

# WHITE PAPER ON TIME & ATTENDANCE MODULE

Whitepaper on Time & Attendance Module of HR Works Application by DLI.

Ver. 1.5



#### **ABSTRACT**

This document provide an in-depth understanding on Time & Attendance Sub Module of HR Works by detailing out on the complete functionalities available in HR Works Application (both Desktop & Web Application) with respect to like Time and Attendance and many more.

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### 1.0 Executive Summary

This document provides an in-depth understanding of functionalities from Time & Attendance Module of HR Works.

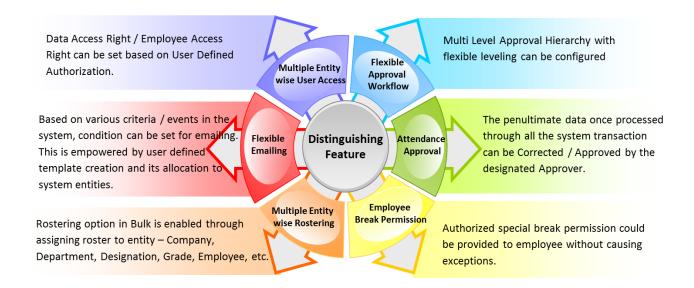
DLI is operating throughout in Middle East with its Head Quarter located in Dubai. DLI is specialize into catering to various industries organization need of software with respect to Payroll and Human Resource related software ranging from Employee Self Service, Time and Attendance System, Performance Management System, Recruitment Management System and Training Management System.

HR Works as an application serve the purpose of small through large scale organization's Payroll and Human Resource Department need.

HR Works is an application developed on C# technology and are meant to serve the purpose of HR & Payroll Department's business process of the organization.

The data from Time & Attendance Sub Module of HR Works flows into Payroll sub module to calculate the payroll precisely. Time and Attendance Module has further been extended to Web domain to cover the enterprise as a whole and to provide all its employee with day to day T&A functionality on their desktop.

### 1.1 Distinguishing Features



# 2.0 Time & Attendance Module Overview

HR Works is an affordable and feature-rich human resource management solution designed to meet the needs of any kinds of organizations. It provides an easy to use, intuitive interface for HR departments, administrators and other users and comes with a set of features which includes Employee Management, Leave Management, Payroll and Accruals, Final Settlement, Salary Revision, Extensive coverage on Reporting, pluggable Time & Attendance module and many more as shown in the fig below:-

HR Works is designed to help you in streamlining your employee resources and improve the HR processes and activities in your organization, by facilitating fast, effective, and accurate HR Management.

### 2.1 Functional Coverage

All the functionalities that are available in the system could be categorized in the following order – Master Data, Transaction Processing and Reports. From a broad level user perspective this can be used by user in the fashion as depicted through Use Case Diagram as below:-

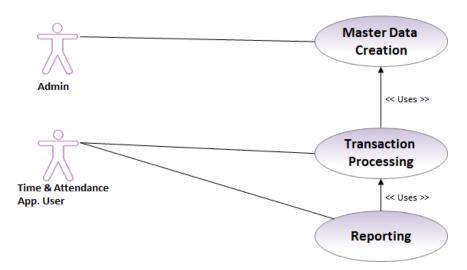


Fig: High Level - Use Case Diagram representing organization of functionalities in Time & Attendance Module

These high level use cases are further explored into its low level to various system use cases as depicted in the following use cases diagrams:-

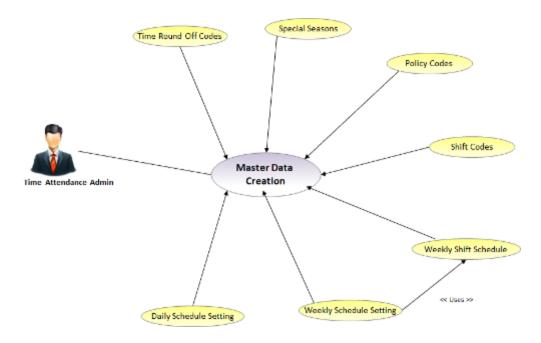
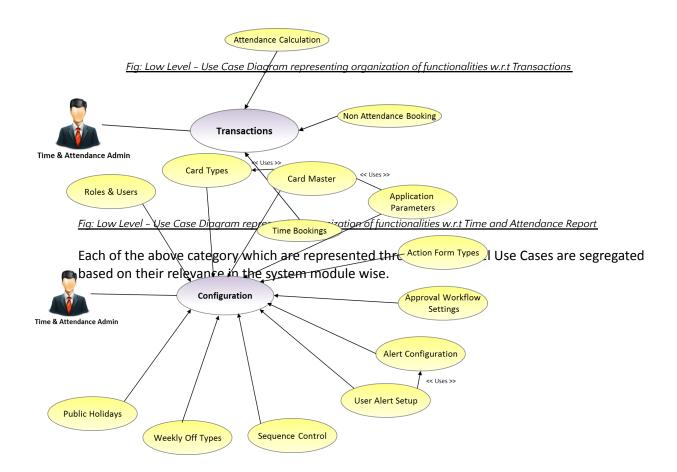
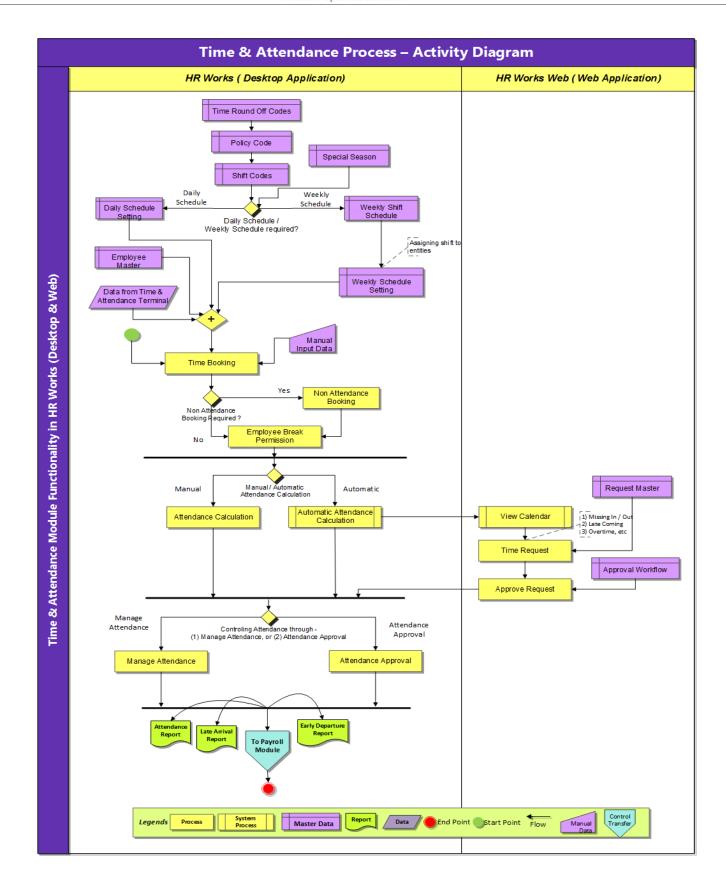


Fig: Low Level - Use Case Diagram representing organization of functionalities w.r.t Master Data Creation



# 2.2 System Process Flow

The High Level process flow with respect to Time & Attendance Module are represented through Activity Diagram as below :-



#### 2.3 Administration

1.

2.

2.1.

2.2.

2.3.

### 2.3.1. User Management

#### 2.3.1.1. Roles and Users

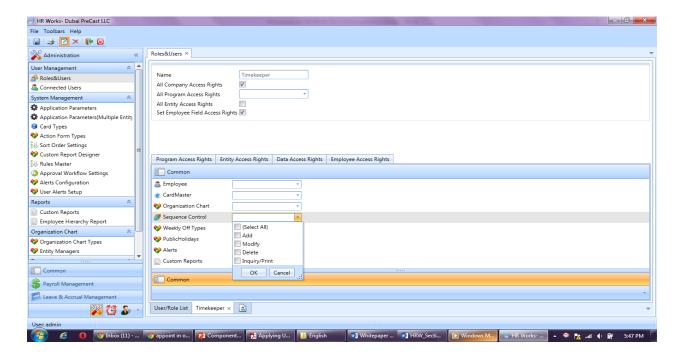
Roles and User master screen is to create new Roles & users in the system. Roles typically are the terms used to identify the user in the system and its role in the system. For example Leave Planner Approver, Leave Request Approver, HR Manager, Line Manager – Production.

User will have to create role that will ultimately be assigned to a user which will enable user to use the system based on menu authorization.

#### **Creating Role**

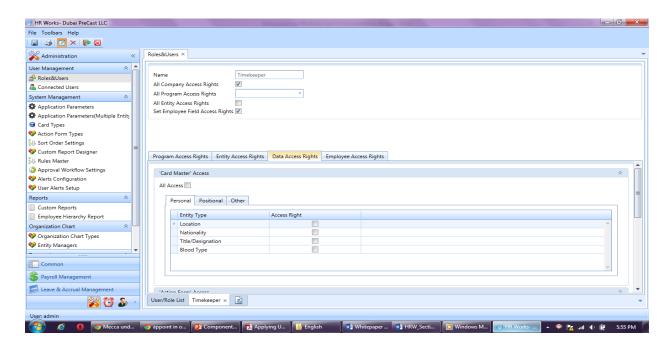
### Program Access Rights

You can define the access of this user to various component of employee master based on the option you select here i.e. – Add, Modify, Delete, Inquiry / Print. Based on this setting the assigned "Role" Holder can perform these action on the respective form available in "Common" Folder of the system.



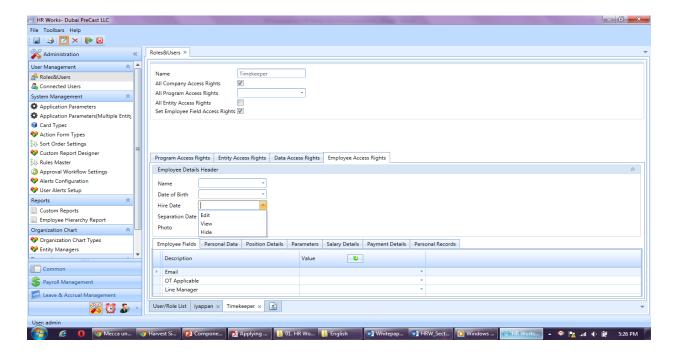
# TAB Data Access Rights

You can define the access of a user to various component which forms the foundation of system. For example, in the below mention screen the Role "Timekeeper" can be assigned with Location, Nationality, Title / Designation from personal tab from Card Master form.



# **TAB** Employee Access Rights

You can define the access of this user to various component of employee master based on the option you select here i.e. - Edit, View, Hide. Based on this setting the assigned "Role" Holder can Edit, View and Hide the field level details of Employee Master.

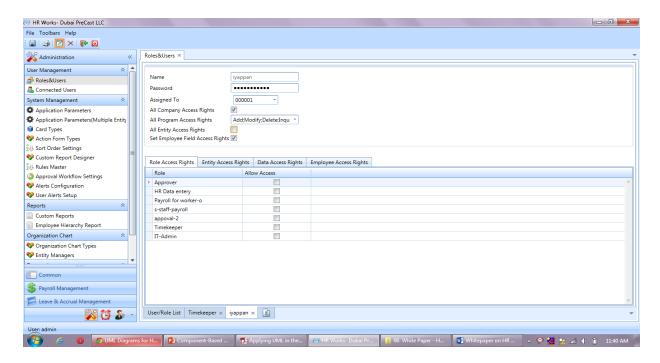


#### **Creating User**

Once the role is created in the system, user can be defined and this role can be assigned to him as shown below:-

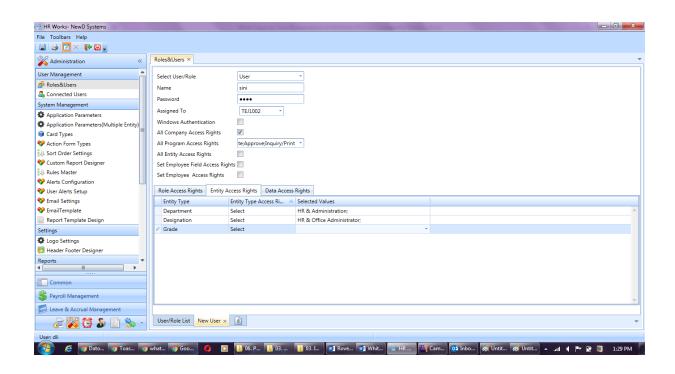
# Role Access Rights

Once the role is created in the system, user can be defined and this role can be assigned to him as shown below:-



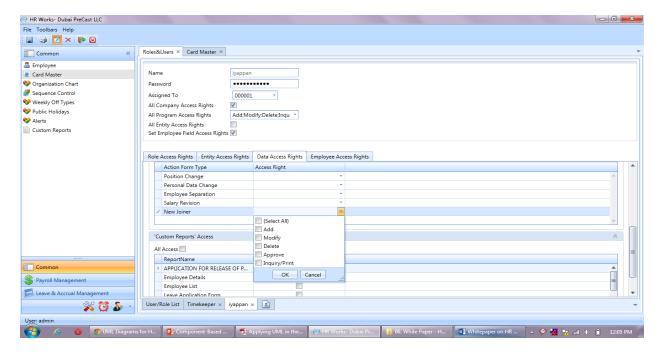
# **ITAB** Entity Access Rights

Entity access right tab enables the assignment (restriction) of entity from position entity tab to this user as shown below:-



# TAB Data Access Rights

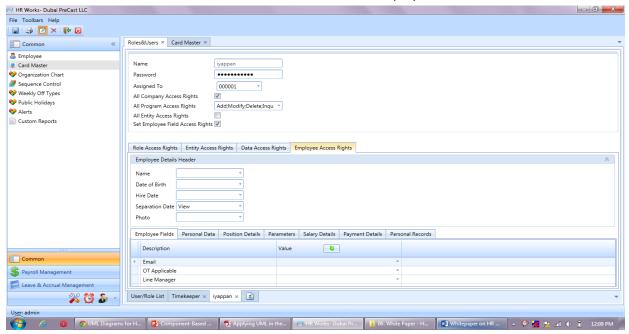
One can assign master level data access to the user in subject for the following level master – Card Master, Action Form and Custom Reports.



# **TAB** Employee Access Rights

Just like role, for user also, you can define the access of this user to various component of employee

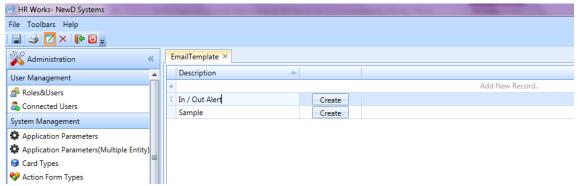
master based on the option you select here i.e. - Edit, View, Hide. Based on this setting the assigned "Role" Holder can Edit, View and Hide the field level details of Employee Master.



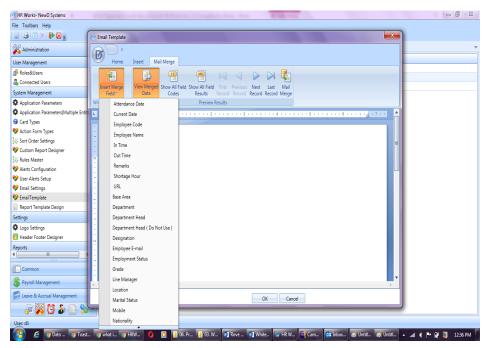
#### 2.3.1.2. Email Template

HR works provides a user friendly creation of email template for the purpose of email alert with respect to Time and Attendance transactions. This facility is provided through "Email Templates" as explained below:-

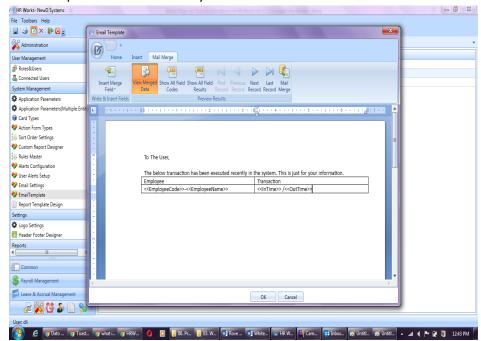
1. Email template instance can be created



2. User can use system field as an information in email. This can be configured through selecting Data field as shown.

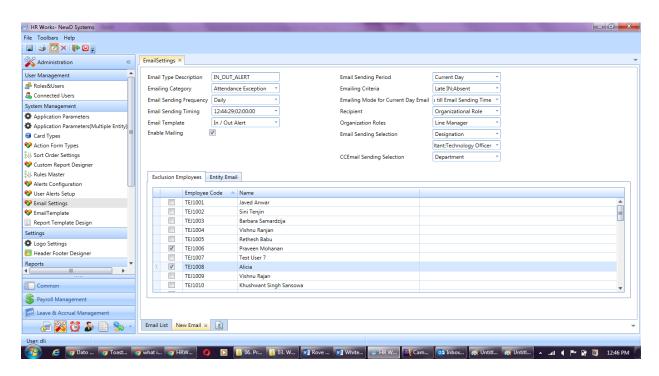


3. Email template will thus be ready :-



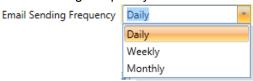
### 2.3.1.3. Email Settings

HR works provides a user exhaustive criteria for setting the emailing facility. These setting could be done through "Email settings" functionality in HR Works.



Following are the highlights of this functionality:-

• Email sending Frequency: It could be set as – Daily, Weekly or Monthly



 Email Sending Time: HR Works provides exception functionality of choosing multiple user defined timings for sending email alert to the user. Thus by alerting the user on multiple instances in case of skipping action taken.



 Emailing Criteria: Email can be sent on various scenarios based on event happening in the system. HR Works has facility of creatin infinite criteria as per user wish for considering a scenario for email alert.



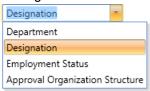
• Recipient : An email recipient could be selected as a specific Employee or certain entity based

on Organization Role.

Recipient Organizational Role Employee Organizational Role

HR Works provides the facility of selecting the entity such as – Designation, Department etc to be selected under as email sending list.

**Email Sending Selection** 



Thus by allowing the flexible, bulk and generic approach to set the conditio of emailings.

 Employee Exclusion: Having set the condition for emailing, none the less, HR Works provides exception to be considered. In this regard, certain employee or email could be skipped from emailing list.

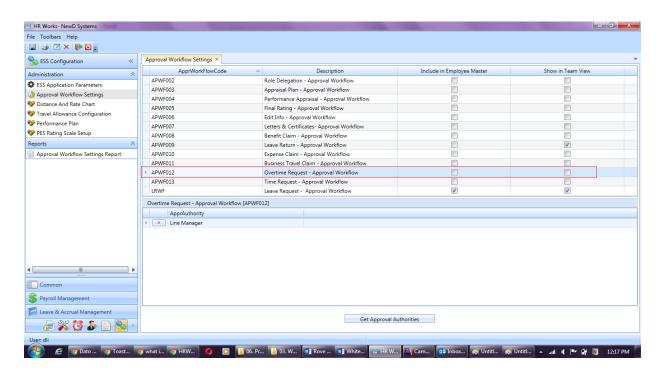


#### 2.3.1.4. Approval Workflow Settings

HR Works distinguishing feature of flexible approval workflow setting allows user to set desired approval hierarchy with Multiple Levels and multiple approver at these levels.

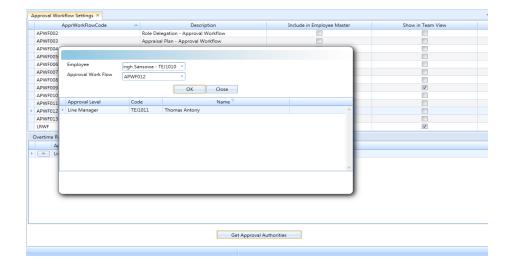
HR Works system allows the user to create approval workflow setting as per the desired hierarchy. The entity thus by set as an approver will receive alert on each request put up by the subordinate.

In the below example, approval workflow has been set and "Line Manager" as approver authority has been configured.



In real tme scenario, these line manager wil be identified for each employee and approval alert will be sent to the same.

User can also see the real time approver hierarchy with individuals at various level. These could be viewed through "Get Approval Authority" button – Get Approval Authorities



### 2.4 Time and Attendance Management

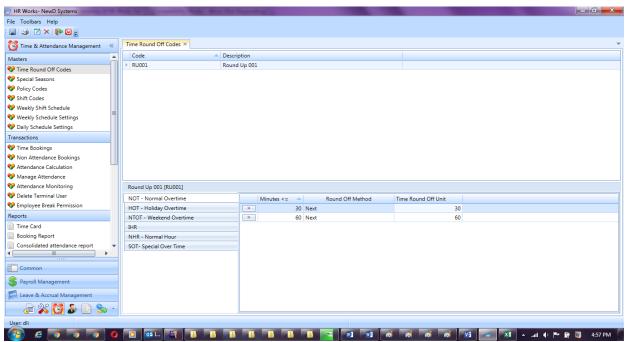
- 3.
- 4.
- 5.
- 5.1.
- 1.
- 2.
- 2.1.
- 2.2.
- 2.3.
- 2.4.

#### 2.4.1. Master Data

#### 2.4.1.1. Time Round Off Codes

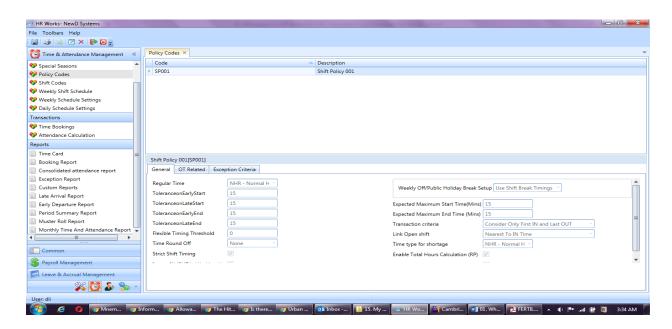
Time round off code can be defined in system and can be used to apply the rounding off of time in duty time calculation.

For example, if an employee has worked for 40 min then, as per organization standard it can be round down to 30 min i.e. half an hour.



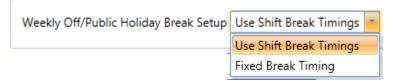
#### 2.4.1.2. Policy Codes

Policy for shift will be defined in the system. Various policies with respect to tolerance, overtime related, etc. can be defined in this screen. The objective of defining these policies is to assign to shift ultimately. The shift will turn be assigned to employees.

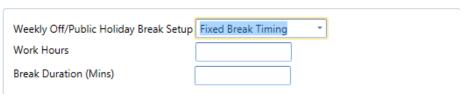


#### **General Tab**

- 1. Regular Time: Mark the regular time for the organization.
- Tolerance Early Start: Tolerance that will not be considered for OT if early start.
- 3. Tolerance Late Start: Tolerance that will not be considered for deduction if early start.
- 4. Tolerance Early End: Tolerance that will not be considered for deduction if early end.
- 5. Tolerance Late End: Tolerance that will not be considered for overtime if late end.
- 6. Flexible Timing Threshold:
- 7. Time Round Off: Link a time rounding off code that will be applied to this policy.
- 8. Strict Shift Timing: Through this system enforce consideration of attendance record strictly between the shift timing. It ignore any time spent (if any) in work beyond shift timing. So, for example, if the shift timing is 9am to 6pm, and an employee working from 9.30 am to 6.30pm; In this scenario, system will show the shortage hour by .5 hr and considered the employee attendance from 9.30am to 6pm.
- 9. Ignore IN / OUT in working hours: System will ignore all the intermediate transactions.
- 10. Weekly Off / Public Holiday Breakup setup : This would define how the break will be considered for time calculation. Two options are available :



- Use Shift Break Timing: he break time will be define for each shift in the shift code master.
- Fixed Break Timing: If fixed break timing is defined in this screen then, each employee irrespective of the shift will necessarily have to work for the fixed duration.



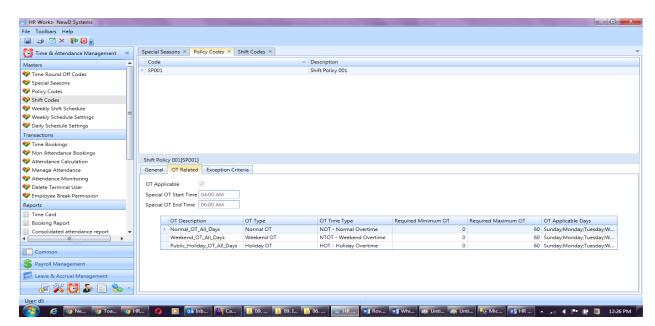
- 11. Link Open Shift: Open shift are mostly used for such person which doesnnot have any fixed timing or place. For example sales people. If the open shift is such defined :
  - a. Start 8 am , End 4pm : Then if an employee punches in at 8.30, then next in time ie 9am will be considered.
  - b. Start 9 am, End 5 pm
  - c. Start 10 am, End 6 pm

Link Open shift

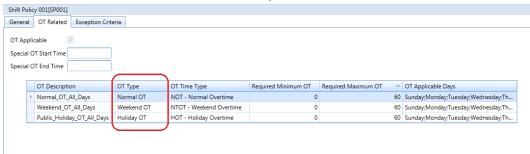


- Nearest to IN Time: Shift the punch in to the nearest In Time.
- Next to IN Time: Shift the punch in to the next In Time.

#### **OT Related**

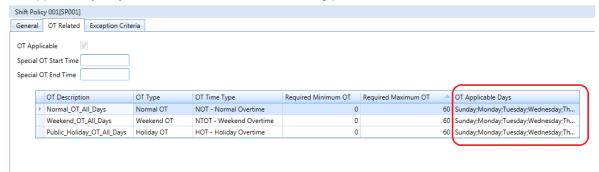


- 1. One can set if OT is applicable to this shift or not.
- 2. Special OT can also be set in the system. The speacial overtime will override all the overtime policies defined elsewhere in the system.
- 3. If overtime is set as applicable then, it is mandatory to define various overtime and its applicability.
  - a. One can set various overtime defined in the system as



b. Minimum Required OT and Maximum required OT can be defined.

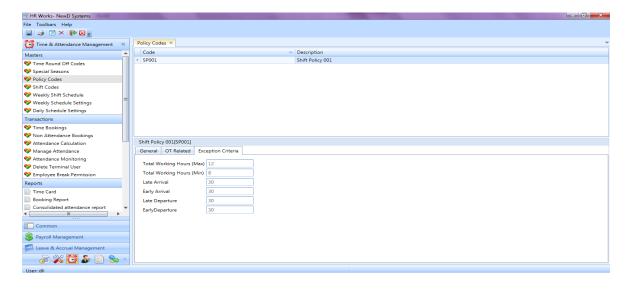
c. OT applicability Days can also be defined while setting policies



#### **Exception Criteria**

Exception criteria for a shift can be defined here. These exceptions will overpower all other setting of exceptions defined elesewhere. For example the following things can be defined here:-

- Min and Max Total working hours
- Late & Early Arrival
- Late & Early Departure



#### 2.4.1.3. Shift Codes

Various Shift codes will be defined in the system for defining the shift timing of a particular shift. The policy rules that is defined in "Policy Code" can be linked to various shift created in this master. Thus, whereby policy are defined in "Policy Code", Shifts are defined and policy are assigned to the shift in this master.

#### **Defining Shift Data**

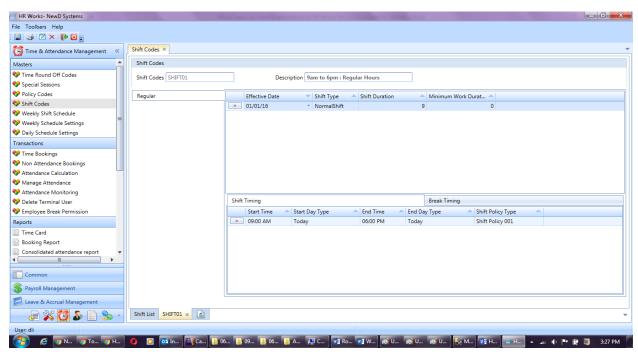


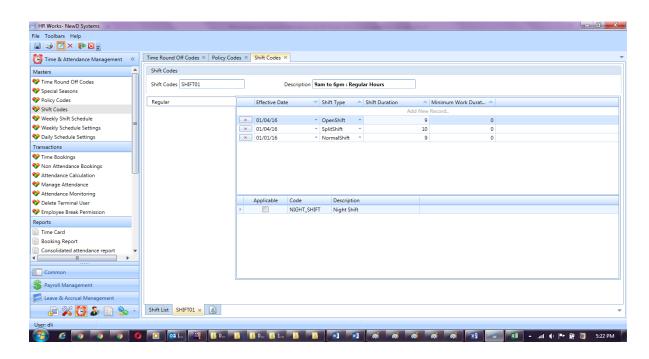
Fig: Shift Code master displaying how shift can be created

In the above screenshot, the shift SHIFT01 is defined for  $9\ hr$ , minimum work duration is  $0\ hr$ . That means only and only if an employee has not worked at all (Minimum Work Duration = 0) then he will be marked as absent.

Three types of shift can be defined in the system. They are :-



- 1. Normal Shift: For normal shift creation
- 2. Split Shift: A working shift comprising two or more separate periods of duty in a day. A split shift is a type of shift-work schedule where a person's work day is split into two or more parts. For example, a person may work from 05:00 to 09:00, take a break until 2:00 and then return to work until 7:00. This kind of pattern is especially common for people such as public transport employees (where it is advantageous to have additional staff working during traditional rush hour times) or bar staff that work at lunchtimes and during the evening.
- 3. Open Shift: Open shift also known as nested shift are for those who work for a definate timing irrespective of a pre defined shift.



#### **Defining Break Timings**

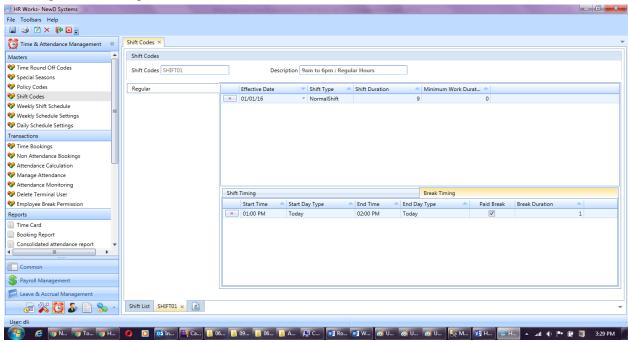
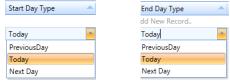


Fig: Shift Code master displaying how break times can be maintained for a given shift

Following are the highlights of Break Timing features :-

- Start Time and End time can be defined
- If start and ends in the same / previous or next day, accordingly setting can be defined

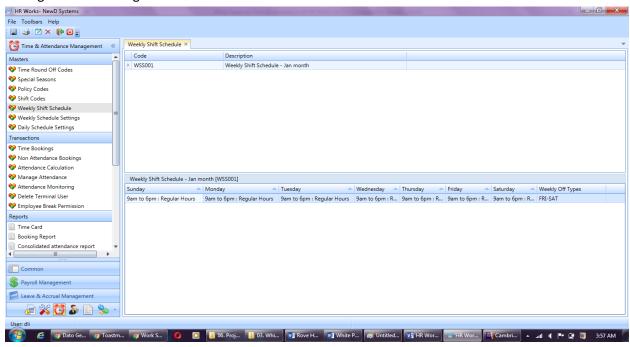


Paid Break – If it is a paid break, it could be excluded from exception reporting

Break Duration can be defined

#### 2.4.1.4. Weekly Shift Schedule

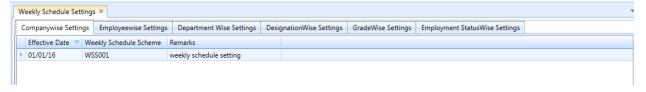
Weekly shift schedule master is for defining the days in week wise working shift. Shift are ultimately assigned day wise in a week. This master is an intermediate and is used further in "Weekly Shift Setting" master setting.



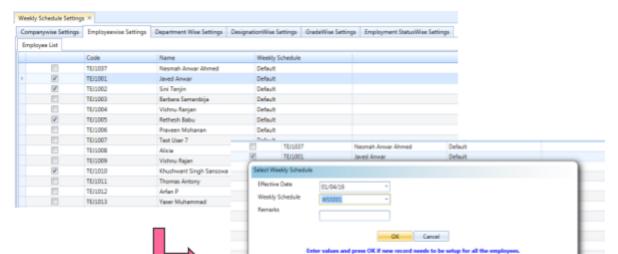
#### 2.4.1.5. Weekly Schedule Settings

Rostering in bulk is enabled in HR Works through this screen. A "Weekly Shift Schedule" as described above can be allocated to various entity( Company, Employee, Department, etc) through this screen. HR Works provides a facility to allocate the weekly shift schedule to the following levels of entities:-

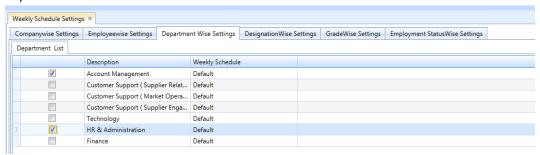
1. Company Level



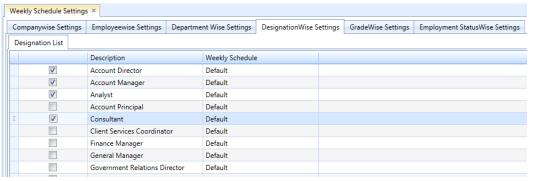
2. Employee Level



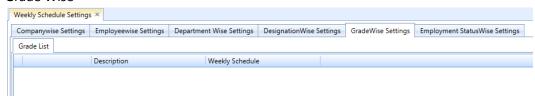
#### 3. Department Level



#### 4. Designation Level



#### 5. Grade Wise

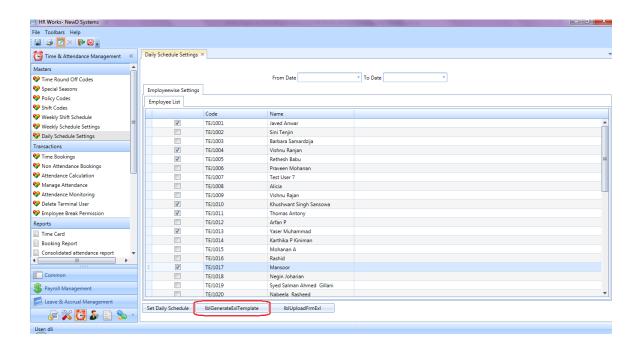


#### 2.4.1.6. Daily Schedule Settings

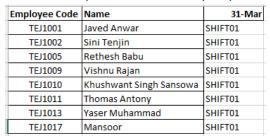
Rostering on a daily basis is enabled through this screen. Shift Codes defined in the "Shift Codes" screen can be used to assign to various employee on daily basis through this screen.

If some employee is on a rotational or variable shift, then, Day wise shift data can be uploaded into the system HR Works system provides the facility of bulk upload shift data for employees.

One can generate template for shift data to be uploaded from the system from :-



The excel template can be filled up as per the shift assignment for the employee such as :-

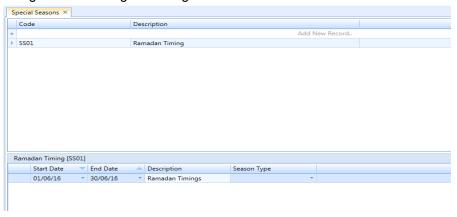


And the final execution can be enabled through upload option - button.

#### 2.4.1.7. Special Seasons

For special season, shift timings will be defined in the system through this screen. Special season rule over the regular shift defined in the system.

For example, one can define Ramadan timing in this screen; and system will consider special season timings instead of regular timings.



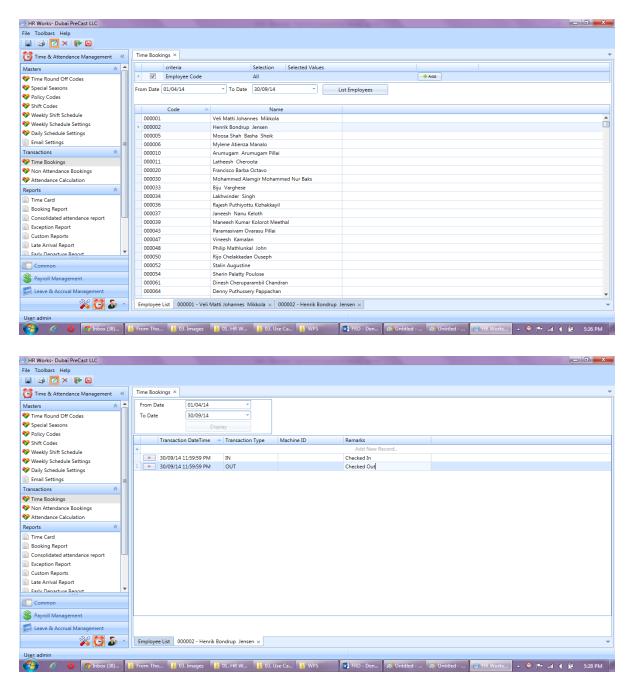
#### 2.4.2. Transactions

#### 2.4.2.1. Time Bookings

Time records for all the employee will come from time and attendance terminal and will be displayed in this menu. It will display In and Out time of the employee based on the swiping in and swiping out of proximity card.

Timekeeper still have provision to overwrite these data based on the requirement.

A sample screen is displayed below:-

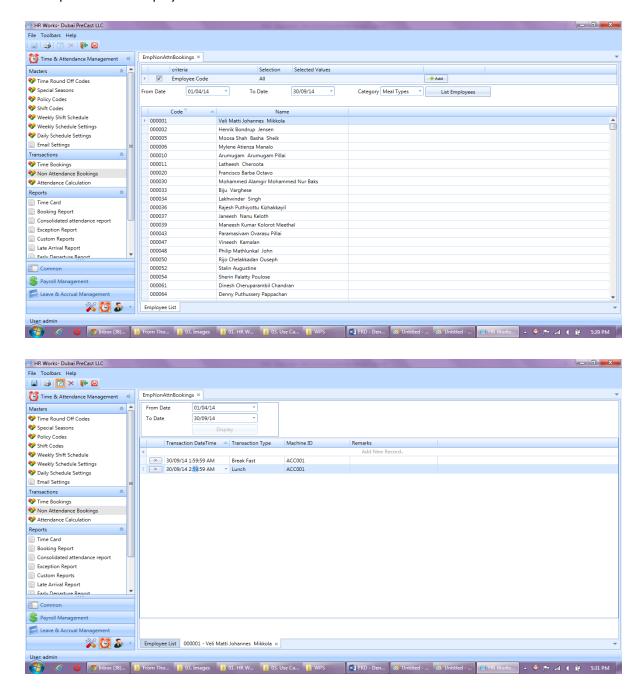


#### 2.4.2.2. Non Attendance Bookings

If an employee is moving out of the premises for non-working hour, the same can be recorded in the system based on logic defined for the same. These non-working hour will come from the Time and attendance terminal and will be displayed in this menu.

Timekeeper will have the right to overwrite the date in it based on the requirement.

A sample screen is displayed below:-

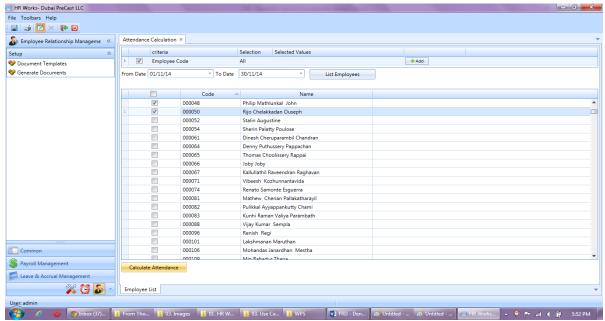


#### 2.4.2.3. Attendance Calculation

For a selected window period, based on the inputs of various Masters from Time and attendance Module viz Employee Master, holidays and weekly off days, policy codes, shift, etc Attendance could be calculated. This transaction allows user to calculate attendance for selected employees.

These attendance data will then be displayed in "Consolidated Attendance Report".

A sample screen of the transaction is displayed below:-

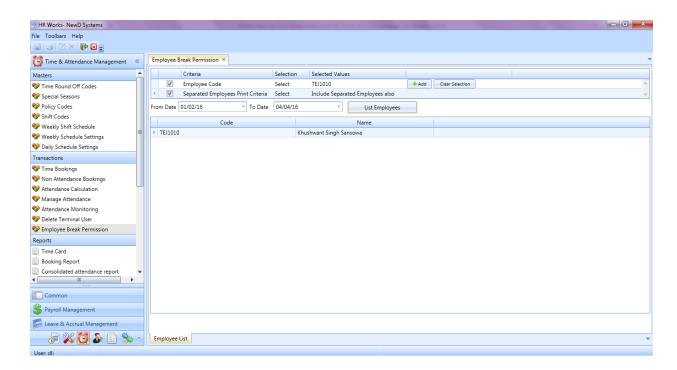


#### 2.4.2.4. Employee Break Permission

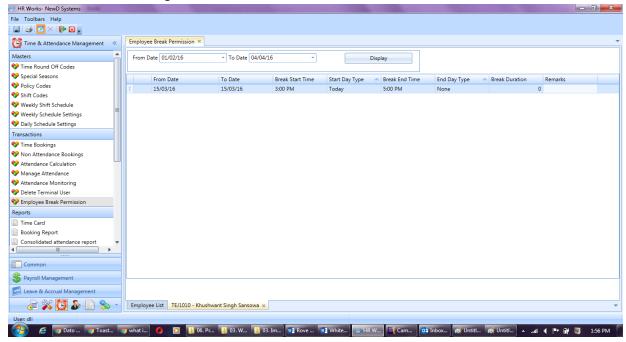
In such cases, where an employee has requested for a break and management is interested in giving away the break to the employee without affecting its attendance data, "Employee Break Permission" facility could be used.

It allows a user to capture the break timing for an employee without highlighting it as an exception in the reporting.

In the below screen, user can select employee:-



User can enter break timings as below :-

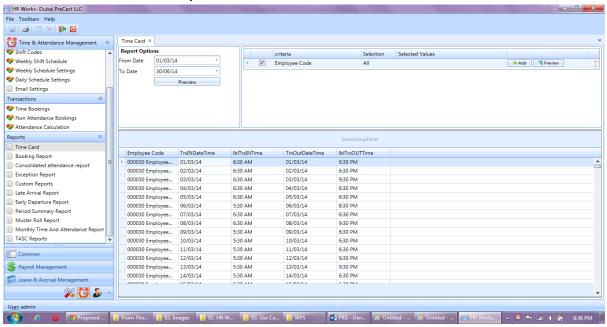


### 2.4.3. Reports

Reports from Time and Attendance module are detailed in this section.

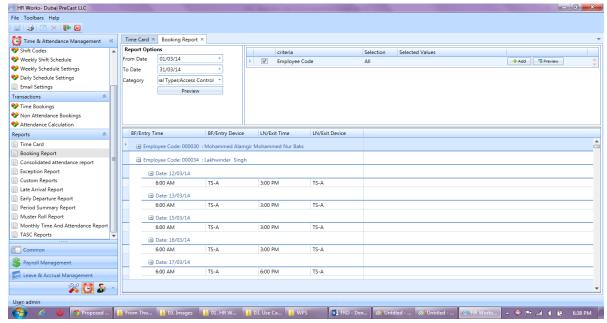
#### 2.4.3.1. Time Card

The "Time Card" report publishes the information of attendance in raw format. As such, it shows initial in and final out transaction in the system.



#### 2.4.3.2. Booking Report

It process the attendance data and segregates it to present the data based on the utilization of swiping card. For example a swiping card may be used for marking attendance, while going for lunch and may well could be used to just to get an access into the company premises.

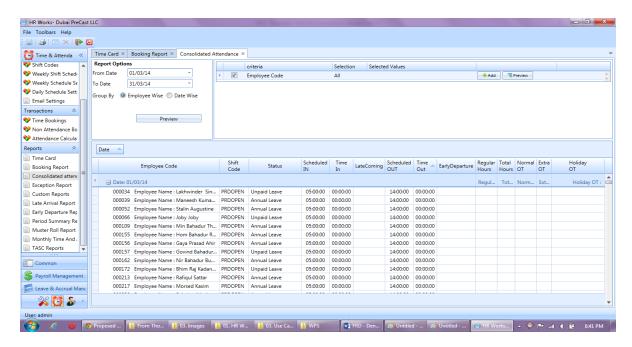


#### 2.4.3.3. Consolidate Attendance Report

The "Time Card" report publishes the information of attendance in raw format. As such, it shows initial in and final out transaction in the system. However it does not highlight the numerous transaction

happen in-between for example – an employee might have swiped out to go for meal, or he may go out for some business meeting and could have come back after some time.

To get to know the exact time spent on work or on a project for that matter, all the intermediate datas required to be processed based on the behavior defined in the system. This report cover this shortcomings in the previous report and present the data after due processing.

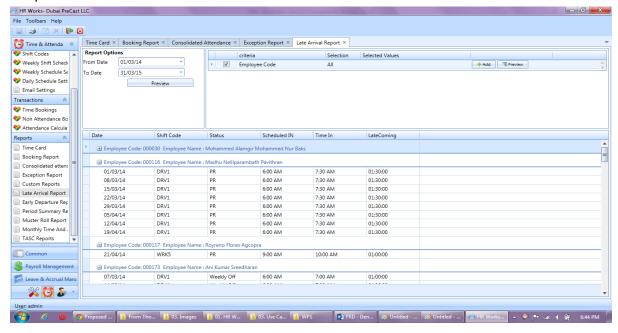


### 2.4.3.4. Exception Report

If there is some mispunch it will be highlighted in this report.

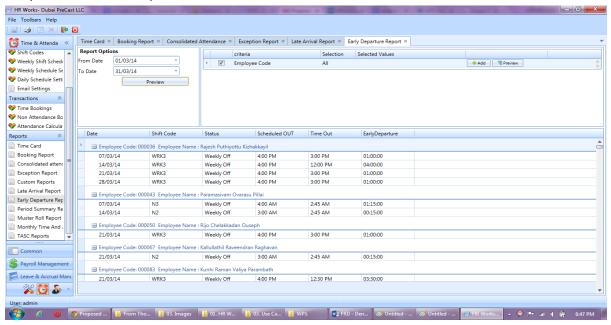
#### 2.4.3.5. Late Arrival Reports

Based on the late coming to the work area, this report option will show the records of all such exception where user comes late than the scheduled time.



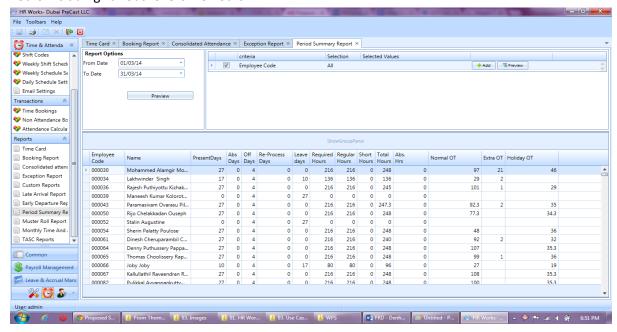
#### 2.4.3.6. Early Departure Reports

Based on the early departure from the work area, this report option will show the records of all such exception where user departed earlier than scheduled time.



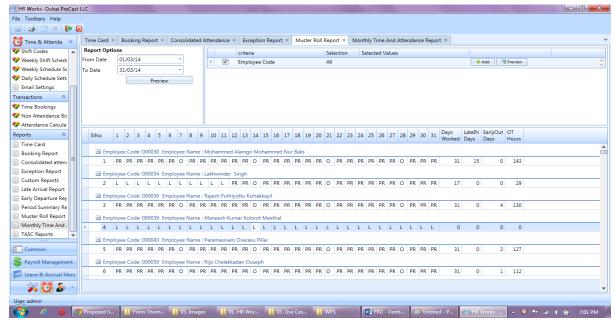
#### 2.4.3.7. Period Summary Reports

For a particular selected range of period, system will display employee wise, the summary of overall number of days worked, Leave taken, Present Days, Short Hours, Regular Hours, Total Hours, Absent Hours including various overtime hours.



#### 2.4.3.8. Muster Roll Reports

This reports gives a bird eye view of the employee attendance for a selected period range. It highlight the off day entry, the mispunch entry, late in and early check out



# 3.0 Technical Specification

# 3.1 Deployment / Architecture Diagram

1.

1.1.

1.2.

### 1.2.1. Deployment Diagram for Time and Attendance Application

