIN number at all

In the event that you have lost user PIN numbers, you can either manually change them or please contact you supplier who will give you full instructions as to what is required. It may take up to 24hrs to provide your original user PIN numbers and a charge may be incurred for this service

With the configurations we have set in the below example (Changed/UnChanged & No Password) will be as follows:

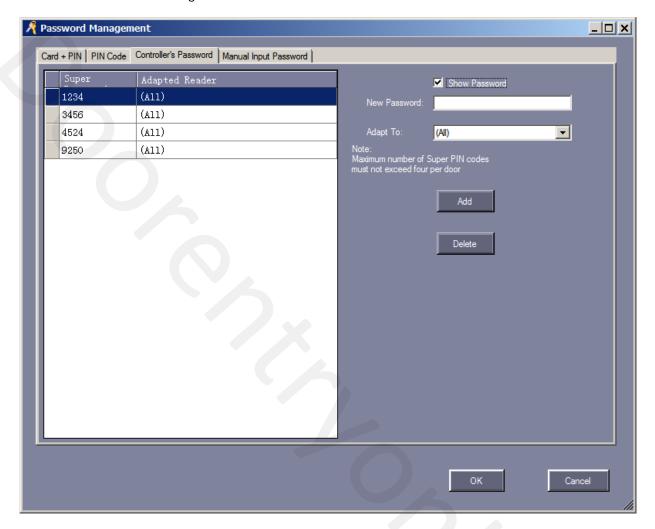
- 1) Andy & Kev must present their 'Card + PIN + #' in order to gain access
- 2) Dee & Dan must present their 'Card + (Default PIN 345678)' in order to gain access (# is not required)
- 3) Sam, Mick & Dave can present their 'Card' or enter '* + the 8 digit Wiegand number on their card + #' in order to gain access



Controller's Password

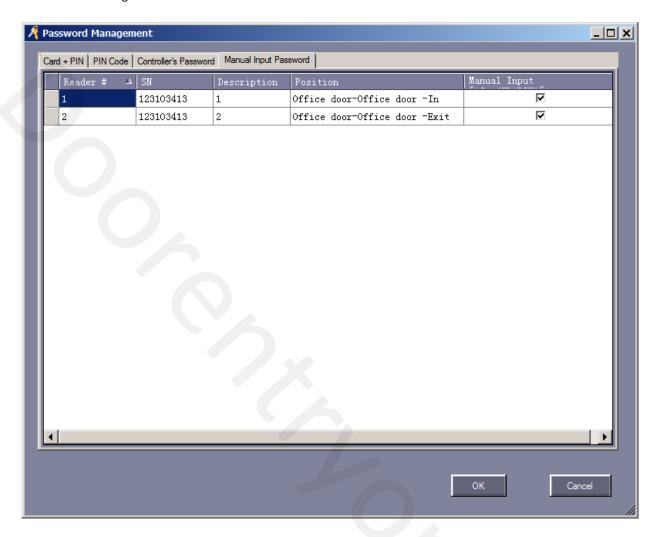
Master PIN codes can also be created for senior staff up to a maximum of 4 PIN codes per door – Users and Master PIN codes can be 4-6 digits

Enter 'PIN + #' in order to gain access



Manual Input Password

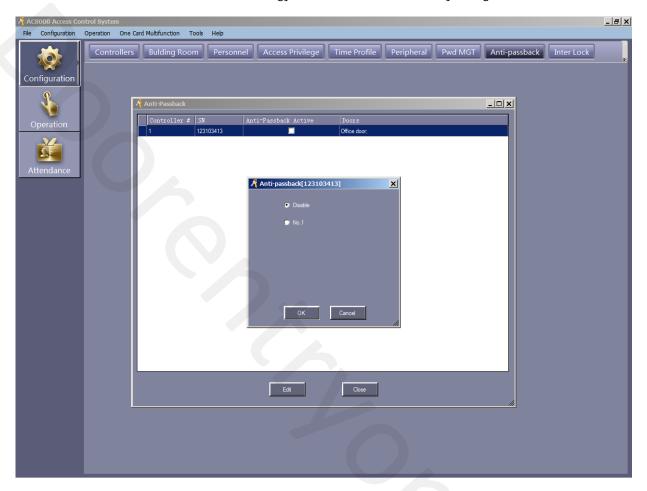
Users who have a 'No Password' can present their 'Card' or '* + the 8 digit Wiegand number on their card + #' in order to gain access



Anti-Passback

Configuration/Anti-Passback

Anti-passback is a secure feature requiring a card reader for entry and exit in order for it to function correctly. This facility prevents a card or PIN code from being used twice to gain access through a door without it being used to exit a door. This prevents users who gain access, then "Passback" their card to another user to gain entry at a later time. An ideal feature for health clubs, gyms or social clubs who may charge an annual fee for membership



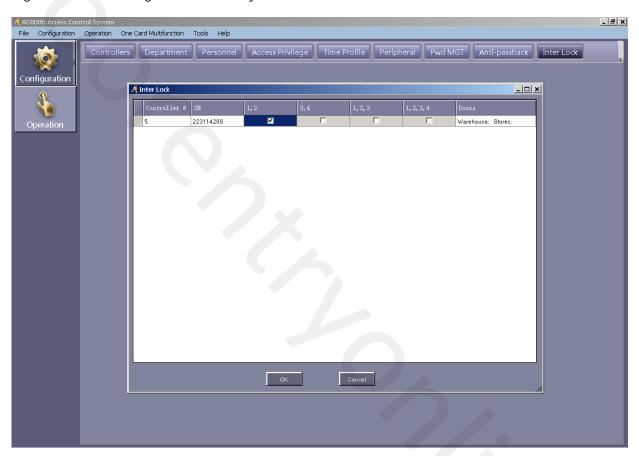
Interlock

Configuration/Inter Lock

You can create an inter lock facility whereby one door is open and the second door is closed. The second door will not open until the first door is closed (You will require standard **door contacts** for this or a monitored magnetic lock or monitored lock release fitted with monitoring door contacts)

(Not available on single door controllers)

Door Contacts: Door contacts connected to the control board will inform the software as to the actual status of the door in question, in this way, the software can detect if the door is in a physical open or closed state, regardless if the locking device is actually locked or unlocked



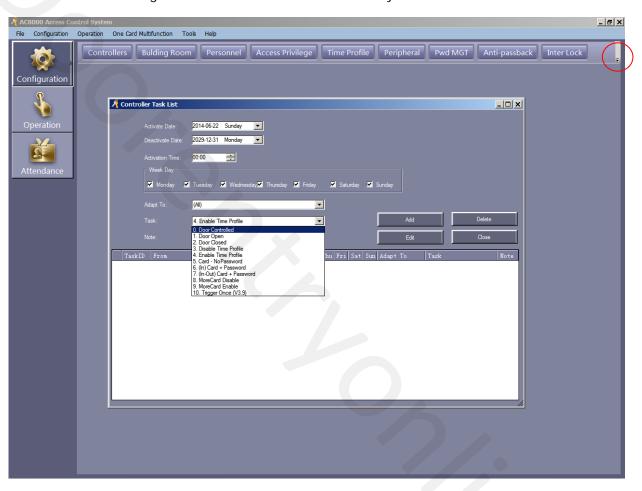
Task List

Configuration/Task List

This option is for setting times of the day and/or days of the week where you require to control the door status automatically, for example, a School may require the door/s to open first thing in the morning or perhaps a Hospital requires absolute no access for door/s of a night time

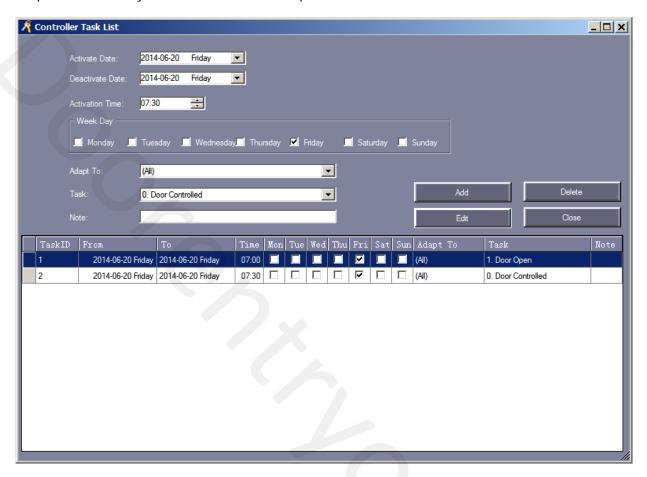
Click on the **Task** drop down menu button to display a variety of available options which can be adapted to individual or all doors

A maximum of 64 settings can be made and can be edited at anytime



This example shows all doors will open at 07.00am and then reverting to door controlled status at 07.30am for one day only

Choose an activation and deactivation date, an activation time, day of the week, which door the task should be adapted to and finally choose a task. When complete, click **Add**



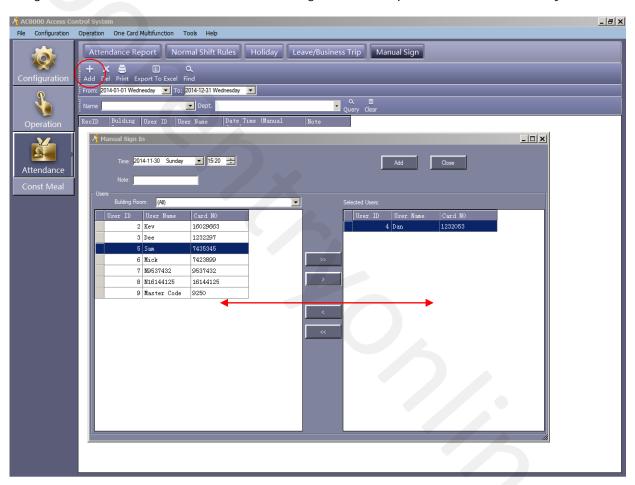
Attendance/Manual Sign In

Attendance (Time Attendance) literally operates in the background for all users and departments and allows you to create daily and annual leave, work shift hours and manual sign in for individual users and/or departments for specific days and time. Complex, simplified or filtered reports can be printed directly to your printer or exported to Excel

Please ensure: User privileges are set for Attendance

Manual Sign In will provide an **ON DUTY** time for users or departments within the reports. This will only be required if you have temporary staff for example, if not, then you do not need to enter any details

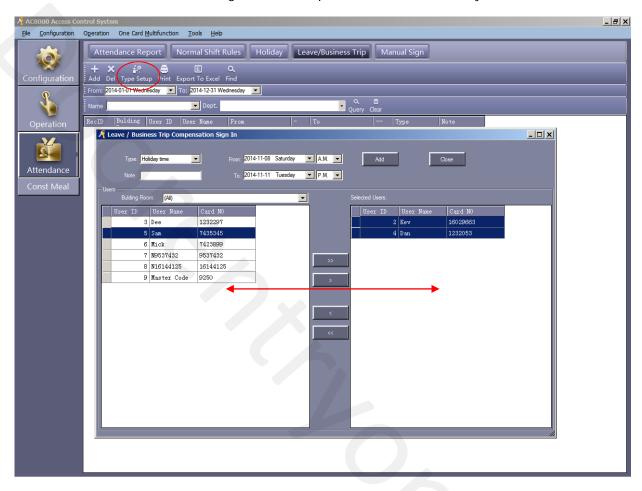
Click the **+Add** button to create a new **Manual Sign In**, select the users or departments on the left and then using the **>>** arrow button/s, move them to the right. When complete, click **Add** followed by **Close**



Leave/Business Trip

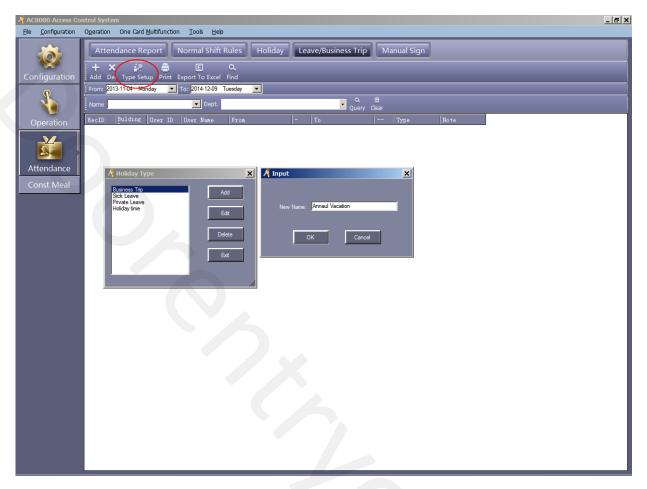
This will allow you to allocate business, sickness and private leave for users and/or departments You can also create your own title by clicking on **Type Setup**

Click the **+Add** button to create a new "Leave", select the users or departments on the left and then using the >> arrow button/s, move them to the right. When complete, click **Add** followed by **Close**



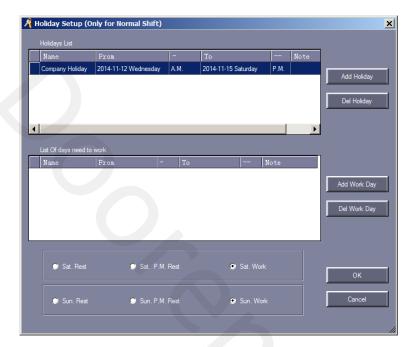
Type Setup

Create your own "Leave" title by clicking **Type Setup/Add/New Name** When complete, click **OK**



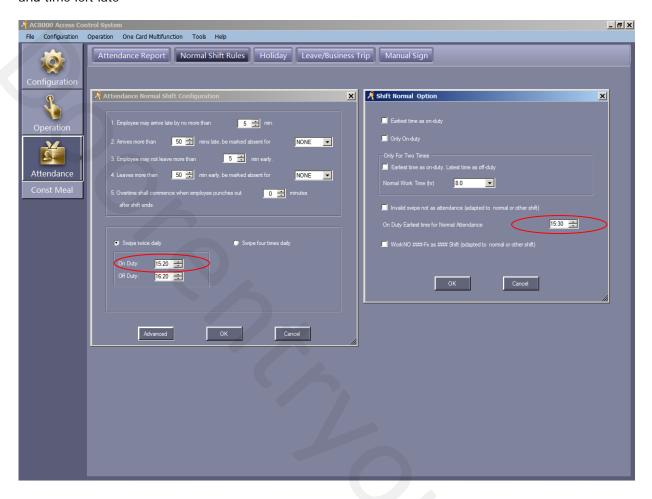
Holiday

This will allow you to allocate Company leave such as Easter, Christmas, New Year, Bank Holidays or whatever you choose. This will be displayed on the reports as a * for each user/department



Normal Shift Rules

This will allow you to allocate normal working hour start and finish times as well as an amount of time from 1 – 600 minutes for arriving late or leaving early. It also provides an advanced facility if required. Correctly setting these options will generate a more enhanced **Attendance Report** such as time arrived, time arrived late, time left and time left late



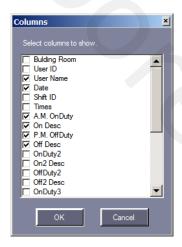
Attendance Report

Click **Create** to generate a report – up to date reports will require you to **Upload** the latest transactions in the first instance. Click **Operation/Console/Upload**

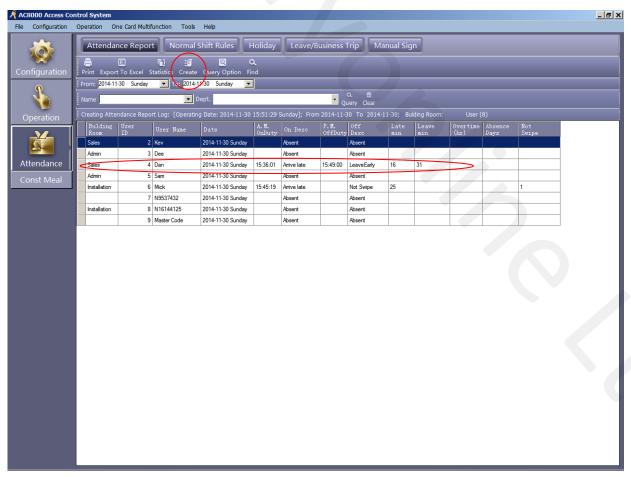
The attendance report can be filtered by user or department for all or selected dates. Note that our user Dan is required for manual sign in, this report shows he is required to sign in at 15.20pm, however, his sign in time was 15.36pm and he left early at 15.49pm by 31 minutes

Right clicking on the report will allow you to select particular configure columns for preferred viewing which can be saved

Query Option will allow you to view specific results of the report. The report can be printed directly to your printer or exported to Excel

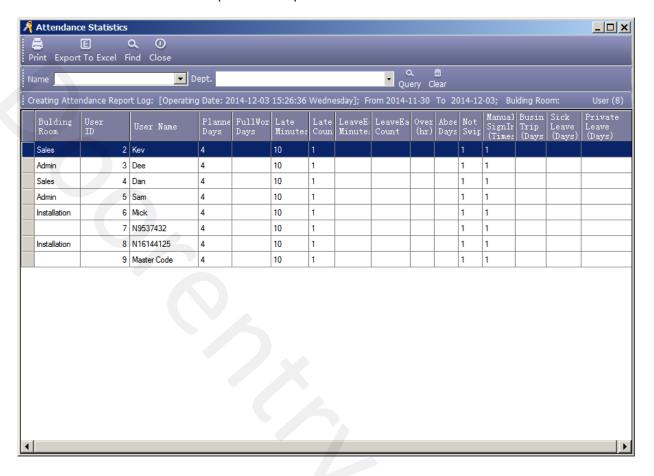






Statistics

The statistics button will provide an individual report for days worked, lateness, early leave, sick leave, annual leave and so on. This can also be printed or exported to Excel

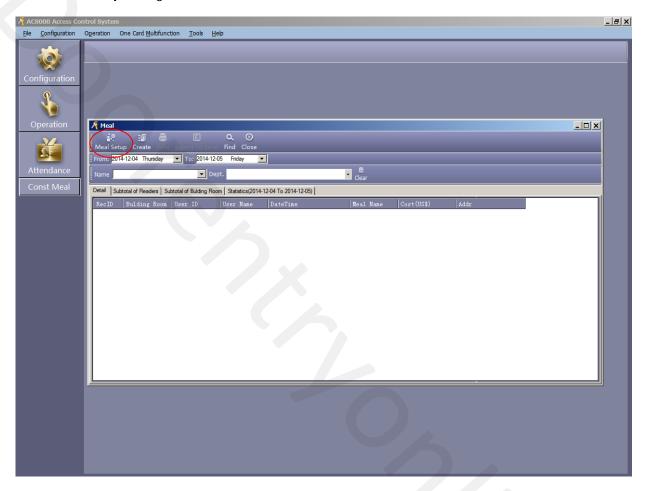


Const Meal

The Meal Setup is primarily designed for charging entry and/or exit to an on-site or factory canteen to enable a cost charge per user or department. The facility could be also used for any other requirement needing to make a charge for entry and/or exit

You can allocate a fixed rate for entry or exit or even allocate a higher rate for individual door readers for special occasions or "One off events" in addition to charging different amounts for certain times of the day

Click Meal Setup to begin



In the Meal Setup, you have three sections, Readers, Rules and Meal Period

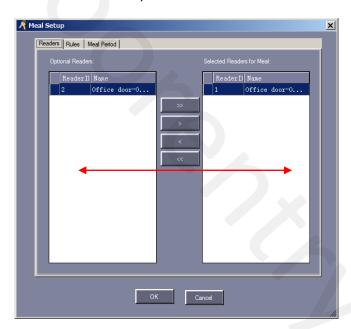
Readers

Choose the door/s on the left and then using the >> arrow button/s, move them to the right. When complete, click **OK**. Readers chosen will of course be chargeable when accessed

Rules

There are three options

- 1) One swipe counts as one meal (Or entry)
- 2) More swipes within the same **Meal Period** as ONLY one meal (Or entry)
- 3) More swipes as one meal if the interval between them is less than the allocated time (With the Meal Period Default is 60 seconds)





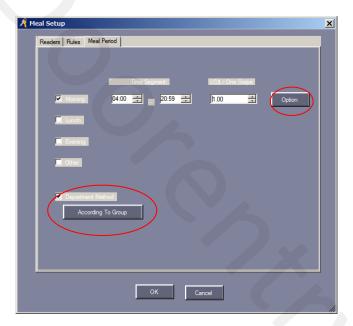
Meal Period

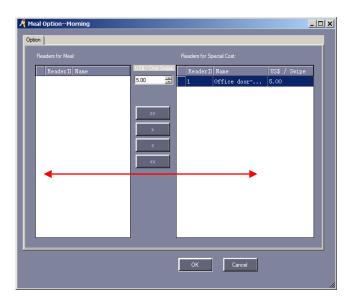
There are four timed options available for morning, lunch, evening and other. This is where you choose the amount to charge for entry and/or exit

Option

Choosing this option allows you to make an overridden cost for the selected door reader for either one or all of the four timed options available

Choose the door/s on the left and then using the >> arrow button/s, move them to the right. When complete, click \mathbf{OK}

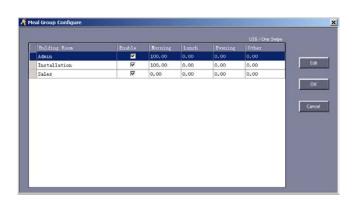


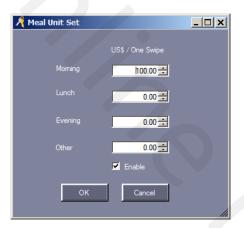


Department Method (According To Group)

Using the According To Group option allows you to make a single cost charge per department. Double click on the *'Enable'* button to display an additional box allowing you to enter the desired amount to charge or disable the department

When complete, click **OK**





Meal Reports

Click **Create** to generate a report – up to date reports will require you to **Upload** the latest transactions in the first instance. Click **Operation/Console/Upload**

The meal report can be filtered by user or department for all or selected dates and can be printed directly to your printer or exported to Excel

Examples: (1-3)

This example shows Mick entering twice (The default time for this particular example was 5 seconds) which has incurred £2



2) This example shows Mick entering twice (We have used the **Option** box to make an overridden cost for the selected door reader) which has incurred £10



3) This example shows Mick entering twice (We have the option of **Department Method** (According To Group) to make an overridden cost for the selected door reader) which has incurred £200

