

Case Study

Company ABC has 10 employees. Everyday, 4 employees work on morning shift and 4 employees work on afternoon shift. Another 2 employees are guards and their working hours are different from other employees.

The following are the working hours of Company ABC:

a) morning shift

WORK IN	MEAL OUT	MEAL IN	WORK OUT	OT IN	OT OUT
08:30	13:00	14:00	17:30	18:00	23:00

b) afternoon shift

WORK IN	MEAL OUT	MEAL IN	WORK OUT	OT IN	OT OUT
13:00	18:00	19:00	23:00	23:30	03:00

c) half day shift (Saturday)

WORK IN	MEAL OUT	MEAL IN	WORK OUT	OT IN	OT OUT
08:30	-	-	13:00	13:30	17:30

Employees are divided into two groups. Each group is required to work on Saturday alternately.

The following are the working hours of Guards:

a) Guard morning shift

WORK IN	MEAL OUT	MEAL IN	WORK OUT	OT IN	OT OUT
08:00	13:00	14:00	20:00	20:30	23:00

b) Guard night shift

WORK IN	MEAL OUT	MEAL IN	WORK OUT	OT IN	OT OUT
20:00	02:00	03:00	08:00	08:30	11:00

Duty roster on July 2009:

July 2009 Duty Roster

July	Wed 1	Thurs 2	Fri 3	Sat 4	Sun 5	Mon 6	Tue 7	Wed 8	Thurs 9	Fri 10	Sat 11	Sun 12
Kelly	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF
Alice	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF
Royce	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF
Mandy	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF
Jessy	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF
Kenneth	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF
Kelvin	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF
John	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF
Ken	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night
Jack	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning

Kelly, Alice, Royce and John have the same working shift pattern:

- 1st week of July: morning shift, Saturday: half day shift
- 2nd week of July: afternoon shift, Saturday: OFF
- 3rd week of July: morning shift, Saturday: half day shift
- 4th week of July: afternoon shift, Saturday: OFF
- 5th week of July: morning shift, Saturday: half day shift

Mandy, Jessy, Kenneth and Kelvin have the same working shift pattern:

- 1st week of July: afternoon shift, Saturday: OFF
- 2nd week of July: morning shift, Saturday: half day shift
- 3rd week of July: afternoon shift, Saturday: OFF
- 4th week of July: morning shift, Saturday: half day shift
- 5th week of July: afternoon shift, Saturday: OFF

Thus, Kelly, Alice, Royce and John could be grouped together as 'G0' and Mandy, Jessy, Kenneth and Kelvin could be grouped together as 'G1' to simplify the process of assigning duty roster.

Ken and Jack have a working shift pattern which is totally different from others.

Thus, Ken and Jack could have their individual duty roster by assigning them to group 'NONE'.

The following is the simplified duty roster:

July 2009 Duty Roster

	Wed	Thurs	Fri	Sat	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
July	1	2	3	4	5	6	7	8	9	10	11	12
G0	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF
G1	Afternoon Shift	Afternoon Shift	Afternoon Shift	OFF	OFF	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Morning Shift	Half Day Shift	OFF
Ken	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night
Jack	Guard Night	Guard Night	Guard Night	Guard Night	Guard Night	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning	Guard Morning

Step by Step Guideline

Now let's us try to configure the working schedule of Company ABC.

Step 1: Clock Terminal Setup

1. Click on Clock Terminal > Clock Terminal Setup
2. The following screen will be displayed:

Please add all of the clock terminals which had been installed.

	Clock ID	Description	Unit No	Clock Type	Disabled
1	CLOCK1	CLOCK1	01	ET630	NO
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Link to Terminal Server

Baud rate: 9600

COM Port: COM1

Save Delete

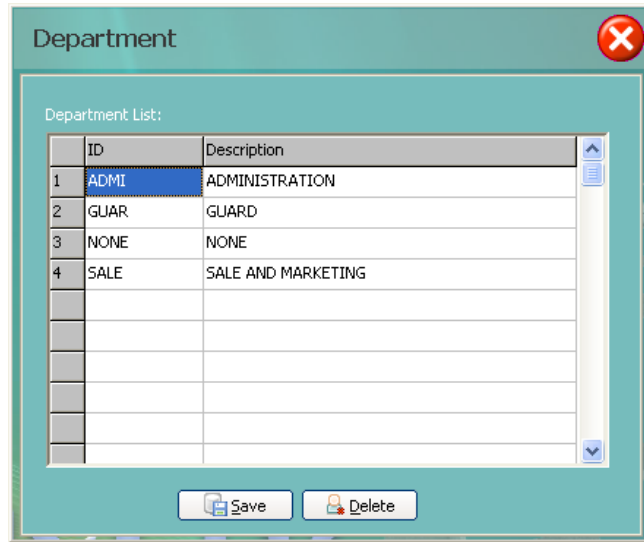
3. Key in Clock ID, Clock Description, Unit No and clock type
4. There are two communication methods:
 - a) Serial Communication
If you are using serial communication, make sure the "Link to Terminal Server" check box is not ticked.
Select the baud rate and COM port according to your clock terminal setting
 - b) TCP/IP Communication
If you are using TCP/IP communication, please make sure the "Link to Terminal Server" check box is ticked.
Key in the IP address and Port number.

5. Click on "Save" button

Step 2: Add Department

Company ABC has 3 departments which are Administration, Guard and Sales And Marketing.

1. Go to Settings > Department
2. Key in the department ID, Department description and click on "Save"



Step 3: Add employee

Company ABC has 10 employees: 2 employees from Administration Department, 6 employees from Sales and Marketing department and 2 employees from Guard Department.

1. Go to Employee
2. Key in the employee details (Emp. ID, Name, Card No, Department, Group and Joined date) as the following screen: (NOTE: If you leave the section column and Resigned date blank, the system will automatically assign section as "NONE" and resigned date as "31/12/2089")

Employee

Employee Details

You may sort the employee view by clicking on the column name.
To Add/Edit department or Add/Edit Section, please right click on the "Department" column name or "Section" column name.

	Emp. ID	Name	Card No	Department	Section	Group	Joined Date	Resigned Dat
1	000001	Kelly	000001	SALE AND MARKETING	NONE	G0	10/07/2009	31/12/2089
2	000002	Alice	000002	ADMINISTRATION	NONE	G0	10/07/2009	31/12/2089
3	000003	Royce	000003	SALE AND MARKETING	NONE	G0	10/07/2009	31/12/2089
4	000004	Mandy	000004	SALE AND MARKETING	NONE	G1	10/07/2009	31/12/2089
5	000005	Jessy	000005	ADMINISTRATION	NONE	G1	10/07/2009	31/12/2089
6	000006	Kenneth	000006	SALE AND MARKETING	NONE	G1	10/07/2009	31/12/2089
7	000007	Kelvin	000007	SALE AND MARKETING	NONE	G1	10/07/2009	31/12/2089
8	000008	John	000008	SALE AND MARKETING	NONE	G0	10/07/2009	31/12/2089
9	000009	Ken	000009	GUARD	NONE	NONE	10/07/2009	31/12/2089
10	000010	Jack	000010	GUARD	NONE	NONE	10/07/2009	31/12/2089
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								

Flexible Working Hour

PHOTO

Add Photo

Delete Photo

Filter By:

Employee ID: To

Department: ALL To ALL

Refresh

Save Delete Add Group Add Badge Card

As the screen shown, employees are divided into two groups which are 'G0' and 'G1'. Guards are grouped to 'NONE' because their working hours are totally different from other employees.

Step 4: Configure working schedule

Company ABC has a total of 6 working shifts which are morning shift (a), afternoon shift (b), Saturday half day shift (c), guard morning shift (d) and guard night shift (e).

- Go to Settings > Working Schedule
- Select "Yes" for employees are required to punch in and out for OT: This is a global settings which will be applied to all schedules.
If "Yes is selected, employees are required to badge their cards for work in, work out, OT in and OT out.
If "No" is selected, overtime calculation will be started from the OT start time.
Employees are only required to badge their cards for work in and OT Out only. Work out time and OT in time will take the WORK OUT Time and OT Start time which have been set in the working schedule.
- Select "No" for flexible meal hour: This is also a global settings.

Flexible meal hour means employees are allowed to go for lunch any time. By default the meal time will start at one hour after WORK IN time and end at one hour before WORK OUT Time. The one hour offset is configurable under "Advance" button.

4. Define morning shift – schedule 'a'

Steps:

- i. Select Schedule ID 'a'
- ii. Key in the Description as Morning shift
- iii. Key in the In time , Meal out time, Meal In time, Out time, OT Start time, and OT End time as shown on the above screen under Clocking Time
- iv. Key in the Clocking range for each time slot
Work in time range has been set from previous day 23:01 until 12:29. This means that employees are required to badge for work in start from 23:01 and end at 12:29. Whoever badges the card after 12:29 would not have work in time in their attendance.
- v. Tick Sunday as Off day

- vi. Set Allowed Late-in minutes as '15' minutes
Employee who came late for 15 minutes or less would not be considered as late in.
 - vii. Set Allowed Early-out minutes as '15' minutes
Employee who left early for 15 minutes or less would not be considered as early out.
 - viii. Set OT Minimum as '15' minutes
Employee must work OT at least 15 minutes in order to have the overtime calculation.
 - ix. Set OT Rounding as '0' minutes
Total Overtime will be the exact total minutes of overtime. If OT Rounding is set to '30' minutes, the total overtime will be rounded down to the nearest value. If employee work OT for 65 minutes, total overtime will be rounded down to '60' minutes.
 - x. Select 'No' for Deduct meal hour
If 'No' is selected, total meal time will be included in the total working hour. If 'Yes' is selected, total meal time will be deducted out from the total working hours.
 - xi. Set Calculation Formula as Default
Default working hour:
 - a) if select 'Yes' for deduct meal hour:
Total Working hour = WORK OUT – WORK IN – (MEAL IN – MEAL OUT)
Total OT = OT OUT – OT IN
 - b) if select 'No' for deduct meal hour:
Total working hour = WORK OUT – WORK IN
Total OT = OT OUT – OT IN
5. Define afternoon shift – schedule 'b'

Working Schedule X

Common Settings for all schedule <<Advance

Employees are required to punch in and out for OVERTIME(OT): Yes No

Flexible Meal Hour: Yes No

Settings for particular schedule

Schedule ID: + - Description:

Clocking Time

Please fill in the actual working hour:

In	Meal Out	Meal In	Out	OT Start	OT End
<input type="text" value="13:00"/>	<input type="text" value="18:00"/>	<input type="text" value="19:00"/>	<input type="text" value="23:00"/>	<input type="text" value="23:30"/>	<input type="text" value="03:00"/>

	From	To		
In Time	<input type="text" value="03:01"/>	<input type="text" value="17:29"/>	Rest Day <input type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday	Off day <input checked="" type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input style="background-color: #0056b3; color: white;" type="checkbox"/> Saturday
Meal Out Time	<input type="text" value="17:30"/>	<input type="text" value="19:30"/>		
Meal In Time	<input type="text" value="17:30"/>	<input type="text" value="19:30"/>		
Out Time	<input type="text" value="19:31"/>	<input type="text" value="23:29"/>		
OT Time	<input type="text" value="23:30"/>	<input type="text" value="03:00"/>		

Additional

Allowed Late-in minutes: minutes

Allowed Early-out minutes: minutes

OT Minimum: minutes

OT Rounding: minutes

Calculation Formula: Define

Deduct Meal Hour? Yes No

6. Define half day shift (Saturday) – schedule 'c'

Working Schedule ✖

Common Settings for all schedule
<<Advance

Employees are required to punch in and out for OVERTIME(OT): Yes No

Flexible Meal Hour: Yes No

Settings for particular schedule

Schedule ID: + Description:

Clocking Time

Please fill in the actual working hour:

In	Meal Out	Meal In	Out	OT Start	OT End
<input type="text" value="08:00"/>	<input type="text" value="13:00"/>	<input type="text" value="14:00"/>	<input type="text" value="20:00"/>	<input type="text" value="20:30"/>	<input type="text" value="23:00"/>

Clocking Range

	From	To
In Time	<input type="text" value="23:01"/>	<input type="text" value="12:29"/>
Meal Out Time	<input type="text" value="12:30"/>	<input type="text" value="14:30"/>
Meal In Time	<input type="text" value="12:30"/>	<input type="text" value="14:30"/>
Out Time	<input type="text" value="14:31"/>	<input type="text" value="20:29"/>
OT Time	<input type="text" value="20:30"/>	<input type="text" value="23:00"/>

Rest Day

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday

Off day

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday

Additional

Allowed Late-in minutes	<input type="text" value="15"/>	minutes	OT Minimum	<input type="text" value="15"/>	minutes
Allowed Early-out minutes	<input type="text" value="15"/>	minutes	OT Rounding	<input type="text" value="0"/>	minutes

Calculation Formula: Define

Deduct Meal Hour? Yes No

8. Define guard night shift – schedule 'e'

Working Schedule ✖

Common Settings for all schedule <<Advance

Employees are required to punch in and out for OVERTIME(OT): Yes No

Flexible Meal Hour: Yes No

Settings for particular schedule

Schedule ID: Description:

Clocking Time

Please fill in the actual working hour:

In	Meal Out	Meal In	Out	OT Start	OT End
<input type="text" value="20:00"/>	<input type="text" value="02:00"/>	<input type="text" value="03:00"/>	<input type="text" value="08:00"/>	<input type="text" value="08:30"/>	<input type="text" value="11:00"/>

Clocking Range		Rest Day	Off day
	From	To	
In Time	<input type="text" value="11:01"/>	<input type="text" value="01:29"/>	<input type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday
Meal Out Time	<input type="text" value="01:30"/>	<input type="text" value="03:30"/>	
Meal In Time	<input type="text" value="01:30"/>	<input type="text" value="03:30"/>	
Out Time	<input type="text" value="03:31"/>	<input type="text" value="08:29"/>	
OT Time	<input type="text" value="08:30"/>	<input type="text" value="11:00"/>	
			<input type="checkbox"/> Sunday <input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday <input type="checkbox"/> Saturday

Additional

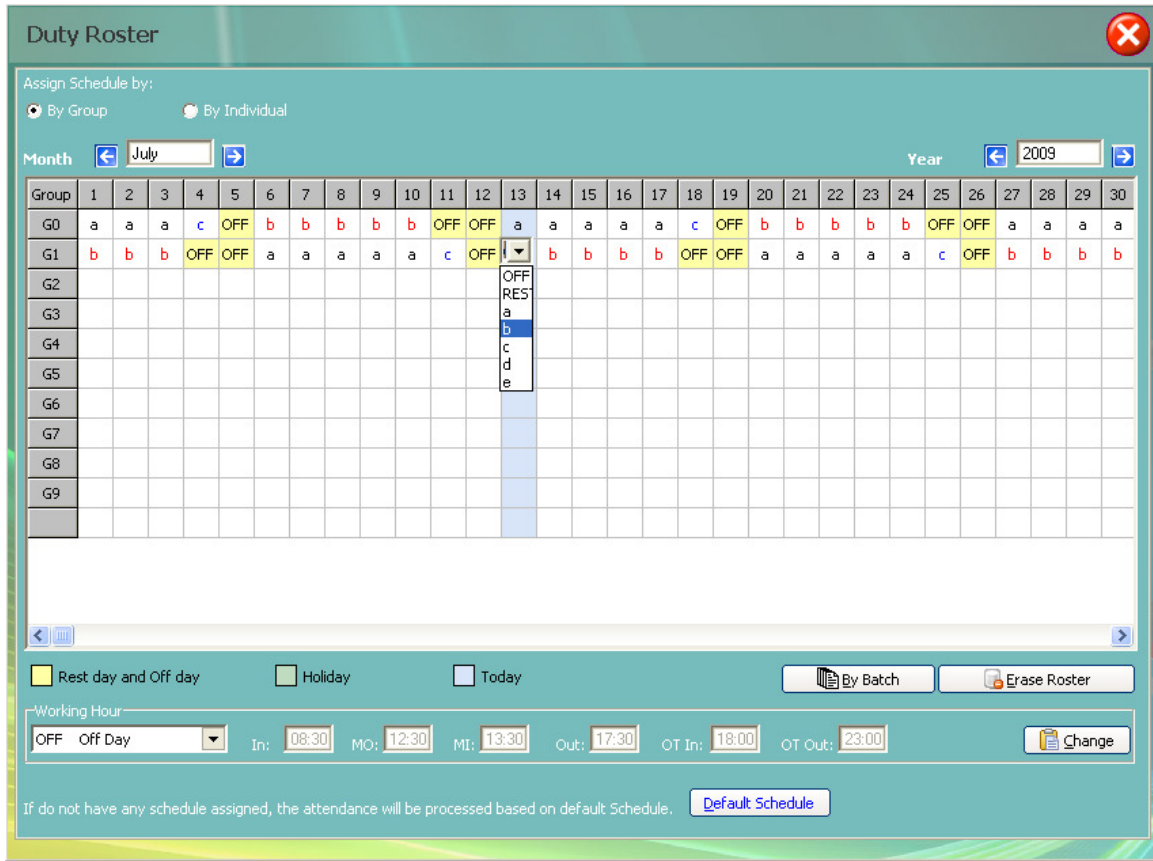
Allowed Late-in minutes	<input type="text" value="15"/> minutes	OT Minimum	<input type="text" value="15"/> minutes
Allowed Early-out minutes	<input type="text" value="15"/> minutes	OT Rounding	<input type="text" value="0"/> minutes

Calculation Formula:

Deduct Meal Hour? Yes No

Step 5: Assign Duty Roster

1. Select "By Group" in order to assign schedules to Group G0 and G1.



There are 2 methods to assign schedules to the groups:

i) Assign schedule to groups day by day

Steps:

- i. select one of the column
- ii. a drop down list will appear
- iii. select one of the schedule from the drop down list

ii) Assign weekly schedule to groups by batch

Steps:

- i. Click on "By Batch" button
- ii. The following screen will be displayed:

Weekday	Schedule
Sunday	OFF
Monday	a
Tuesday	a
Wednesday	a
Thursday	a
Friday	a
Saturday	c

- iii. Select the group, eg: G0
- iv. Select the date range, eg: from 01/07/2009 to 05/07/2009
- v. Assign the weekly schedules, eg: Sunday = OFF, Monday to Friday = schedule 'a', Saturday = schedule 'c'

Please assign the duty roster according to the following details:

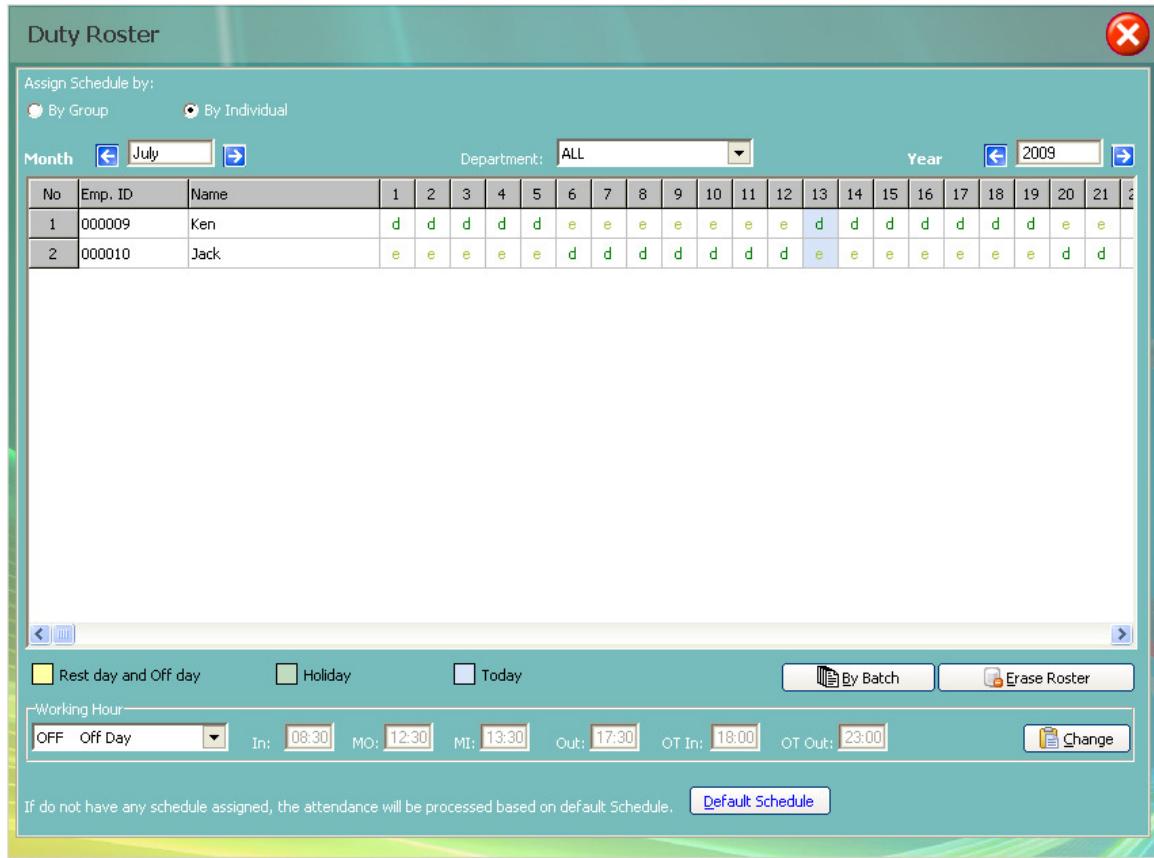
G0

- 1st week of July: morning shift, Saturday: half day shift
- 2nd week of July: afternoon shift, Saturday: OFF
- 3rd week of July: morning shift, Saturday: half day shift
- 4th week of July: afternoon shift, Saturday: OFF
- 5th week of July: morning shift, Saturday: half day shift

G1

- 1st week of July: afternoon shift, Saturday: OFF
- 2nd week of July: morning shift, Saturday: half day shift
- 3rd week of July: afternoon shift, Saturday: OFF
- 4th week of July: morning shift, Saturday: half day shift
- 5th week of July: afternoon shift, Saturday: OFF

- 2. Select "By Individual" in order to assign schedules to Ken and Jack.



There are 2 methods to assign schedules to employees individually:

i) Assign schedule to employees individually day by day

Steps:

- i. select one of the column
- ii. a drop down list will appear
- iii. select one of the schedule from the drop down list

ii) Assign weekly schedule to employees individually by batch

Steps:

- i. Click on "By Batch" button
- ii. The following screen will be displayed:

Weekday	Schedule
Sunday	d
Monday	d
Tuesday	d
Wednesday	d
Thursday	d
Friday	d
Saturday	d

- iii. Select Emp. ID, eg: 000009 (Ken)
- iv. Select the date range, eg: from 01/07/2009 to 05/07/2009
- v. Assign the weekly schedules, eg: Sunday to Saturday= schedule 'd'

Please assign the duty roster according to the following details:
000009 Ken

- 1st week of July: Guard morning shift
- 2nd week of July: Guard night shift
- 3rd week of July: Guard morning shift
- 4th week of July: Guard night shift
- 5th week of July: Guard morning shift

000010 Jack

- 1st week of July: Guard night shift
- 2nd week of July: Guard morning shift
- 3rd week of July: Guard night shift
- 4th week of July: Guard morning shift
- 5th week of July: Guard night shift

Steps 6: Badge the card and view attendance

Now, the system is ready for processing attendance. Employees could badge their cards on clock terminals and the system will generate the attendance report.

Steps:

1. Download transaction from clock terminal
 - Go to Utility>Download transaction
 - Select download latest
 - Click on "Download" button

2. View attendance
 - Click on "Attendance" at main menu
 - The attendance screen will display employees' attendance of current date
3. View and print report
 - Click on "Report" at main menu
 - Select one of the report, eg: Daily Attendance report
 - Select the date range
 - Click on "View"
 - Click on "Print" button to print the report