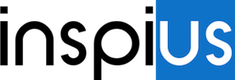
Product Development Service Document

By



**For EF Software Product: eTMS**

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# General Information

## Interface

Frontend

Admin

## Framework

Frontend: Angular JS 5

Admin panel: .NET Core 2.1

Database: Microsoft SQL 2016

## URL

Documents are pending.

## Timeline

To be updated after the confirmation of this document.

# System Structure

## General Structure

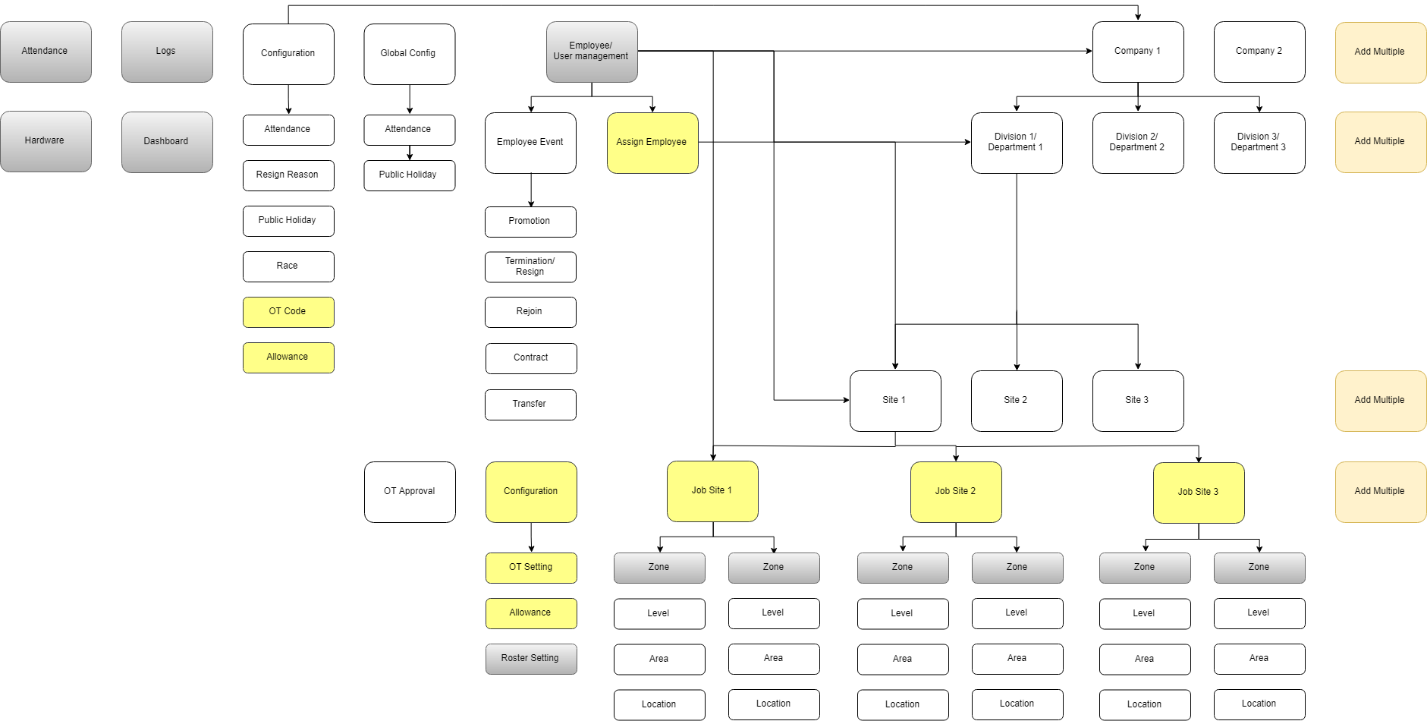


Figure 1: General Structure

Notes:

* All gray components aren't included on this document and will be discussed later.
* All yellow components are updated.

# Wireframes

## Dashboard



Figure 2: Dashboard

## Manual Attendance Recording

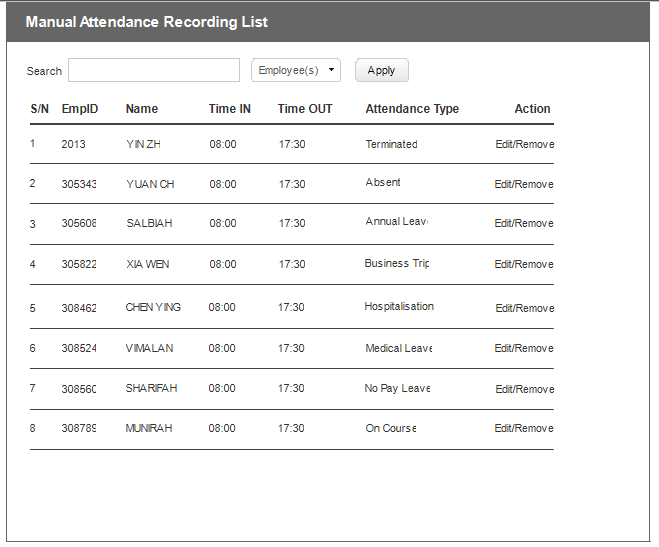


Figure 3: Manual Attendance Recording List

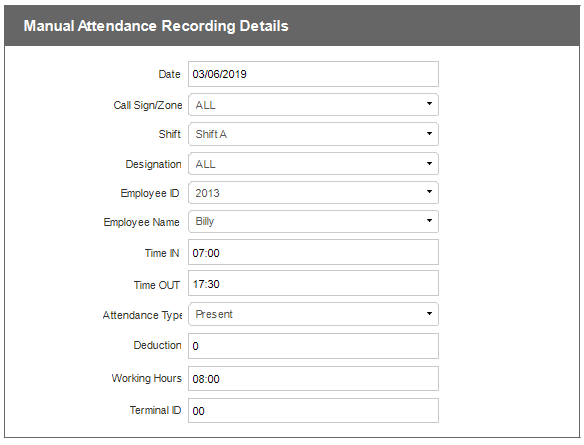


Figure 4: Manual Attendance Details

## Global Config

### 3.1 Attendance

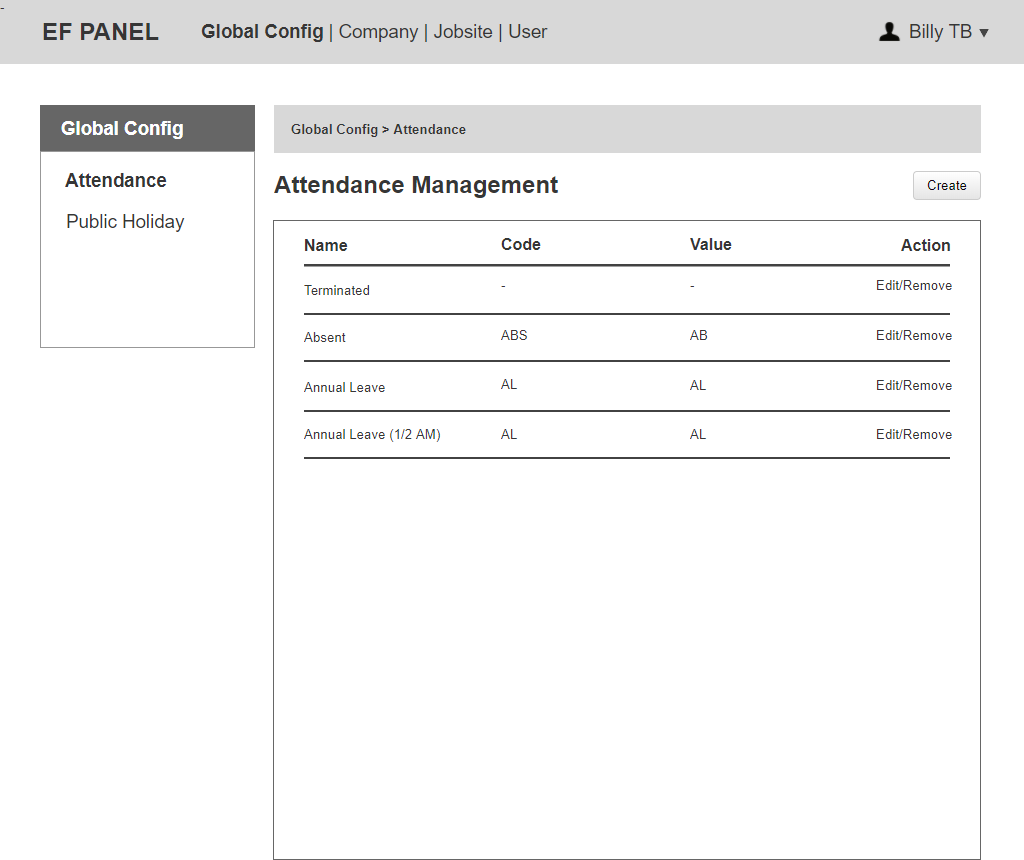


Figure 5: Attendance List

Notes:

* After creation, an attendance can only be removed if it has not been used (no children).
* EF Admin can click on “Edit” to update Name, Code, Value of an attendance.
* EF Admin can click on “Create” to add a new attendance.

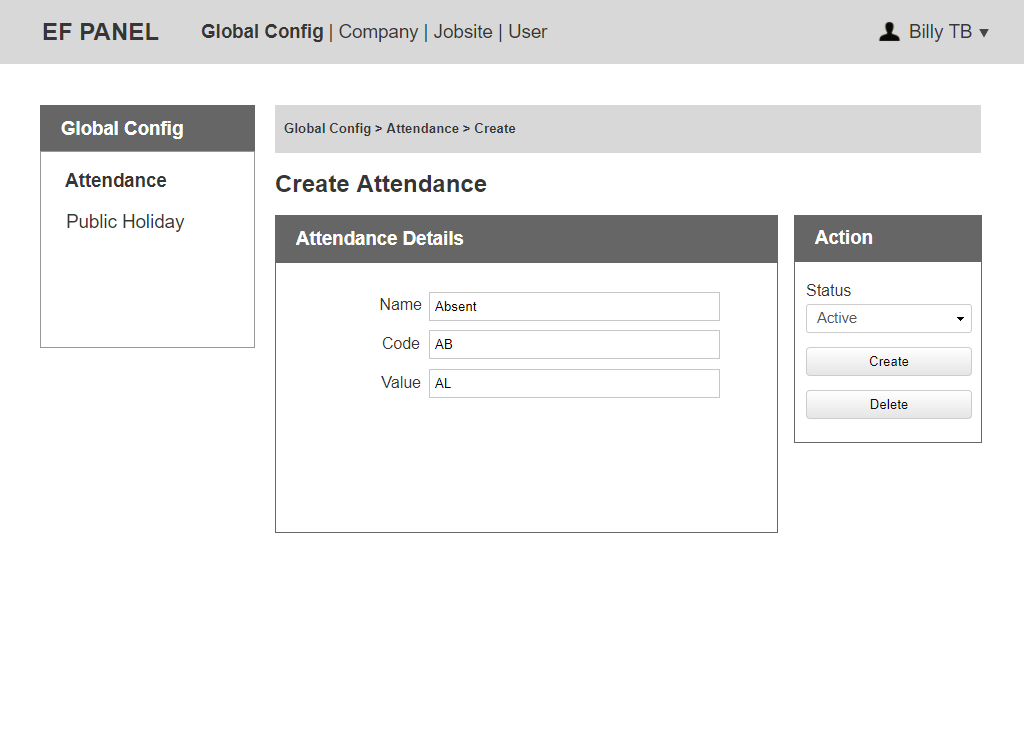


Figure 6: Create Attendance

Notes:

* Global EF Admin can edit all information of an attendance.
* The status includes: Active, Inactive.
* EF Admin can change the status to Active/ Inactive.

### 3.2 Public Holiday

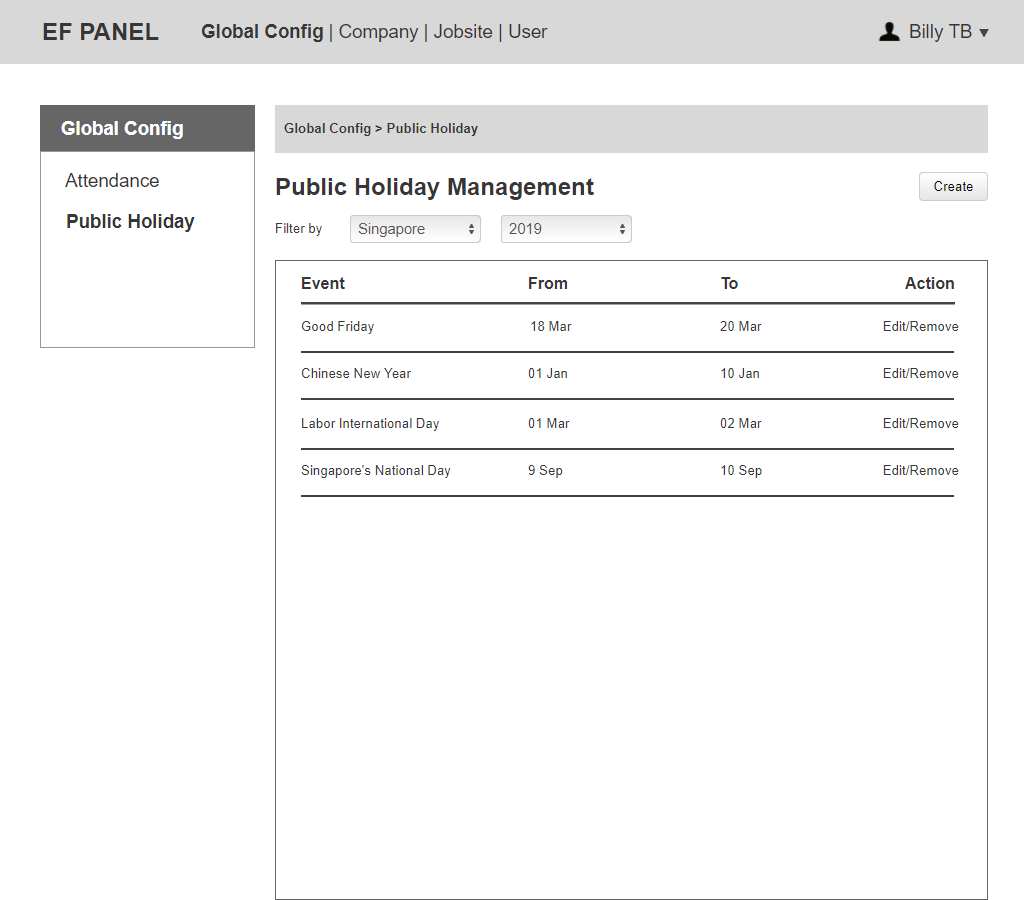


Figure 7: Public Holiday List

Notes:

* After creation, a public holiday can only be removed, if it has notbeen used (no children).
* EF Admin can click on “Edit” to update Event, Start Date, End Date, Year, Country of Public Holiday.
* EF Admin can click on “Create” to add a new public holiday in the same category chosen.
* The default country and year on "Create Public Holiday Page" is the one filtered on "Public Holiday List Page".
  + E.g. If EF admin filter "Singapore - 2019" onPublic Holiday List Page, when Admin click on "Create", the country & year choose "Singapore - 2019" by default on "Create Public Holiday Page".

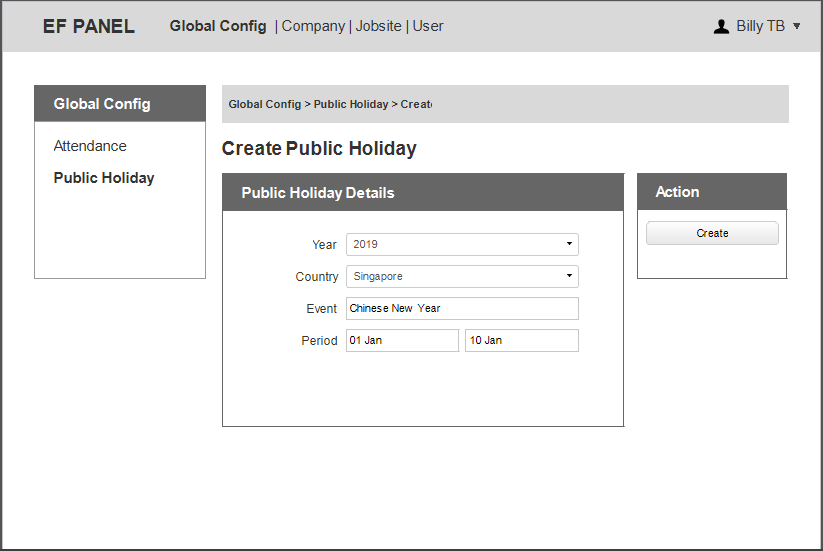


Figure 8: Create Public Holiday

Notes:

* Country and Year are dropdown, Global EF Admin must choose value for them before creating a new public holiday.
* Can create a public holiday in the future.
* Can not create a public holiday, which has the same year/country/period with the listed public holiday.

### 4. Company Listing

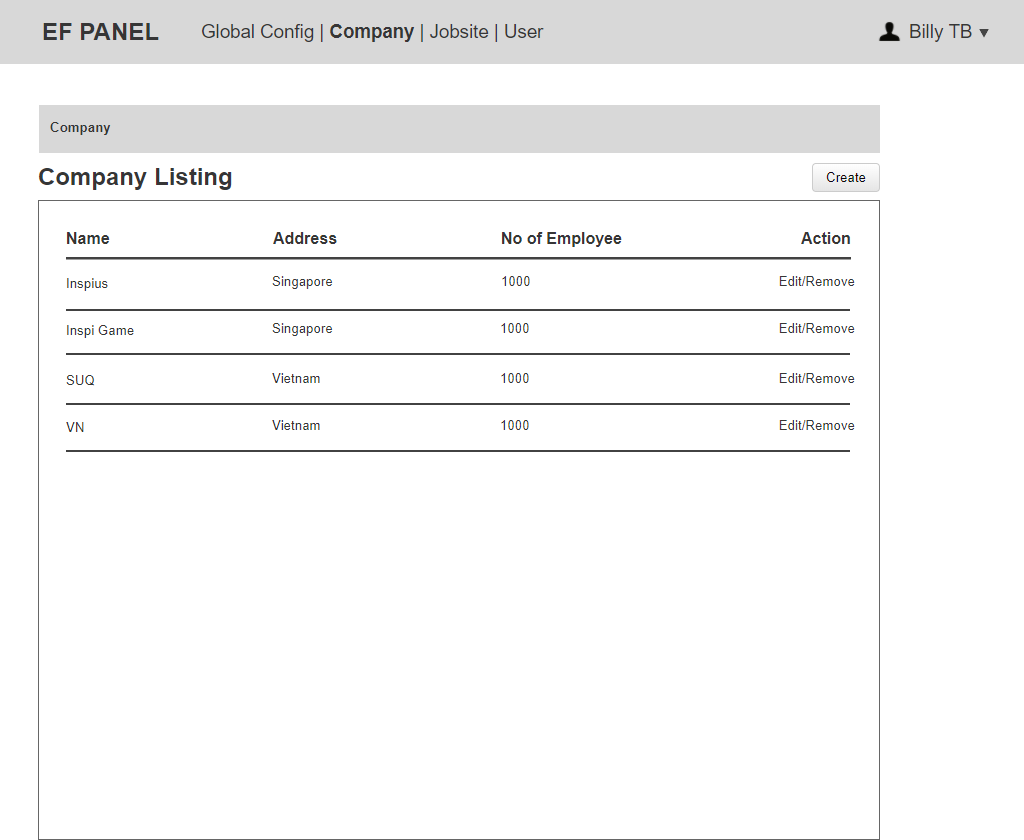


Figure 9: Company Listing

Notes:

* Only EF Admin is able to see “Company Listing Page”. Company admin can not see “Company Listing Page”, they can only have access from the “Company - Basic Information”.
* EF Admin can click on “Edit” to update all information of company details.
* EF Admin can remove a company if there is no transaction.
* (1st approach) 1 company might have its own database or (2nd approach) multiple companies can share 1 general data. At the 1st phrase, we only do 2nd approach.
* Number of Employee is automatically generate from the list of active employee belongs to this company.

### 4.1 Company Details

### 4.1.1 Basic Information

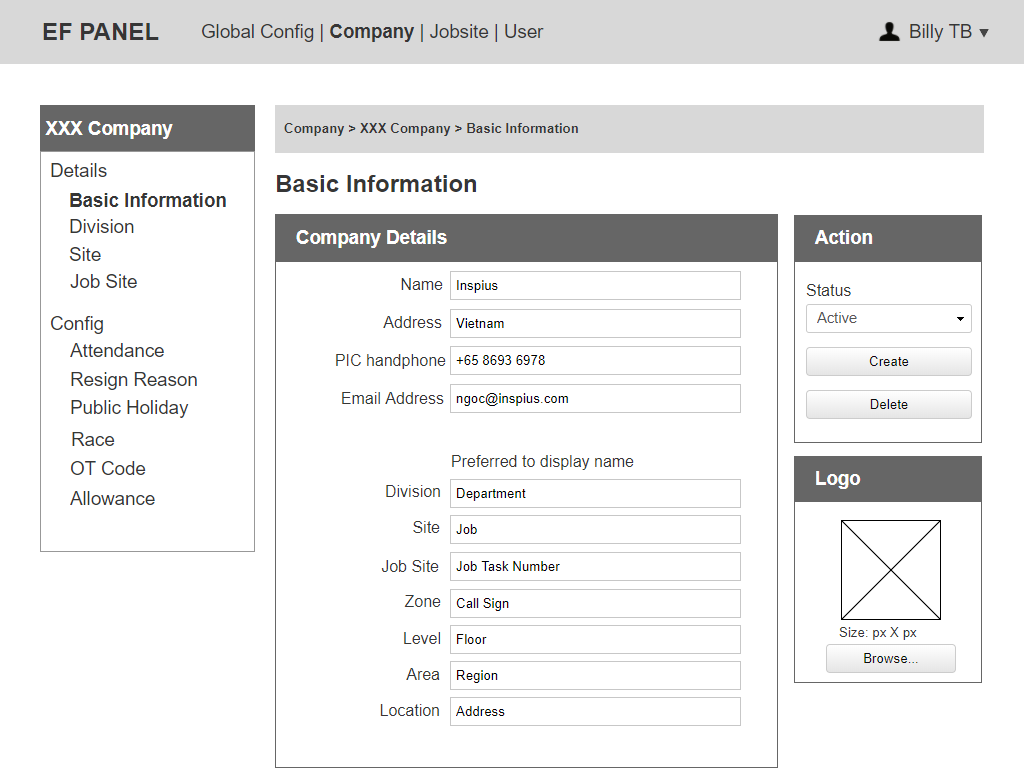


Figure 10: Basic Information

Notes:

* Company Admin can update a preferred display name (of Division, Site, Job Site, Zone, Level, Area, Location) for left side menu and any related place as header, title, breadcrumb.
* If Preferred-to-display name is updated, the menu would be updated follow it. If the preferred-to-display name is blank, the menu would be the default menu.

### 4.1.2 Division

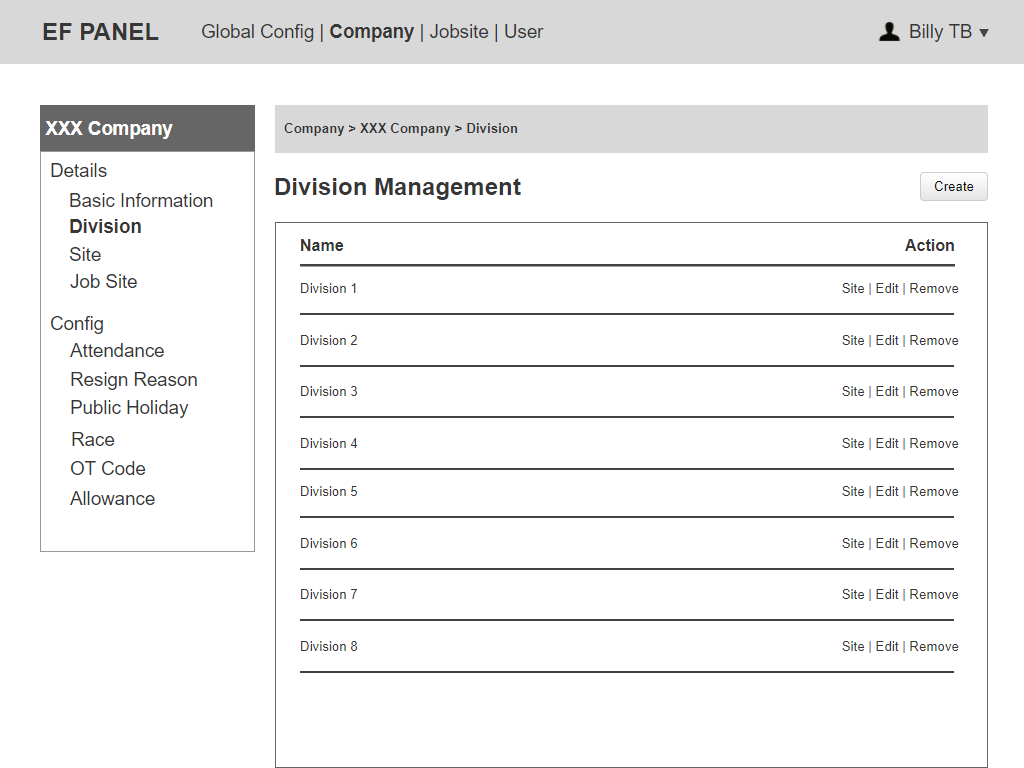


Figure 11: Division List

Notes:

* EF Admin and Company Admin can click on “Site” to show list of the site belongs to the division.
* EF Admin and Company Admin can click on “Edit” to update name of the division.
* EF Admin and Company Admin can remove any division if there is no children yet.

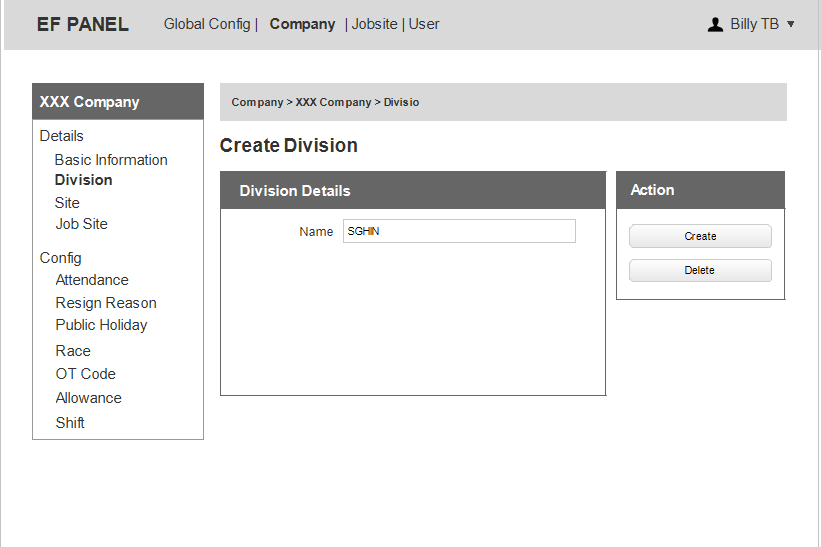


Figure 12: Create Division

### 4.1.3 Site

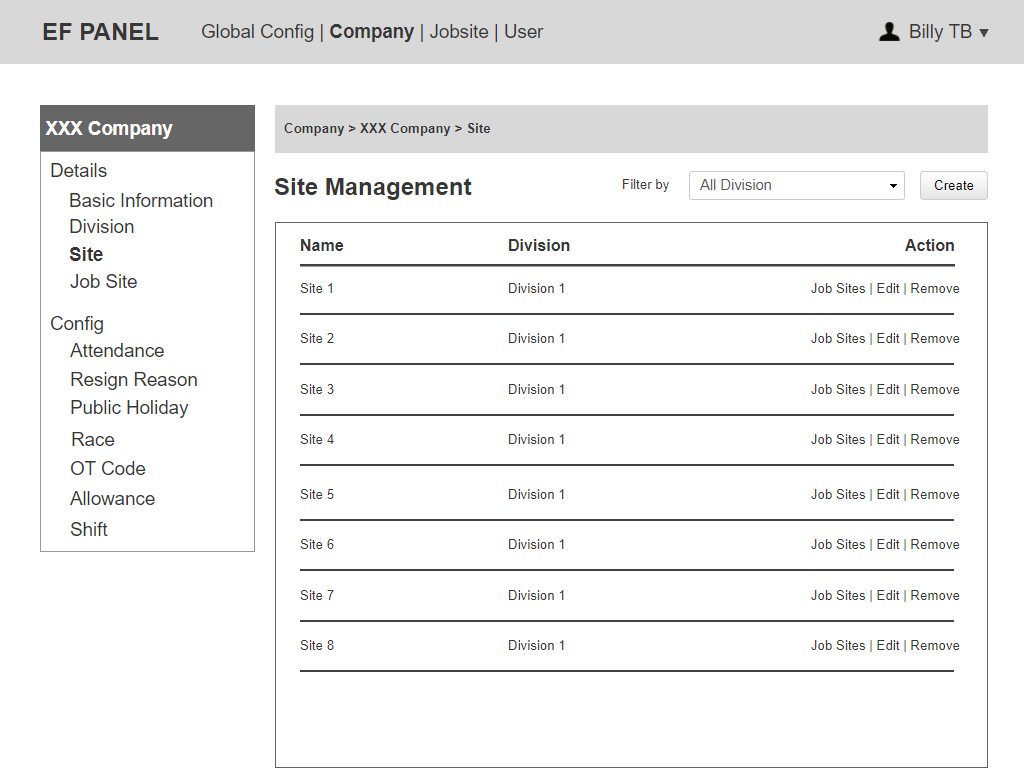


Figure 13: Site List

Notes:

* EF Admin and Company Admin can click on “Edit” to update name and division, whichthis site belongs to.
* EF Admin and Company Admin can click on “Job Site” to see list of job site for this site.

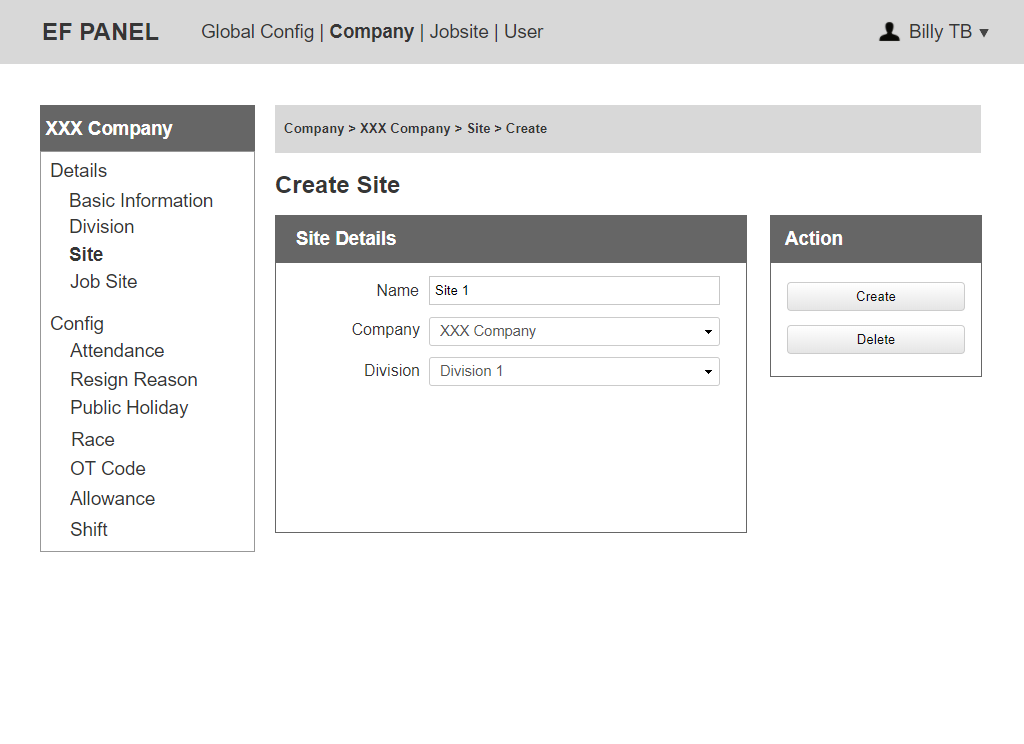


Figure 14: Create Site

Notes:

* Company Admin can edit name, choose Division.
* Only EF Admin can edit Company dropdown, Company Admin can not.

### 4.1.4 Job Site

It will be shown in point 5 on the below page.

### 4.2 Company Config

Notes:

* EF Admin and Company Admin can edit information for Company Config.

### 4.2.1 Attendance

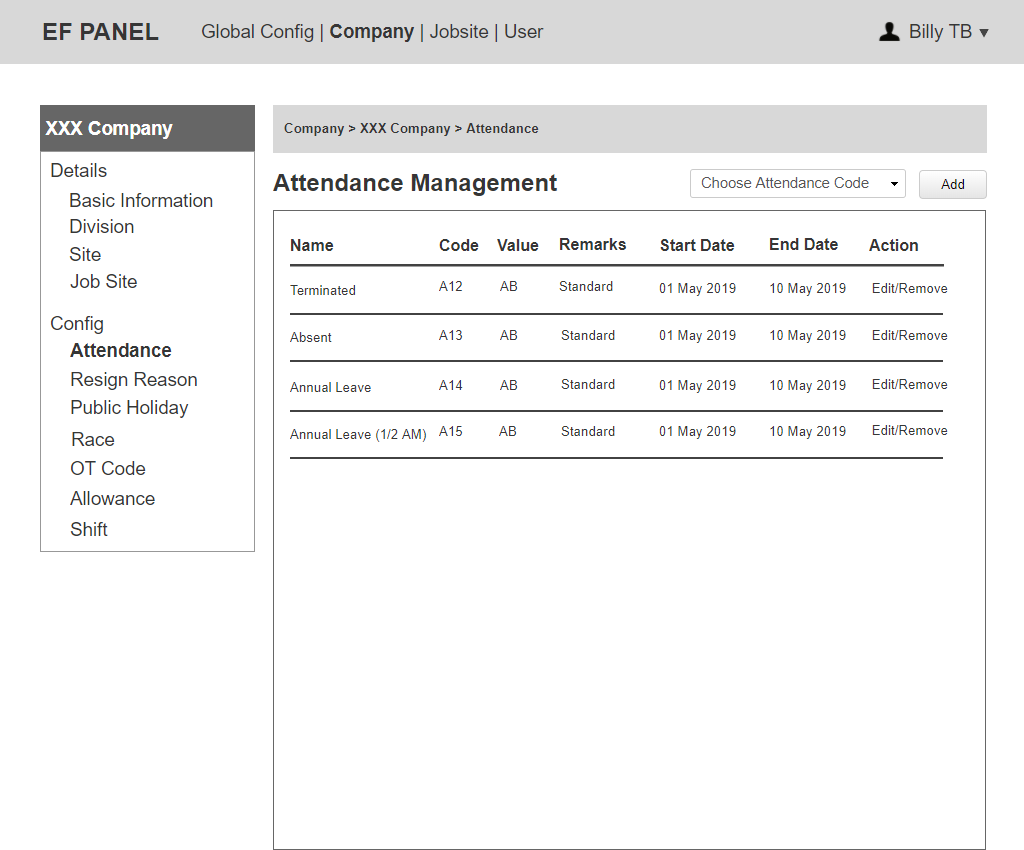


Figure 15: Attendance List

Notes:

* The system will list all active attendance code in global config to dropdown "Choose Attendance Code”.
* Code and Name must be unique but value can be the same. If a name and a code are being used, they can not be shown in dropdown to choose again.
* An attendance code can only be added back to the “Choose Attendance Code” dropdown if the old one is Expired/Inactive.
* Step for Company Admin to add the attendance code then config it:
  + Choose attendance code (generate active attendance code from global configuration) then click “Add".
  + The system add new attendance code to the list (the start date, end date, remarks are blank).
  + EF Admin/Company Admin can edit to add start date, end date and remarks. If Admin do not edit these value, they will use default value belongs to Global Config.

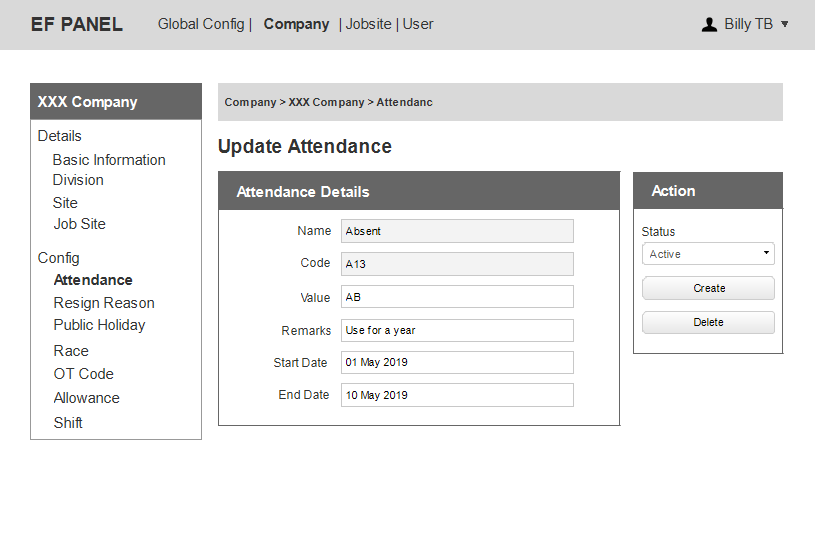


Figure 15: Update Attendance

Notes:

* Company Admin can not edit name, code. They only can add, edit values in these fields: remarks, start date, end date, value.
* Able to remove if that attendance has no children yet.
* Unable to edit value, remarks, start date, end date if the hardware recorded the attendance code.
* When an attendance is expired, the dropdown of status is hidden and replaced by Expired**.** The system notices Company Admin this attendance code is expired.Do you need a place to store all notification for admin?
* Company Admin can change the status to Active/Inactive.
* End date is blank so that attendance code is infinitive.
* For an expired attendance code, all information of that can still save in database management system to export.

### 4.2.2 Resign Reason

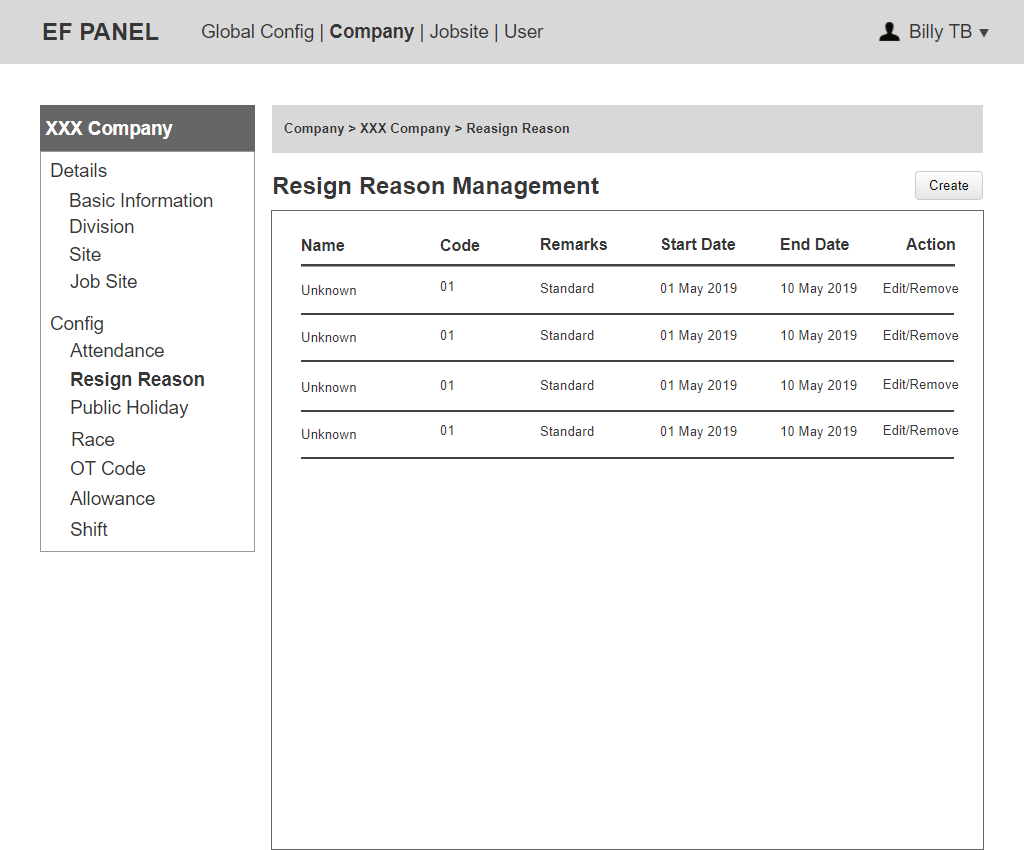


Figure 16: Resign Reason List

Notes:

* Company Admin can edit all information of a resign reason.
* Company Admin can click on “ Create” to add a new resign reason.
* Company Admin can click on “Remove” to delete a resign reason.

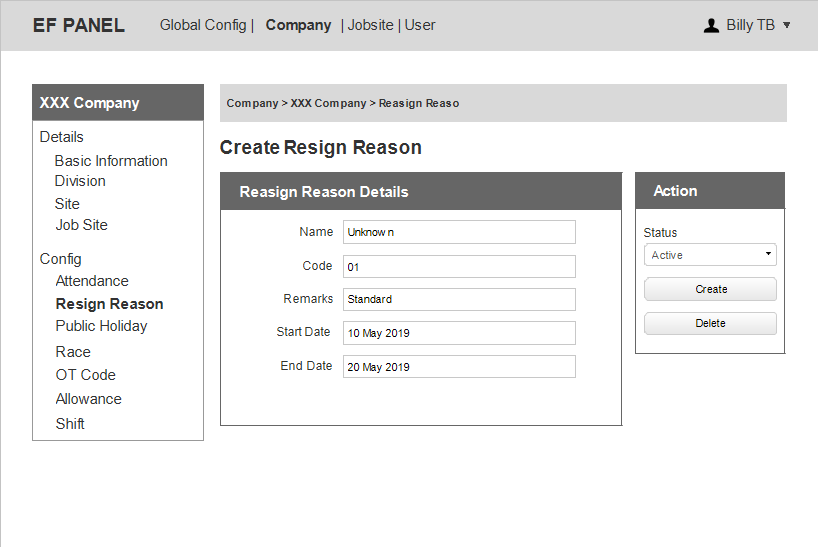


Figure 18: Create Resign Reason

Notes:

* The status includes: Active, Inactive.
* When a resign reason is expired, the dropdown of status is hidden and replaced by Expired**.** The system notices Company Admin this resign reason is expired. So it can not be used unless Company Admin edit End Date.
* Company Admin can change the status to Active/ Inactive.

### 3.2.3 Public Holiday

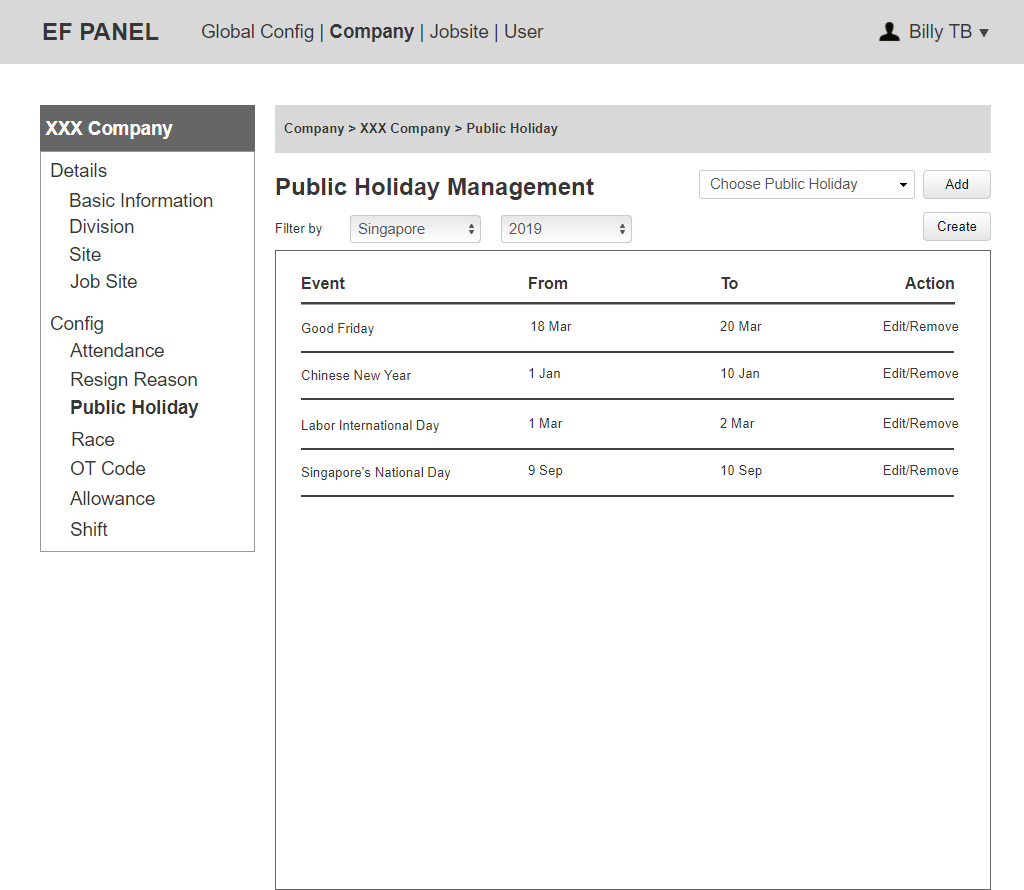


Figure 19: Public Holiday List

Notes:

* EF Admin and Company Admin can click on “Edit” to update Country, Year, Start Date, End Date of a public holiday.
* Unable to remove if a public holiday code is being used.
* The system will list all active public holiday code in global config to dropdown "Choose Public Holiday”. And if a name and a code are being used, they can not be shown in dropdown to choose again.
* A public holiday can only be added back to “Choose Public Holiday” dropdown if the old one is Expired/Inactive.

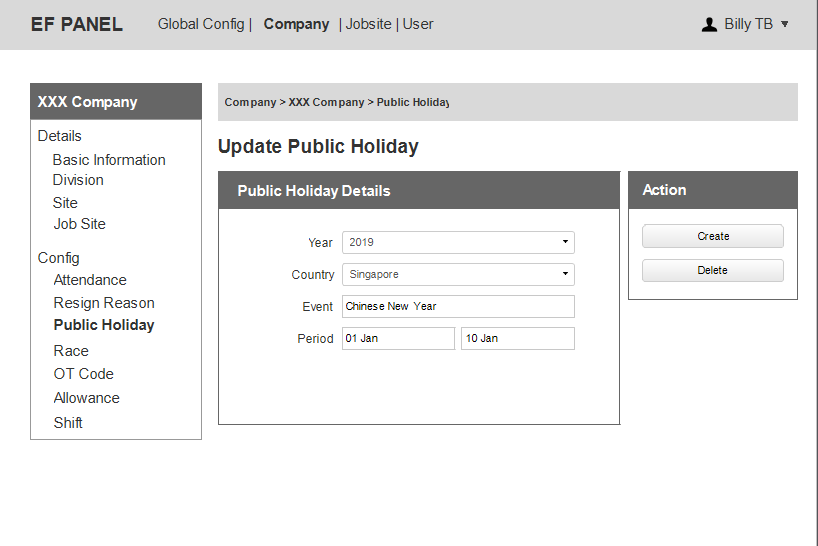


Figure 20: Update Public Holiday

3.2.4 Race

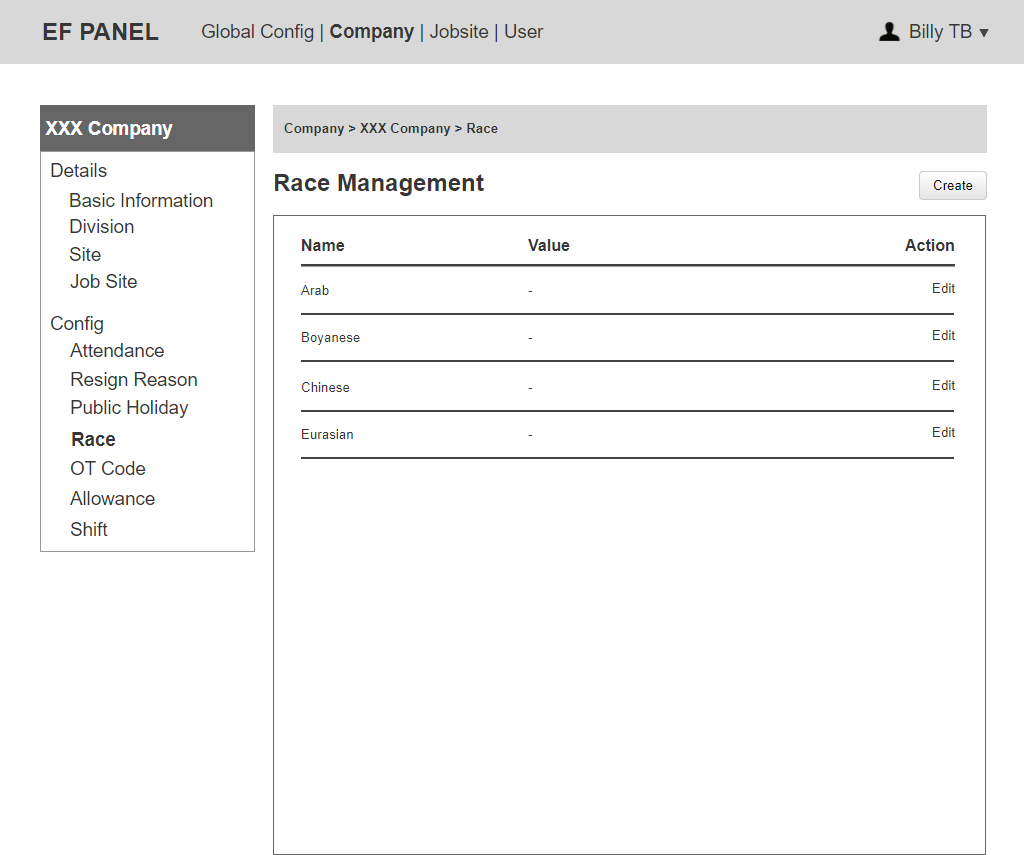


Figure 21: Race List

Notes:

* EF Admin and Company Admin can click on “Create” to add a new race.
* EF Admin and Company Admin can click on “Edit” to update name and value for a race.

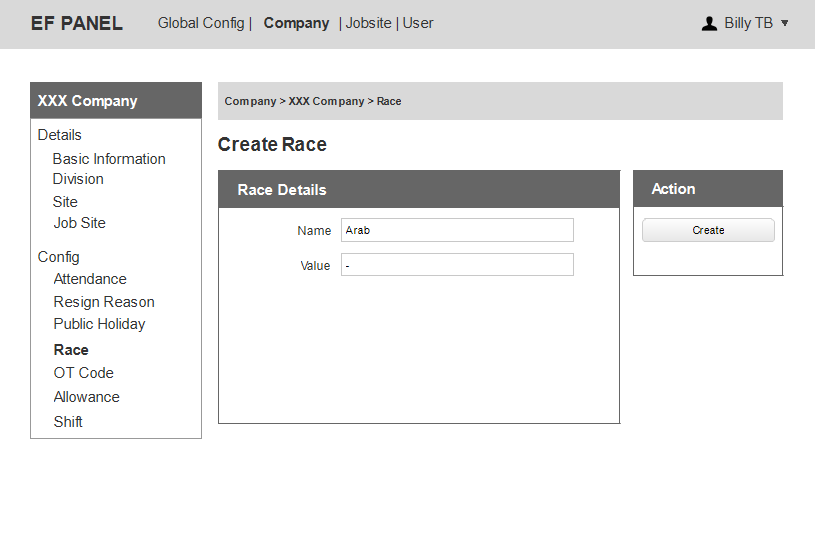


Figure 22: Create Race

### 3.2.5 OT Code

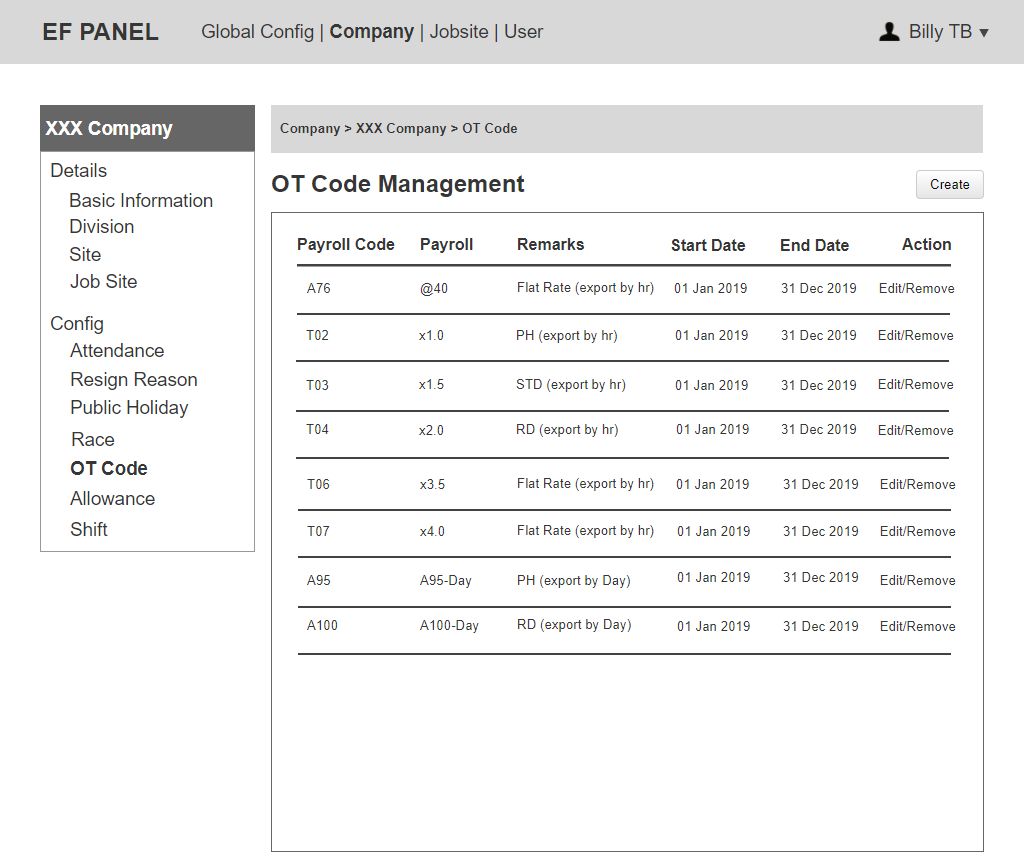


Figure 23: Company OT Code List

Notes:

* This is tied to default working hours. This value can be set differently for each job site.
  + Eg: Default working hours = 7.5, OT = 10 hours.

If Roster = RD

RD (A100) = 2 Days + STD = 10 – 7.5 = 2.5 hours.

If Roster = PH

PH (A95) = 1 Day + STD = 10 – 7.5 = 2.5 hours.

* Company Admin can click on “Edit” to update all information of a OT Code.
* After creation, an OT Code can only be removed if it has not been used (no children).

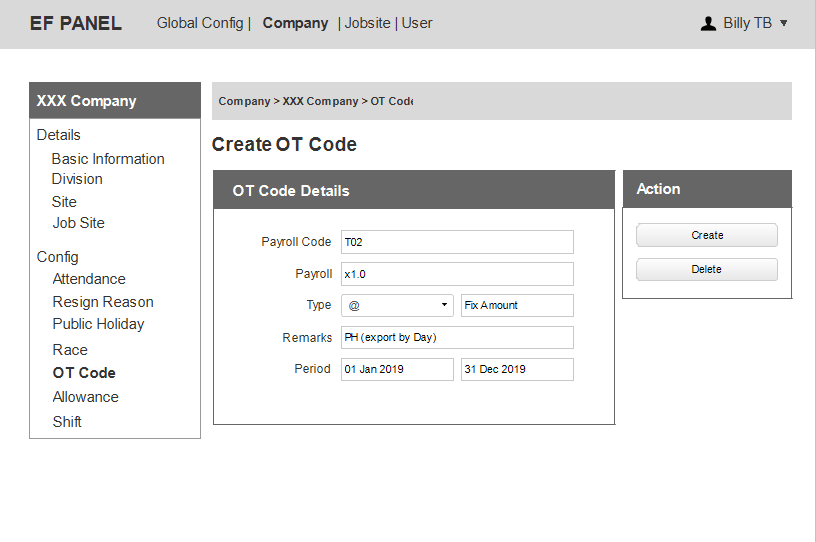


Figure 24: Create Company OT Code

Notes:

* Assign the different types of OT to each employee.
* Type includes: @, X, Day. Value corresponding: fix amount, multiple, day.
* Type = day: when show on OT report, show Payroll code + Payroll ‘type + rate’.
* Type = @, X, when show on OT report, show payroll ‘type + rate’.
  + e.g. Payroll code ‘A95’, type ‘day’, rate ‘1’ (or ‘2.5’) —> show A95 - Day 1 (or 2.5).
  + e.g. Payroll code ‘T35’, type ‘@‘, rate 2 —> show @2.

### 3.2.6 Allowance

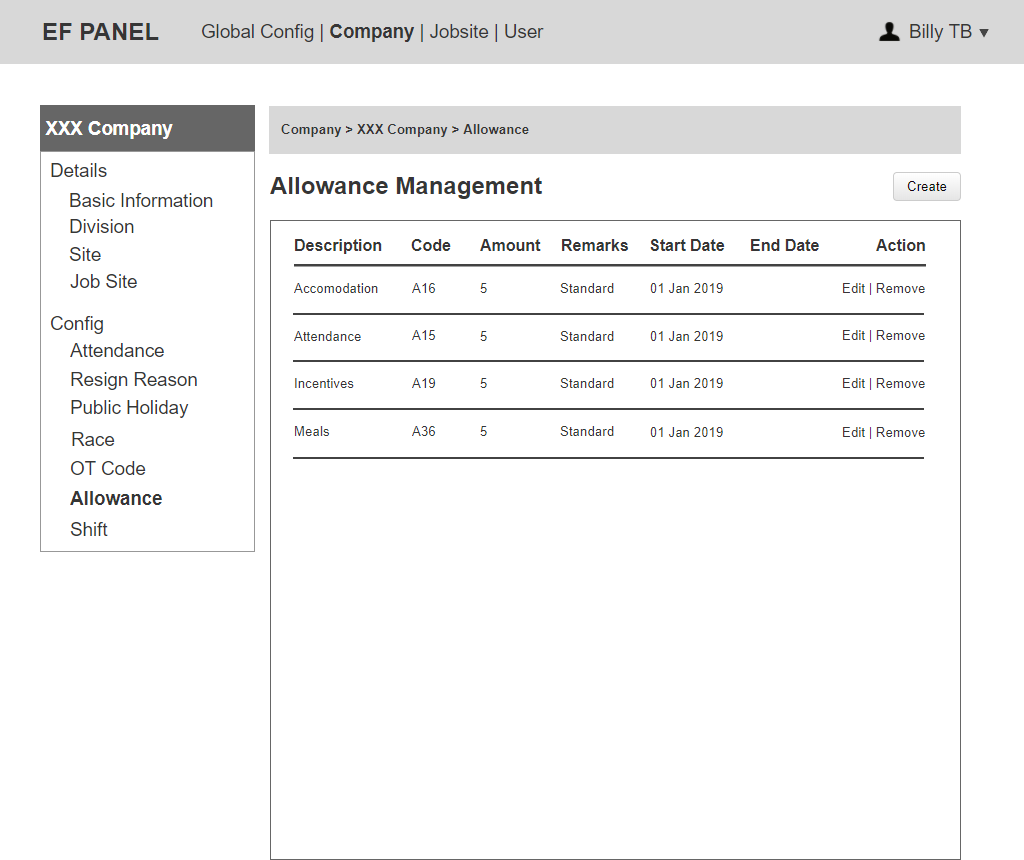


Figure 25: Company Allowance List

Notes:

* Company Admin can click on “Edit” to update all information of an allowance.
* After creation, an allowance can only be removed if it has not been used at Employee detail (each employee has their own allowance code).

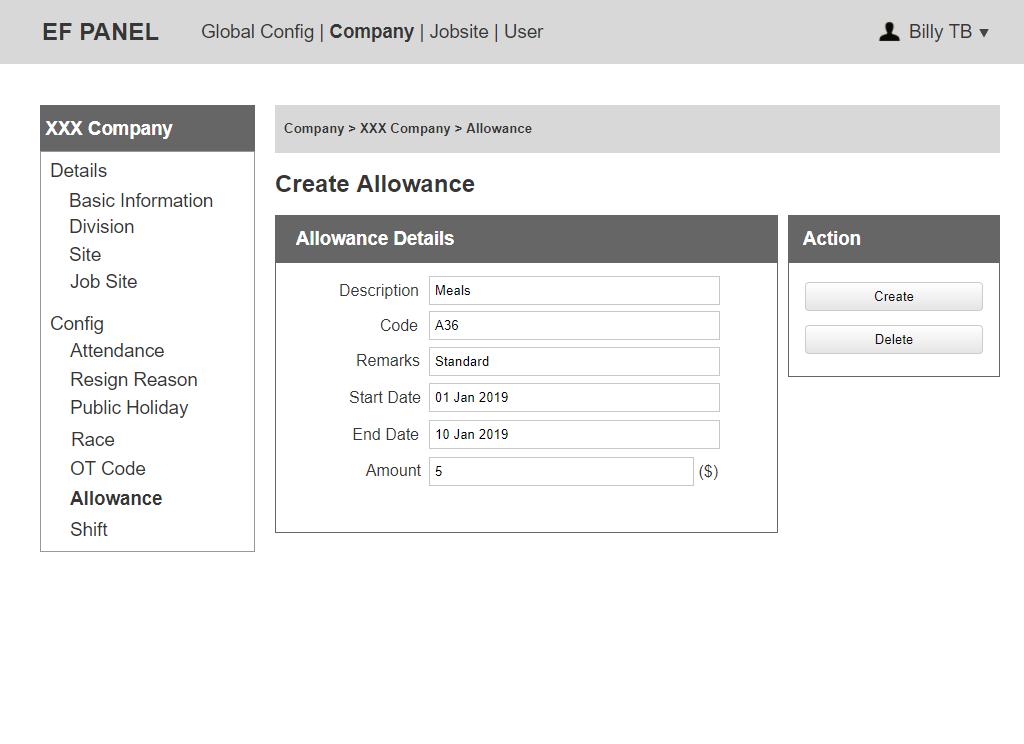


Figure 26: Create Company Allowance

### 3.2.7Shift

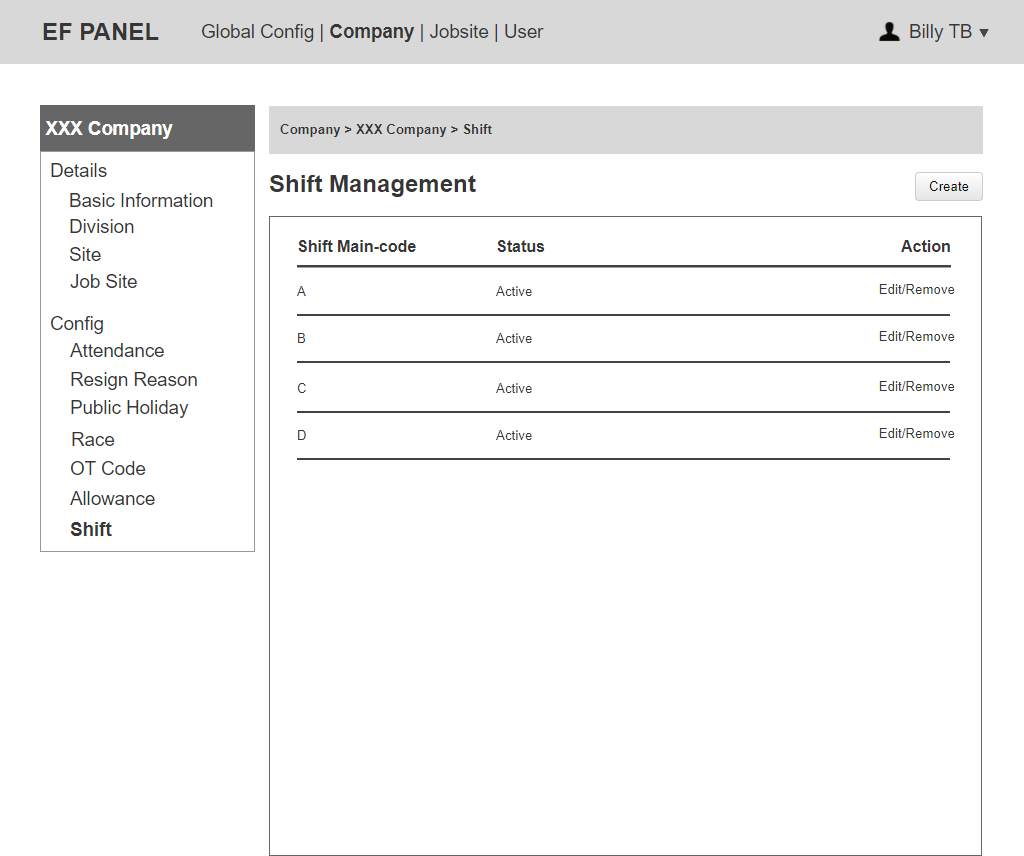


Figure 27: Shift List

Notes:

* Company Admin can click on “Edit” to update Shift Main-code and status.

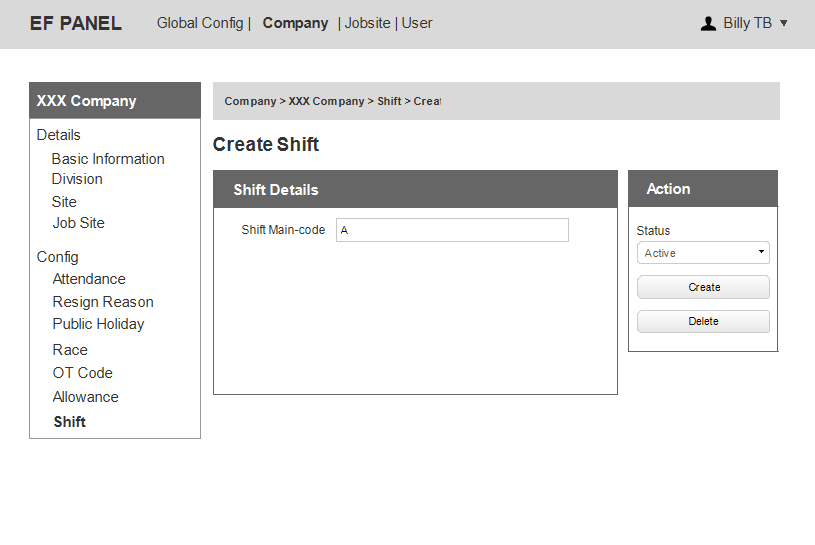


Figure 28: Create Company Shift

## 5. Job Site

Note:

* EF Admin, Company Admin and Job Site Admin can edit information for Job Site Config.

### 5.1 Job Site Details

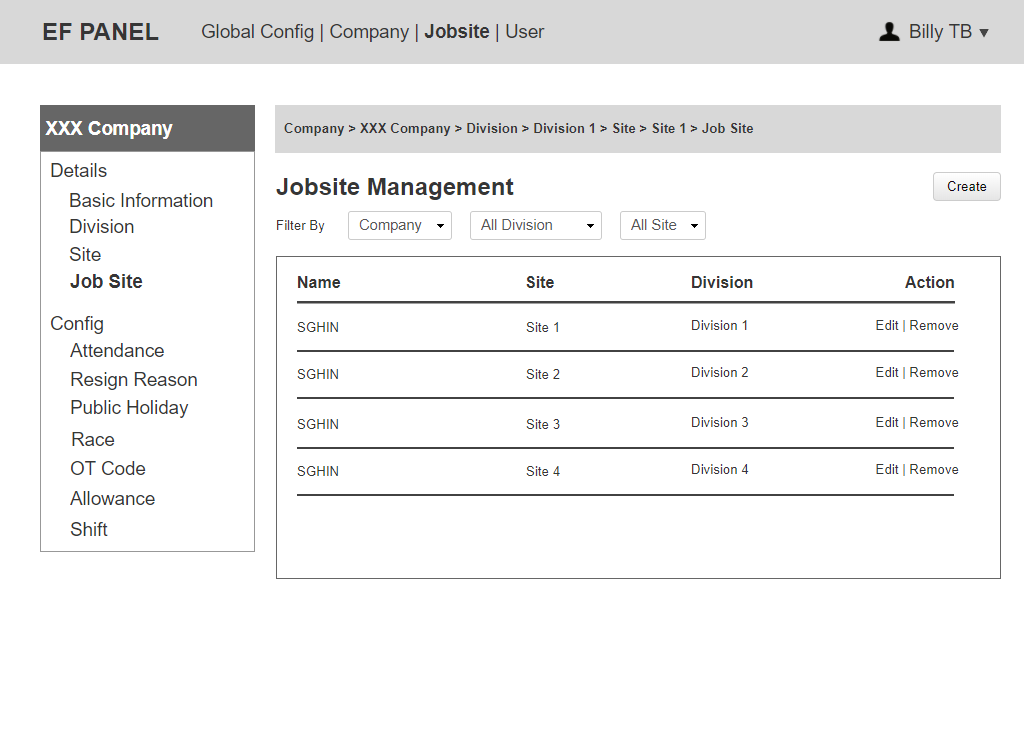


Figure 29: Job Site List

Notes:

* Only EF Admin can see Company dropdown on the filter.
* Can filter by Company, Department, Site.
* EF Admin and Company Admin can remove a Job Site if there is no transaction.
* Company Admin can only see its own job site.

### 5.1.1 Job Site Basic Information

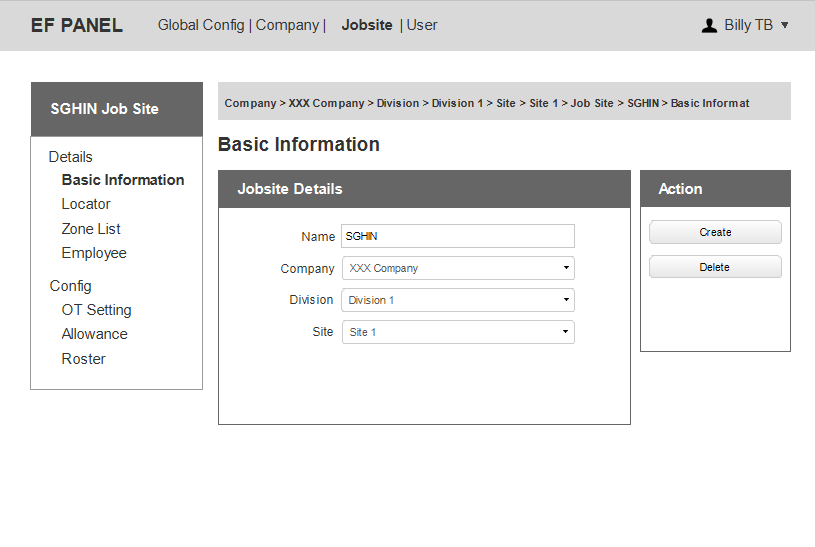


Figure 30: Job Site Details

Notes:

* Only EF Admin can edit Company dropdown, Company Admin can not.

### 5.1.2 Job Site Employee



Figure 31: Employee List

Notes:

* Can click on “Create” to add a new employee.
* Can click on “Edit” to update all information of an employee.
* Can click on “Remove” to delete an employee.
* Only EF admin is allowed to edit the “company dropdown”.
* Can click on “Roster” to see Roster List belong to this employee.
* Can click on “Event” to choose and update Event Type for this employee.

### 5.2 Job Site Config

### 5.2.1 Job Site OT Setting

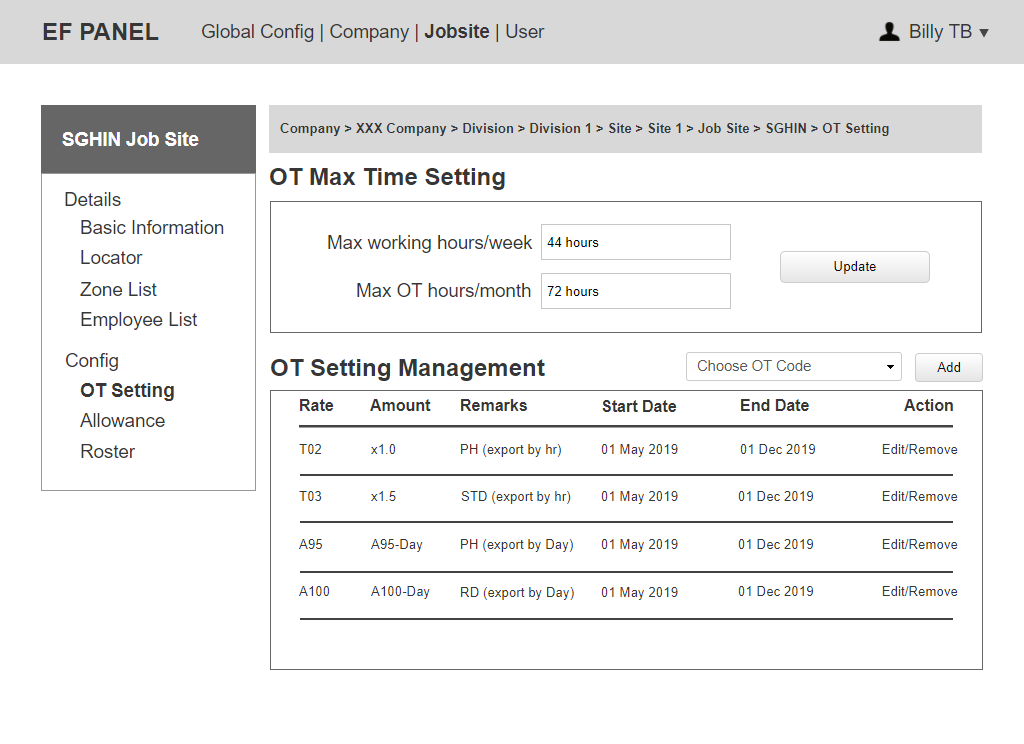


Figure 32: Job Site OT Setting

Notes:

* OT Max Time Setting will be used for OT with Standard + Off day.Is this setting for display purpose only or do you need us to actually stop record when OT hours of 'Standard + off day' is over 72 hours/week?
* Can set max working hours per week and max OT hours per week.
* The system will list all active OT code in Company Config to dropdown "Choose OT Code”.
* Can click on “Edit” to update for value, remarks, period.
* After creation, an OT Code can only be removed if it has not been used (no children).
* OT Max Time Setting is used to alert admin to send Email notification for each Employee if they reach 72 hours limit.

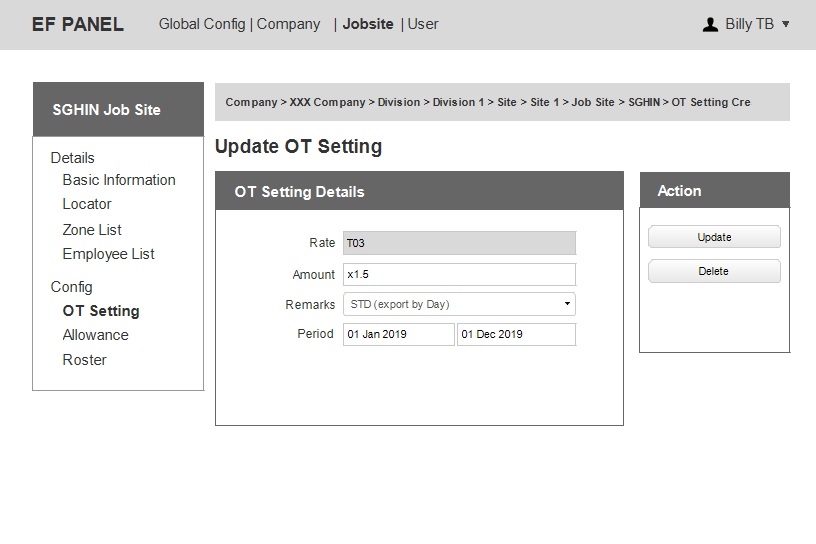


Figure 33: Company OT Rate Setting Update

Notes:

* At Job Site Config, Admin is not allow to create a new OT code. Admin only allow to choose the OT code from Company Config then update value, remarks and period.
* Remarks includes: PH, STD, O, RD.

### 5.2.2 Job Site Allowance

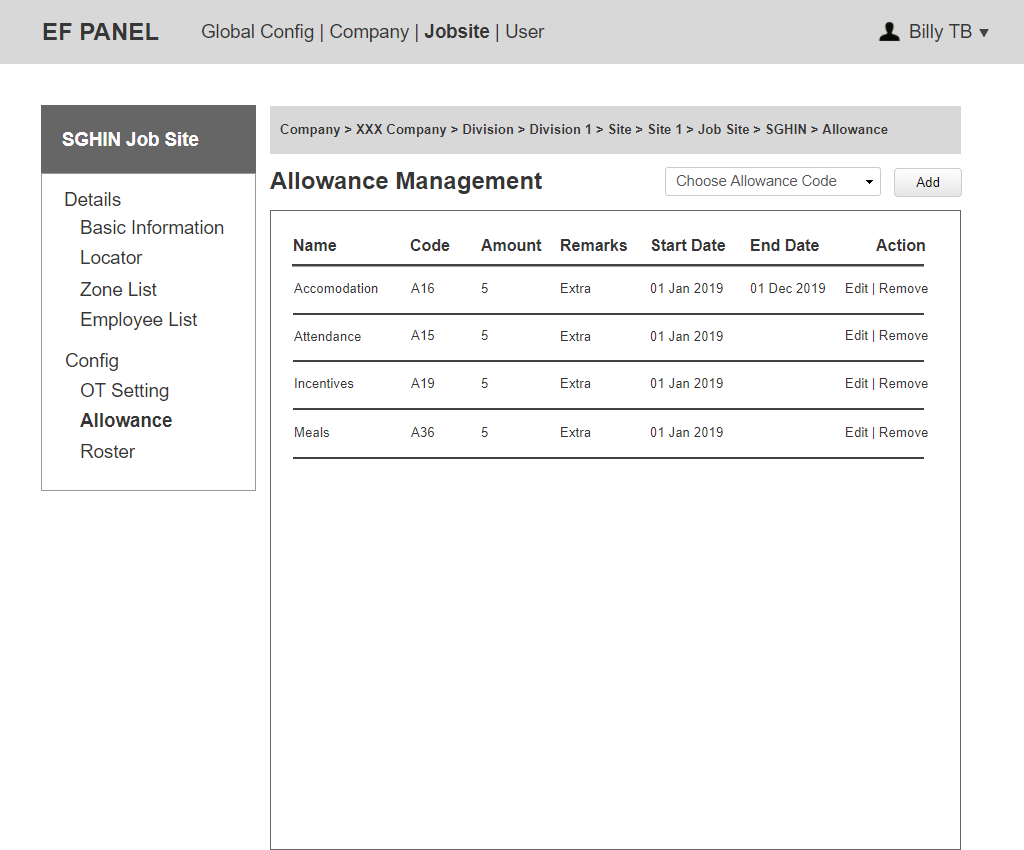


Figure 34: Job Site Allowance List

Notes:

* The system will list all active allowance code in Company Config to dropdown "Choose Allowance Code”.
* Can click on “Edit” to update value for an allowance.
* After creation, an allowance can only be removed if it has not been used (no children).

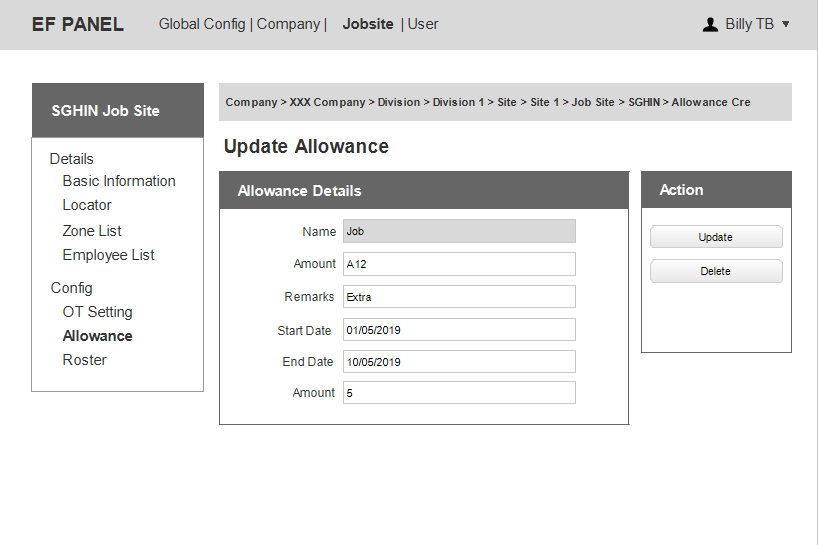


Figure 35: Allowance Update

Notes:

* Only can update value for an allowance.

## Employee



Figure 36: Employee List

Notes:

* Can click on “Create” to add a new employee.
* Can click on “Edit” to update all information of an employee.
* Can click on “Remove” to delete an employee.
* Only EF admin is allowed to edit the “company dropdown”.
* Can click on “Roster” to see Roster List belong to this employee.
* Can click on “Event” to choose and update Event Type for this employee.
* Any changes of Employee must be recorded and shown in Employee History.

### 6.1 Employee Details

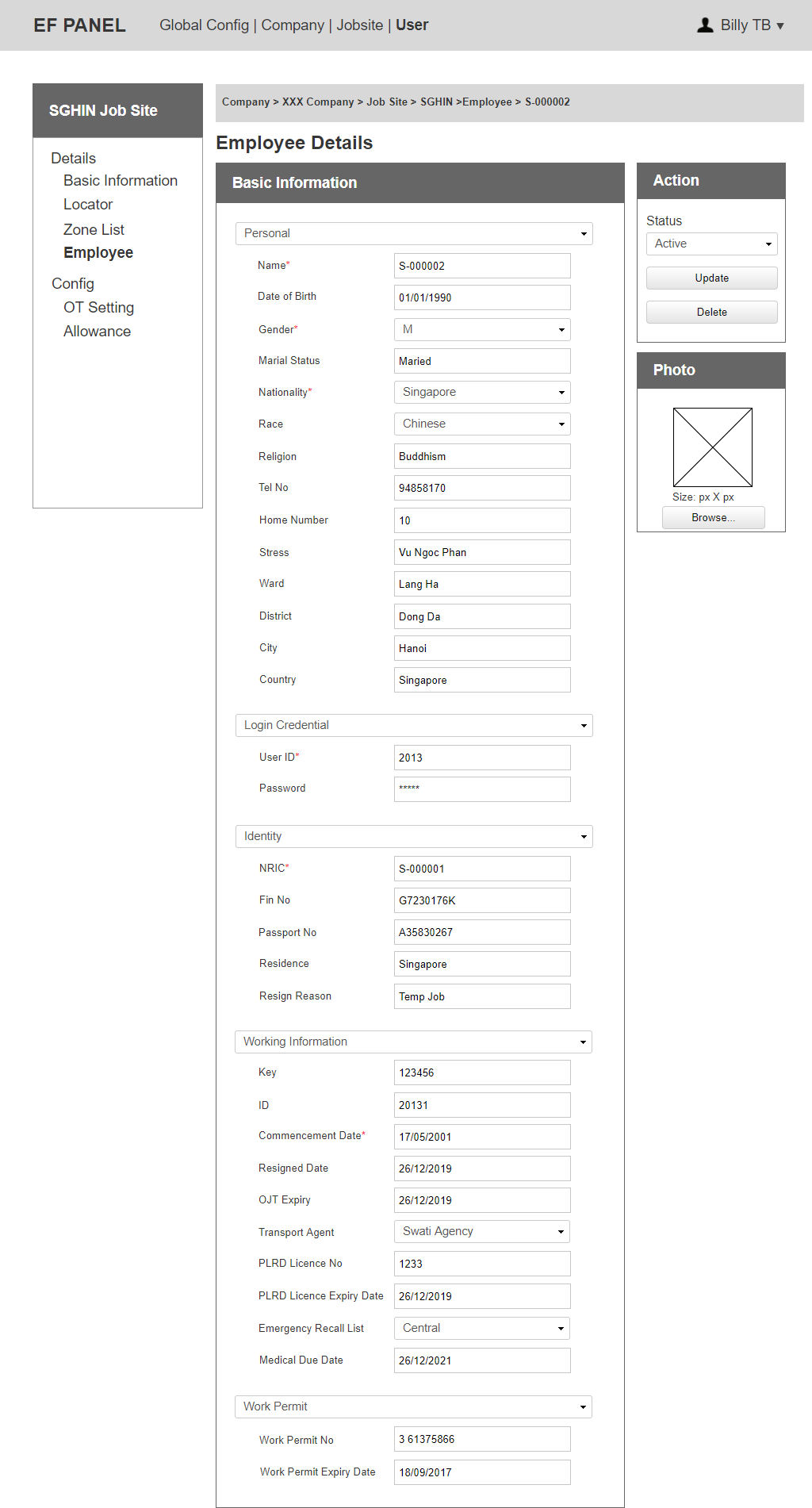


Figure 37: Employee Details

Notes:

* Allowance can be set at Employee Information.

### 6.2 Employee Event – Promotion

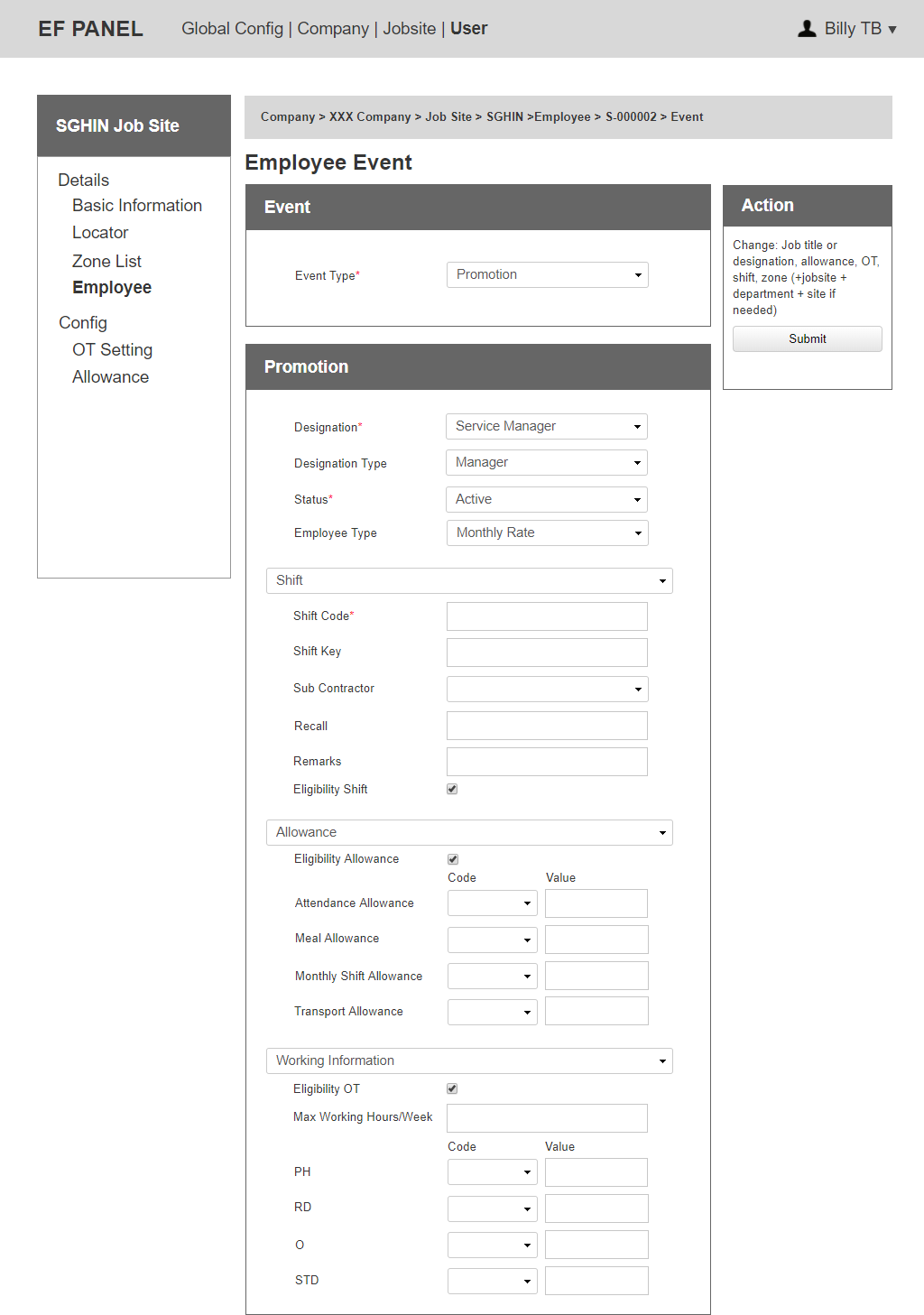


Figure 38: Employee Event - Promotion

Notes:

* Can change: Job title or designation, allowance, OT, shift, zone (+jobsite + department + site if needed).

### 6.3 Employee Event – Termination/Resign

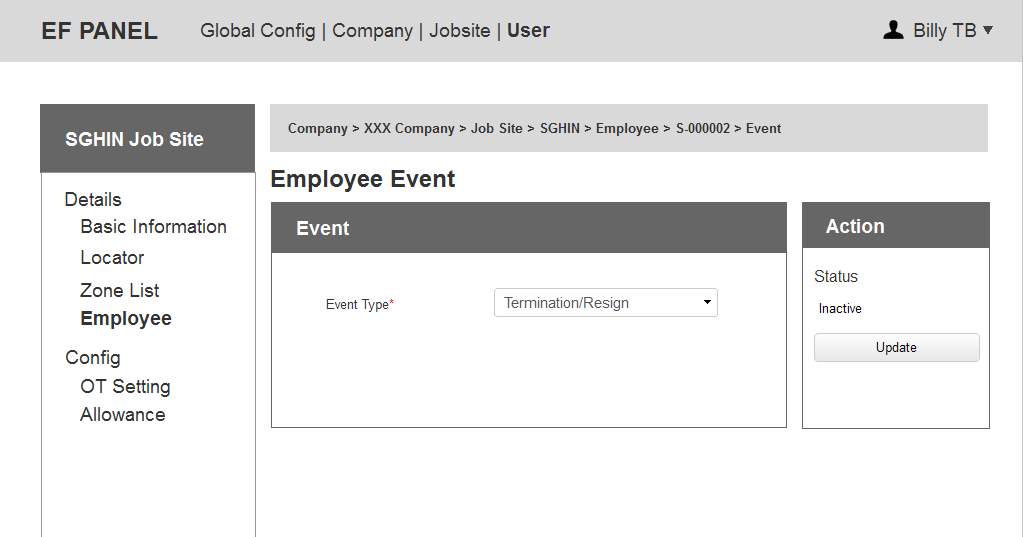


Figure 39: Employee Event – Termination/Resign

### 6.4 Employee Rejoin

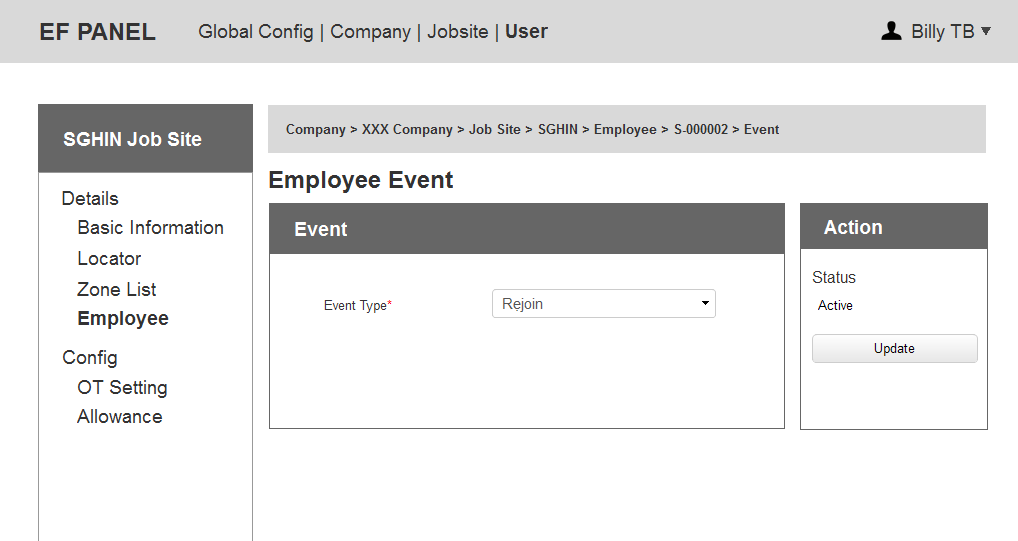


Figure 40: Employee Event Rejoin

### 6.5 Employee Contract

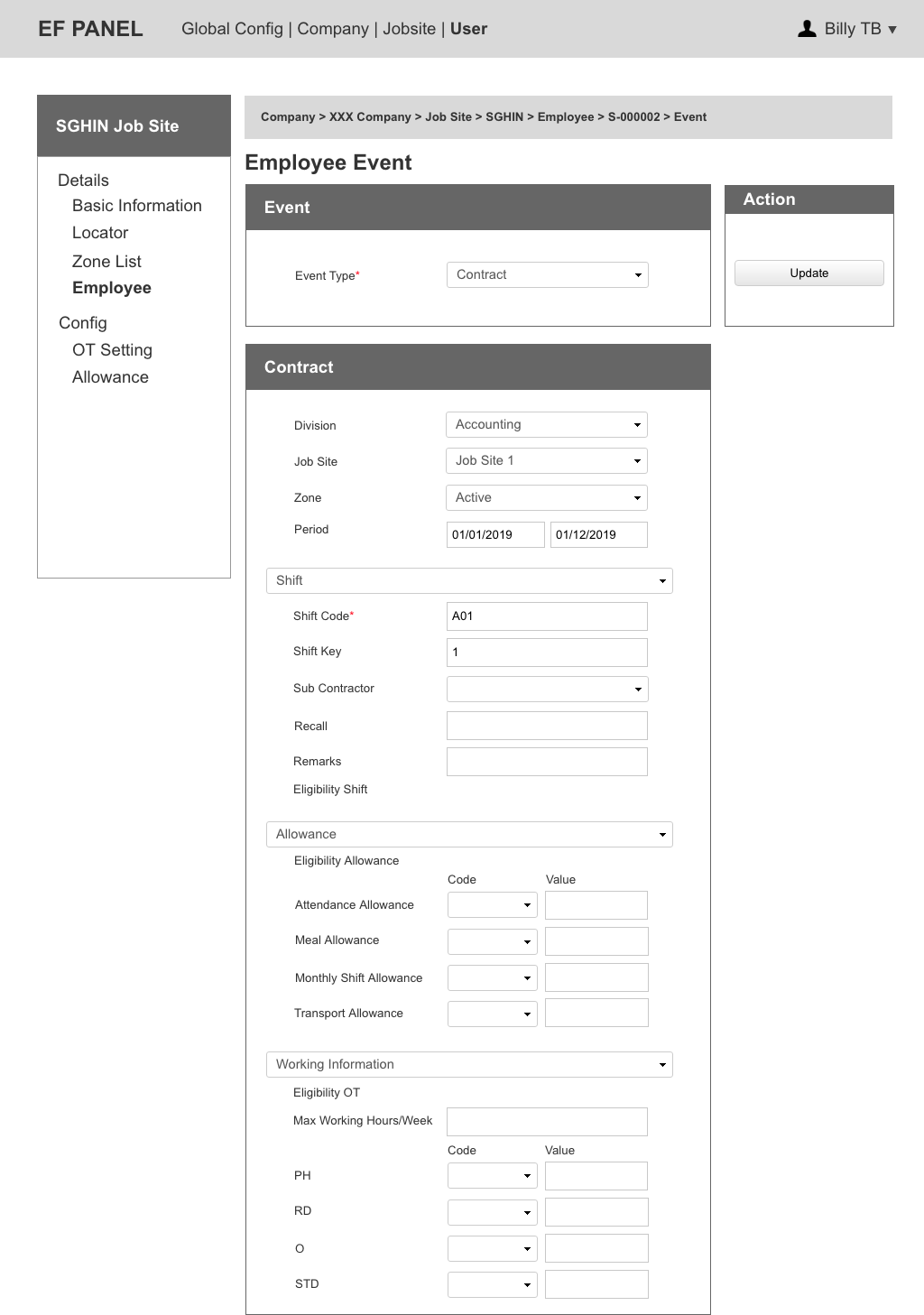


Figure 41: Employee Event Contract

### 6.6 Employee Transfer

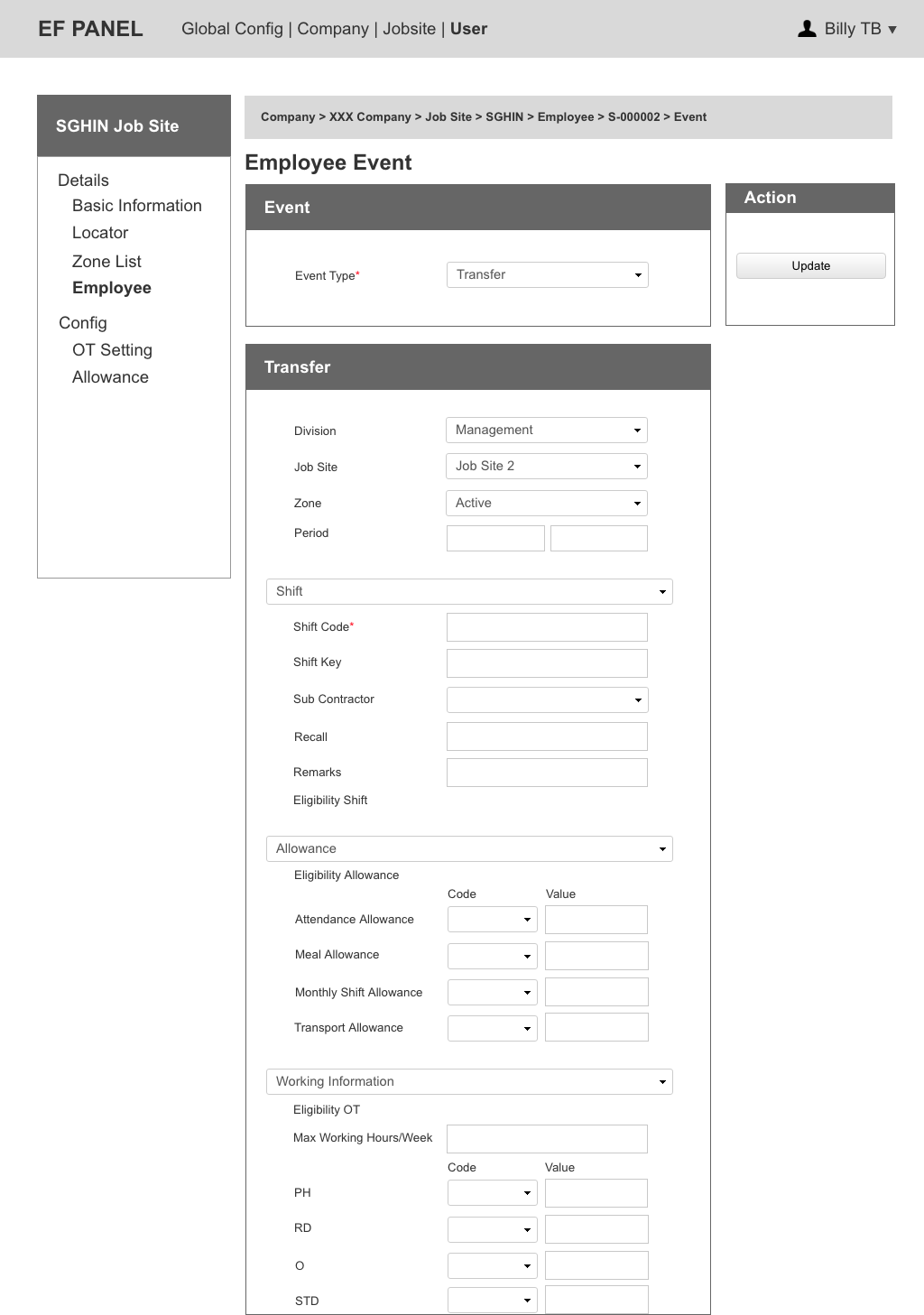


Figure 42: Employee Event Transfer

### 6.7 Employee Roster

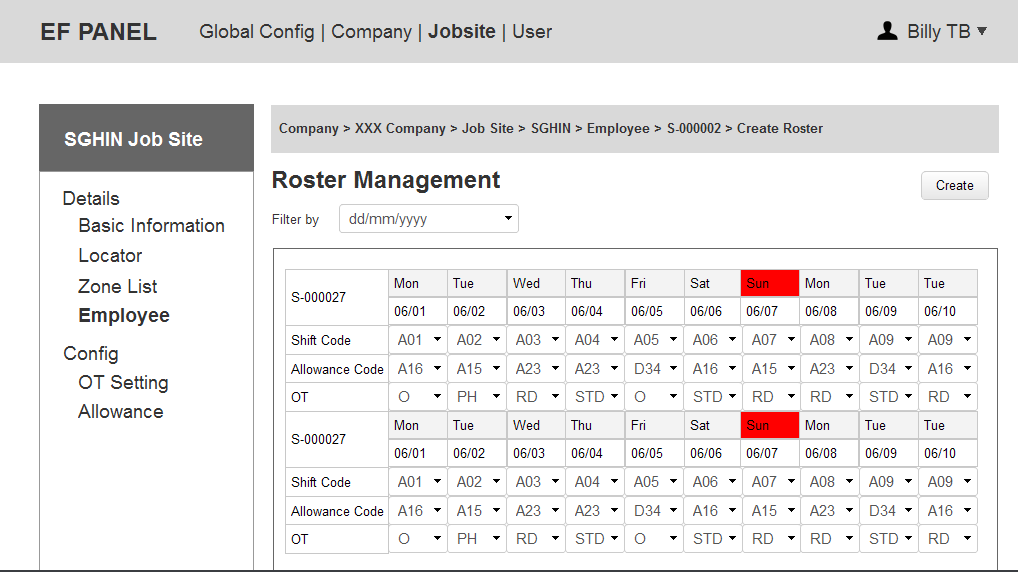


Figure 43: Employee Roster List

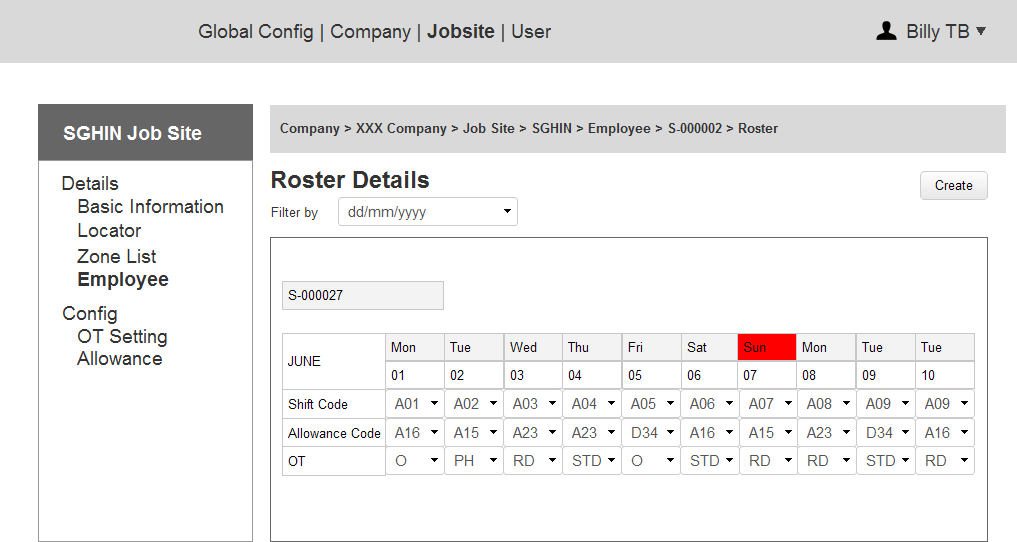


Figure 44: Create Employee Roster

Notes:

* Shift Code will be automatically belong to Employee Shift then can be edited.
* Allowance Code will be automatically belong to Employee Allowance then can be edited.
* OT Code will be automatically belong to Employee OT Code then can be edited.

### 6.8 Employee History

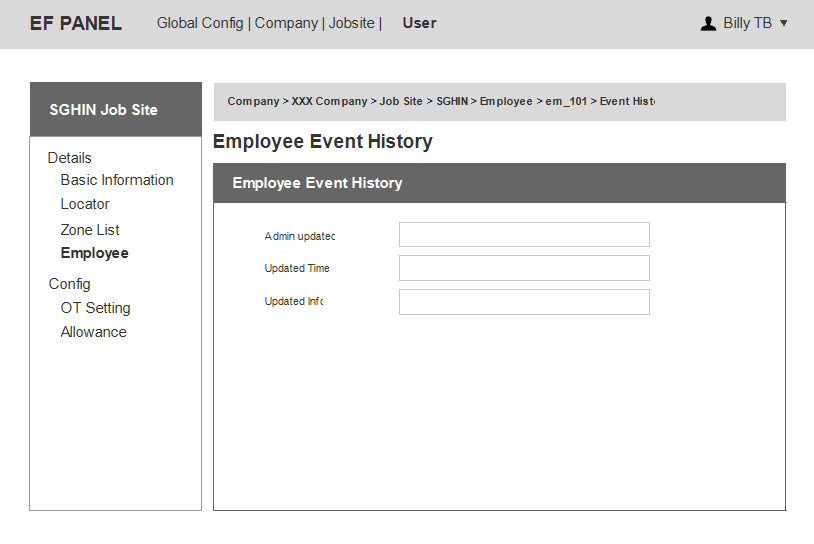


Figure 45: Employee History