Knowledge Base Article

Scheduling Doors to Automatically Unlock

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Document Version

(KBA0180AutoUnlock.Doc)

Date of Revision	Revision	Author	Description
11/15/2009	**1.0**	**Shirl Jones**	**Initial Release**

1: INTRODUCTION

A commonly used feature of the ISONAS Access Control System (ACS) is to have the system automatically unlock selected doors based on a pre-programmed time schedule.

The control of these unlock operations is done thru the use of special "Permissions", and the ISONAS system supports two different modes of unlock operations:

1. An "Unlock Permission" will unlock the door (or door-group) at the beginning of the associated time-period (shift), and relock the door(s) at the end of the shift.

2. An "Unlock Badge Permission" will unlock the door when:
   a. The shift has started AND
   b. A specially-authorized person enters thru the door.

   The door will relock at the end of the shift.

This document describes examples how to configure the system to implement these features.

2: EXAMPLES

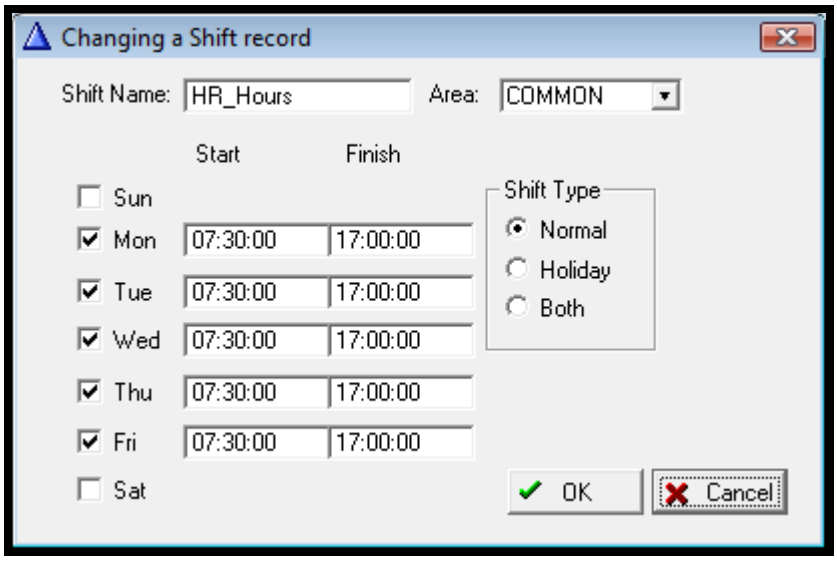
2.1: AUTOMATIC UNLOCK EXAMPLE:

2.1.1: PROBLEM DESCRIPTION

The end user's facility has a set of interior doors which access the human-resources department. As part of their "open door" policy, these doors are to be unlocked from 07:30 AM to 17:00 PM on normal work days.

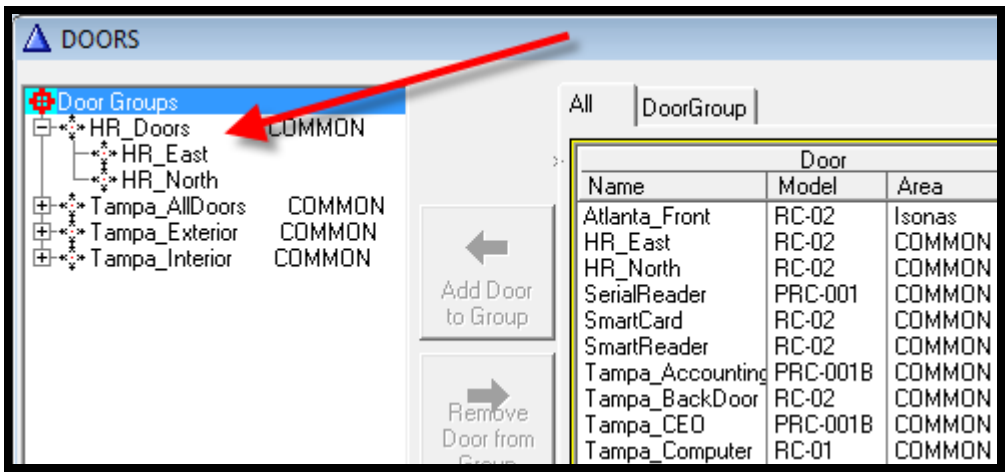
2.1.2: SHIFT (When)

The "HR_Hours" shift is created that defines the time-frames when these doors will be unlocked.



2.1.3: DOOR-GROUP (Where)

The HR department has two doors that are controlled by this rule. A door group is defined, and those doors are assigned to it.

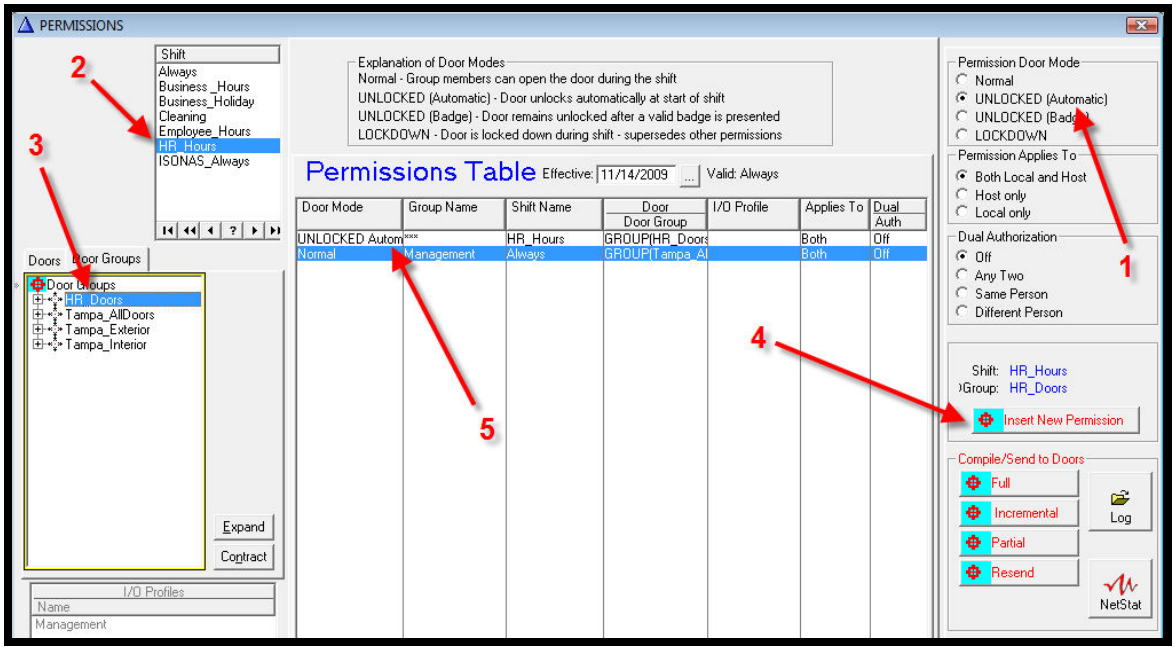


2.1.4: PERMISSION (Business Rule)

A Permission is created that defines the unlock rules for the HR Doors.

1. The Permission's Mode is "Unlock -- Automatic"
2. The Shift HR_Hours is selected
3. The Door_Group HR_Doors is used
4. A Permission is created with the selected values
5. The created Permission appears in the Permissions Table

A full or incremental compile is initiated, which activates the newly defined Permission.



2.2: AUTOMATIC UNLOCK BADGE EXAMPLE:

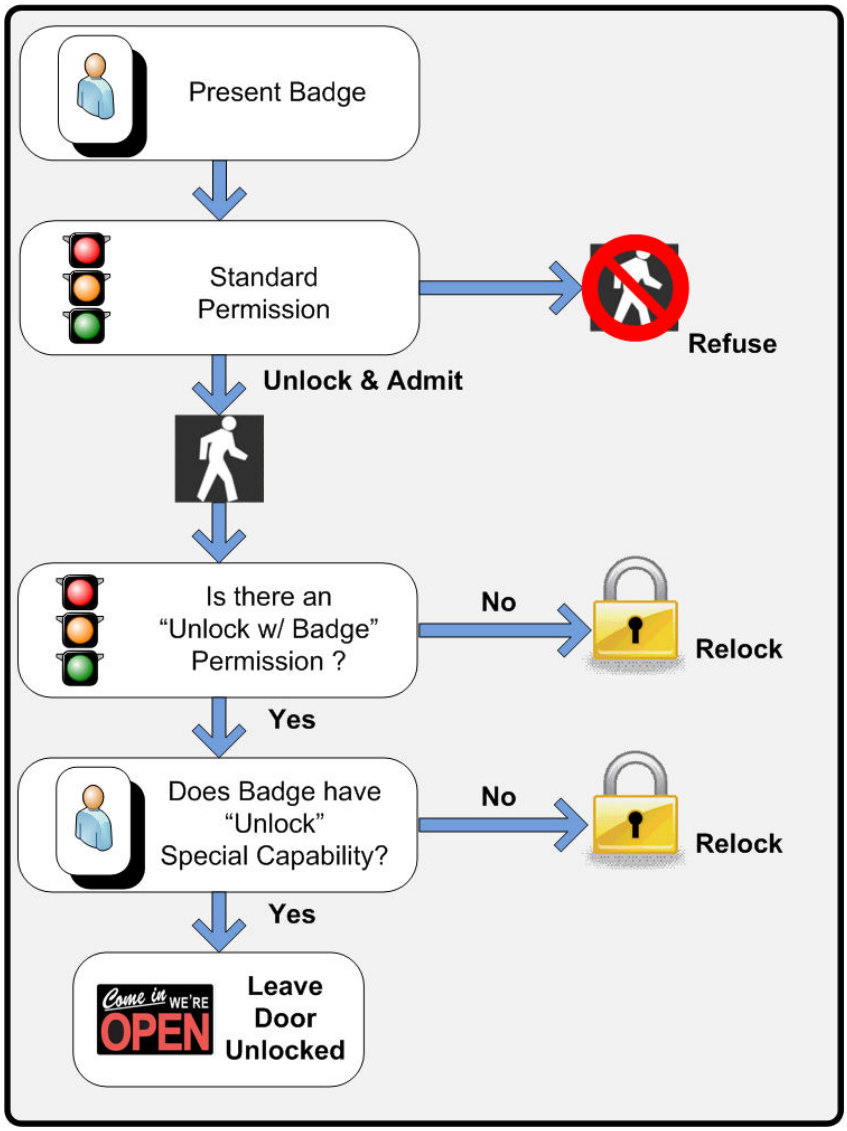
2.2.1: PROBLEM DESCRIPTION

The end-user's facility has an on-site factory outlet store. The store's front door should be unlocked during normal business hours, but should only be unlocked if one of the store's employees has arrived for work.

2.2.2: UNLOCK BADGE CONCEPT

Before configuring the system to implement this rule, it is helpful to understanding how the system works when an employee enters the store.

Below is a diagram of the steps involved.



a) The Employee presents their badge to the door's PowerNet.

b) The system checks for a permission that allows: This person entry, through this door, at this time.

c) Once the employee is admitted, then the system checks for a 2nd permission that would cause the door to stay unlocked. This is the "Unlock w/badge" permission.

d) If an "Unlock w/badge" permission exists, for this door & at this time, then the system checks to see if this employee is expected to unlock the door for the store.

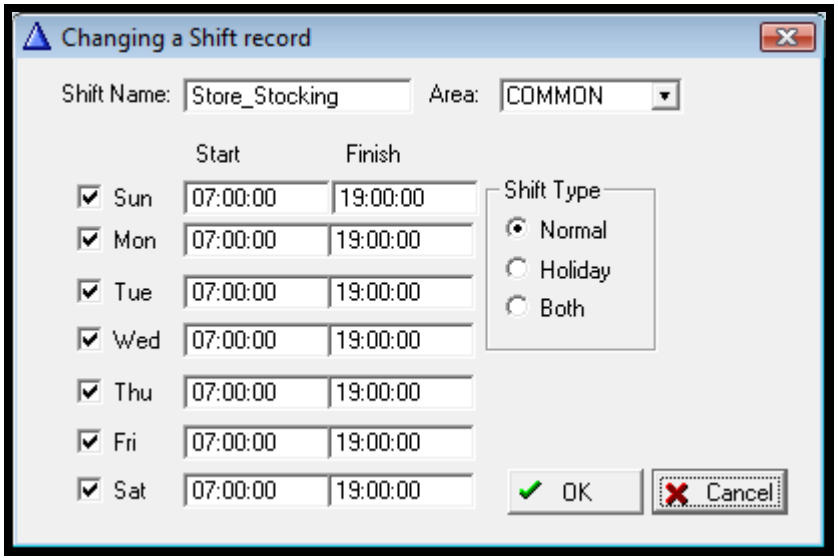
    a. If a maintenance worker enters the door, to repair a broken window, then the store is not opening for the public. The door should relock behind them.

    b. If the store manager is entering the store, then they are opening the store for the day. The door should stay unlocked.

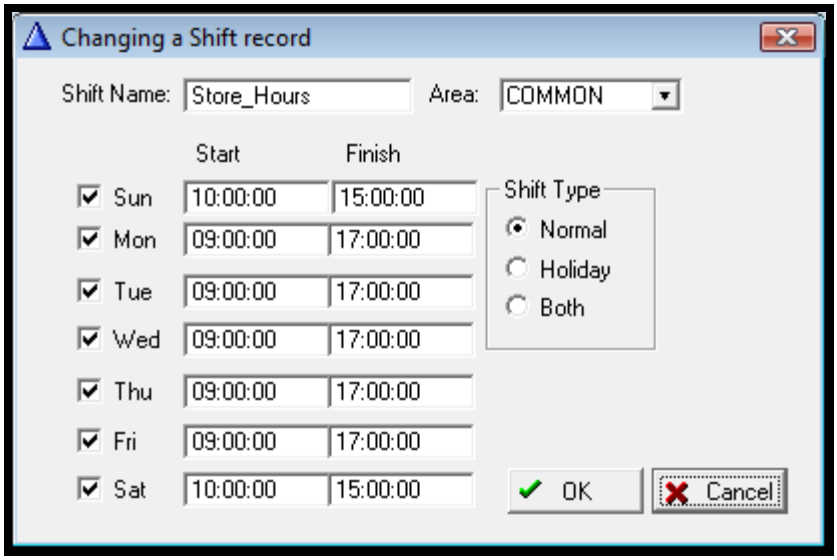
2.2.3: SHIFTS (When)

For controlling the store's front door, two shifts are defined.

The 1st shift is used to control when the Store's staff is allowed access to the store (07:00 to 19:00).



The 2nd shift defines the hours when the front door is scheduled to be unlocked (09:00 to 17:00 weekdays; 10:00 to 15:00 on weekends).



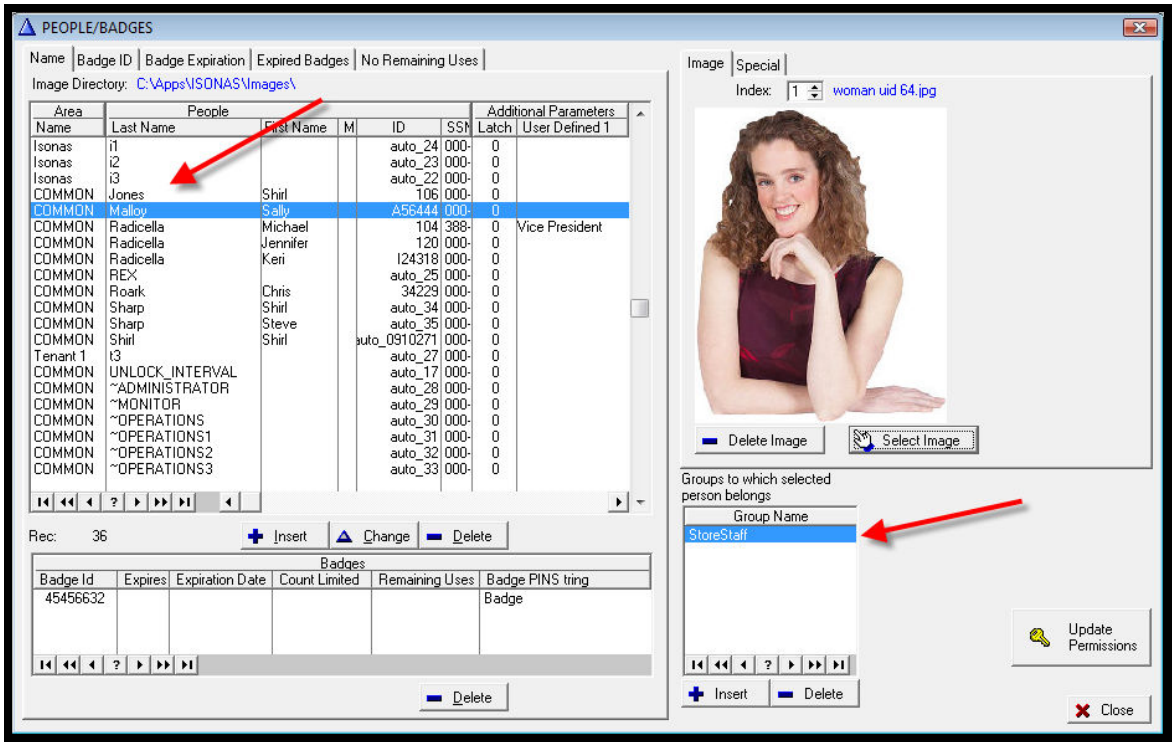
2.2.4: DOOR (Where)

The Store's front door is defined within the software, and named "OutletStoreFront".

2.2.5: PEOPLE GROUP (Who)

A People-Group "StoreStaff" is created, and the appropriate people are assigned to that People-Group.

Sally Malloy in one of the store managers, and her record is shown below.

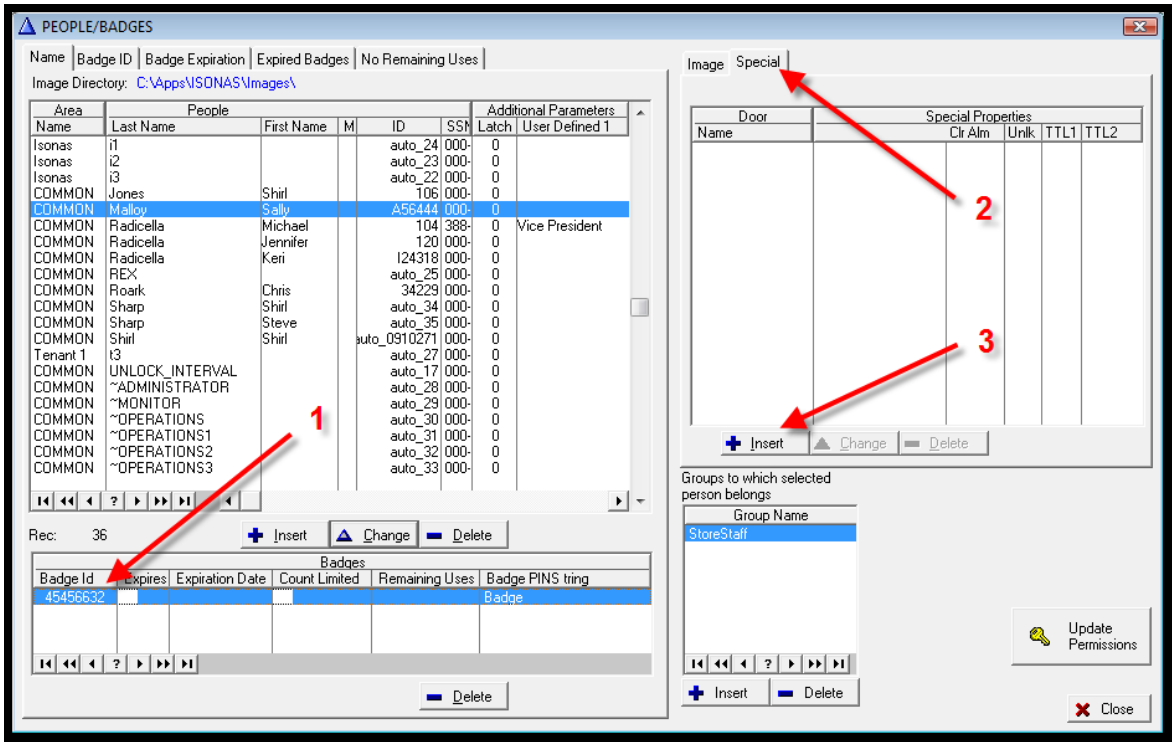


2.2.6: BADGE SPECIAL CAPABILITY (Who)

To authorize Sally's badge to leave the front door unlocked, a "special capability" is added to the badge. This is done on a "badge by badge" basis. She might have multiple badges, and may only want selected badges to unlock the store's door.

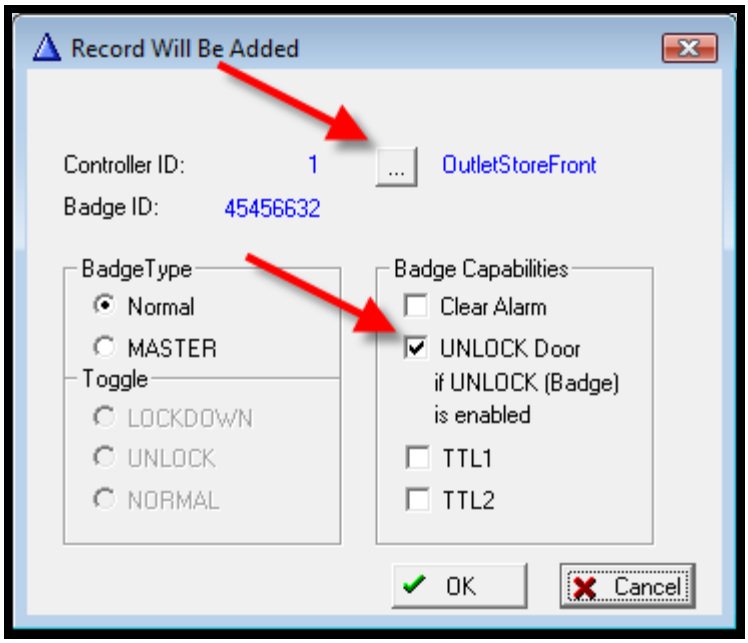
To add this special capability:

1) Select her badge
2) Select the "special" tab
3) Click on the Insert button



Select the door that this special capability will apply to.

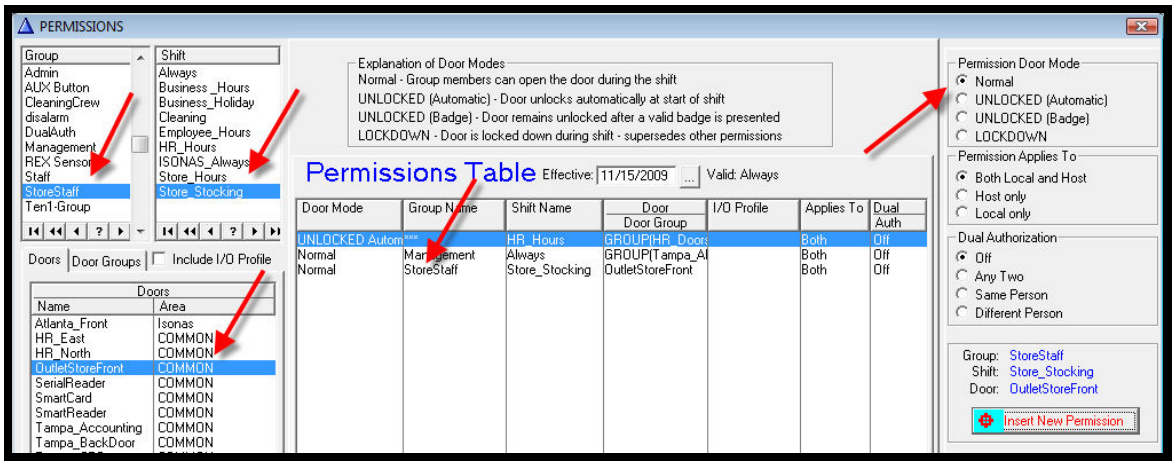
Select the "UNLOCK Door" capability



Click on "OK" to save this configuration.

2.2.7: STANDARD PERMISSION (Business Rule)

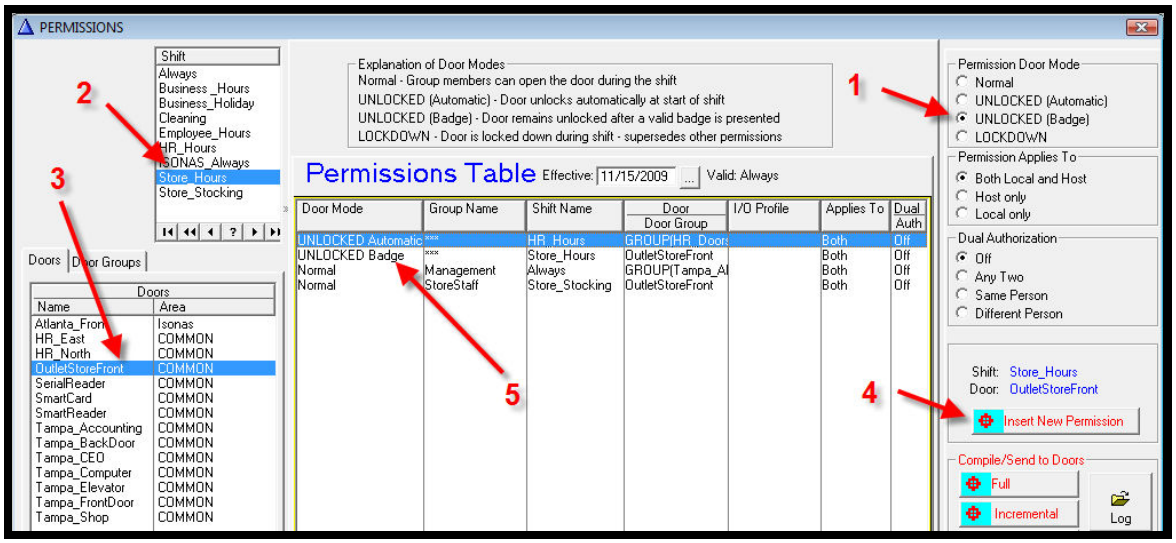
A Permission is created that allows the Store Staff to enter during the Store Stocking Hours



2.2.8: UNLOCK W/ BADGE PERMISSION (Business Rule)

A Permission is created that defines the unlock rules for the Outlet store's front doors.

1. The Permission's Mode is "Unlock -- Badge"
2. The Shift "Store_Hours" is selected
3. The Door "OutletStoreFront" is used
4. A Permission is created with the selected values
5. The created Permission appears in the Permissions Table



A full or incremental compile is initiated, which activates the newly defined Permission.

With this Permission, the system is fully configured to allow the proper people through the Outlet Store's door, and when Sally enters, the door will stay unlocked for the rest of the day.

2.3: MANUAL OVERRIDE TO RELOCK THE DOORS:

If it is required to relock these doors in the middle of the day, this can be done from the Crystal Monitor or Crystal EasyWeb applications.

When overriding the scheduled period of the unlock shift, the type of override is specified as temporary or permanent. A temporary override will allow the next scheduled door-state change to occur. A permanent override will prevent any future scheduled door-state changes to occur. The user can reset the permanent override from the Crystal Monitor application.

For doors being controlled with Automatic-Unlock Permissions, please note that if the system is compiled, or the supporting CSUP is stopped and restarted, the doors will return to their Unlock condition.

For a door being controlled by an Unlock w/badge permission, if an authorized badge is presented to the door, the door will again enter the Unlocked state.

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