## Revision History

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<th>Version</th>
<th>Description</th>
<th>Author</th>
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<td>1.5</td>
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<td>T.Suganya</td>
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<td>1.6</td>
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<td>1.8.1</td>
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<td>T.Suganya</td>
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<td>1.9</td>
<td>Admin Groups, Empty status filter</td>
<td>T.Suganya</td>
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<tr>
<td>10/08/2015</td>
<td>2.0</td>
<td>Send reminder, User filters</td>
<td>T.Suganya</td>
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<td>2.1.1</td>
<td>Attendance, Reports</td>
<td>T.Suganya</td>
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<td>Termination date, Filters in Attendance and Reports</td>
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<td>R.Dhineshkumar</td>
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</tbody>
</table>
Table of Contents

1. INTRODUCTION .............................................................................................................................................. 8
   1.1 INSTALLATION ............................................................................................................................................. 8

2. TIME & EXPENSE .............................................................................................................................................. 8
   2.1 TIMESHEET ..................................................................................................................................................... 8
       2.1.1 Timesheet List ..................................................................................................................................... 8
       2.1.2 Send Reminder ................................................................................................................................... 9
       2.1.3 New timesheet ................................................................................................................................... 9
       2.1.4 Custom fields ...................................................................................................................................... 9
   2.2 EXPENSE SHEET ........................................................................................................................................ 10
       2.2.1 Expense Sheet List ............................................................................................................................ 10
       2.2.2 New Expense Sheet ........................................................................................................................... 10
       2.2.3 Detail and Report Page ..................................................................................................................... 11
   2.3 APPROVAL SYSTEM ............................................................................................................................... 11
       2.3.1 Status ................................................................................................................................................. 11
       2.3.2 Workflow .......................................................................................................................................... 12

3. ATTENDANCE ..................................................................................................................................................... 13
   3.1 LEAVE SUMMARY ...................................................................................................................................... 14
   3.2 CLOCK IN/OUT .......................................................................................................................................... 15

4. PAYROLL .......................................................................................................................................................... 16
   4.1 PAYROLL LIST .......................................................................................................................................... 16
   4.2 USER SETTINGS ........................................................................................................................................ 17

5. CRM ................................................................................................................................................................. 17
   5.1 LEADS ....................................................................................................................................................... 18
   5.2 ACCOUNTS ................................................................................................................................................. 19
       5.2.1 New Account ..................................................................................................................................... 19
   5.3 OPPORTUNITIES ...................................................................................................................................... 20
       5.3.1 Add/Edit Opportunities .................................................................................................................. 21
   5.4 ACTIVITIES .............................................................................................................................................. 21
       5.4.1 Add/Edit Activities ......................................................................................................................... 22
   5.5 CONTACTS ............................................................................................................................................... 22
       5.5.1 Add/Edit Contacts ......................................................................................................................... 23

6. BILLING ........................................................................................................................................................... 23
   6.1 CONTRACTS ............................................................................................................................................ 23
       6.1.1 New contract .................................................................................................................................... 24
   6.2 BILLABLE PROJECTS ............................................................................................................................. 24
       6.2.1 New Billing Projects ........................................................................................................................ 25
   6.3 INVOICE LIST .......................................................................................................................................... 25
       6.3.1 New Invoice ..................................................................................................................................... 26
       6.3.2 Edit Invoice ...................................................................................................................................... 26
       6.3.3 Unbilled invoice ............................................................................................................................... 26
       6.3.4 Print invoice .................................................................................................................................... 27
   6.4 PAYMENTS ............................................................................................................................................... 28
       6.4.1 Edit Payment .................................................................................................................................... 28

7. ACCOUNTING ................................................................................................................................................ 28

2016 , Adhi Software Pvt Ltd
12. ERPMINE CONFIGURATION ........................................................................... 58

12.1 GENERAL SETTINGS ...................................................................................... 58
12.1.1 Enable reports .......................................................................................... 58
12.1.2 Company Name ........................................................................................ 58
12.1.3 Address .................................................................................................... 58
12.1.4 Header Logo ............................................................................................ 58

12.2 TIME & EXPENSE SETTINGS ....................................................................... 58
12.2.1 Include closed issues ............................................................................... 58
12.2.2 Previous week template .......................................................................... 59
12.2.3 Issue input format .................................................................................... 59
12.2.4 Allow Blank Issue ................................................................................... 59
12.2.5 Enter comment in row ............................................................................ 60
12.2.6 Use detail time entry popup ..................................................................... 60
12.2.7 Allow User Filtering to My Issues ............................................................ 61
12.2.8 T&E Admin Groups .................................................................................. 61
12.2.9 Time Settings ........................................................................................... 61
12.2.10 Default work time .................................................................................. 61
12.2.11 Max hour ................................................................................................ 61
12.2.12 Enforce Max hour .................................................................................. 61
12.2.13 Enforce Min hour ................................................................................... 61
12.2.14 Filter Issue by Tracker .......................................................................... 62
12.2.15 Allow User Filtering by Tracker ............................................................... 62
12.2.16 Enter custom field in row1 ..................................................................... 62
12.2.17 Enter custom field in row2 ..................................................................... 62
12.2.18 Expense Settings .................................................................................... 62
12.2.19 Enable Expense ..................................................................................... 62
12.2.20 Expense project ..................................................................................... 62
12.2.21 Filter issue by tracker ............................................................................. 63
12.2.22 Approval Settings ................................................................................... 63
12.2.23 Use Approval System ............................................................................ 63
12.2.24 Auto approve .......................................................................................... 63
12.2.25 Approve own time/expense sheet .......................................................... 63
12.2.26 Submission ask text .............................................................................. 64
12.2.27 Email Notification .................................................................................. 64
12.2.28 Submission deadline ............................................................................. 64
12.2.29 Non submission email message ............................................................. 64
12.2.30 Target group of Non submission email .................................................. 64

12.3 ATTENDANCE .............................................................................................. 64
12.3.1 Enable attendance module ...................................................................... 64
12.3.2 Enable clock in / clock out ...................................................................... 65
12.3.3 Break Time ................................................................................................ 65
12.3.4 Leave ......................................................................................................... 65
12.3.5 Miscellaneous fields ............................................................................... 66
12.3.6 Auto import ............................................................................................... 66
12.3.7 Auto Import Every.................................................................66
12.3.8 Import File Path.................................................................66
12.3.9 File Headers.................................................................66
12.3.10 Field Separator............................................................67
12.3.11 Field Wrapper...............................................................67
12.3.12 Encoding.................................................................67
12.3.13 Date format.................................................................67
12.3.14 Available Fields and Fields in File.................................67
12.4 PAYROLL...............................................................................67
12.4.1 Enable Payroll module.......................................................67
12.4.2 Auto generate salary.......................................................67
12.4.3 Currency........................................................................68
12.4.4 Pay Period......................................................................68
12.4.5 Pay day........................................................................68
12.4.6 Loss of pay......................................................................68
12.4.7 Financial year start.........................................................68
12.4.8 Auto post to General/Ledger............................................68
12.4.9 Credit Ledger..................................................................68
12.4.10 Basic pay.......................................................................68
12.4.11 Allowances....................................................................68
12.4.12 Deduction......................................................................68
12.5 BILLING................................................................................69
12.5.1 Enable Billing module......................................................69
12.5.2 Auto post to General/Ledger............................................69
12.5.3 Credit Ledger..................................................................69
12.5.4 Debit Ledger....................................................................69
12.5.5 Payment Credit Ledger...................................................69
12.5.6 Payment Debit Ledger.....................................................69
12.5.7 Auto generate invoice......................................................69
12.5.8 Invoice generation period................................................70
12.5.9 Contract number prefix...................................................70
12.5.10 Invoice generation day....................................................70
12.5.11 Invoice number prefix....................................................70
12.5.12 Generate Invoice from..................................................70
12.5.13 Time Entry Billing id.......................................................70
12.5.14 Rate fields.....................................................................70
12.5.15 Billing Admin group.......................................................70
12.5.16 Invoice Components.....................................................70
12.6 ACCOUNTING.......................................................................70
12.6.1 Enable Accounting module.............................................71
12.6.2 Accounting Group............................................................71
12.6.3 Accounting Admin Group.................................................71
12.7 CRM.....................................................................................71
12.7.1 Enable CRM module.......................................................71
12.7.2 CRM User Group.............................................................71
12.7.3 CRM Admin Group.........................................................71
10.8 PURCHASING.......................................................................71
12.8.2 Enable Purchase Module..................................................72
12.8.2 Purchase User Group.......................................................72
12.8.3 Purchase Admin Group....................................................72
12.8.4 Auto post to General/Ledger............................................72
12.8.5 Credit Ledger..................................................................72
12.8.6 Debit Ledger....................................................................72
12.8.7 Payment Credit Ledger....................................................72
12.8.8 Payment Debit Ledger........................................................................................................73
12.8.9 Quote Number Prefix..........................................................................................................73
12.8.10 PO Number Prefix............................................................................................................73
12.8.11 SI Number Prefix.............................................................................................................73
12.8.12 Quote Components...........................................................................................................73
12.8.13 Purchase Order Components...........................................................................................73
12.8.14 Supplier Invoice Components........................................................................................73
12.8 INVENTORY......................................................................................................................................73
12.8.1 Enable Inventory Module....................................................................................................73
12.9.2 Inventory User Group.........................................................................................................73
12.9.3 Inventory Admin Group......................................................................................................74
12.9.4 Auto post to General/Ledger...............................................................................................74
12.9.5 Credit Ledger......................................................................................................................74
12.9.6 Debit Ledger.......................................................................................................................74
13. REDMINE SETTINGS....................................................................................................................74
13.1 Approve Time Logs Permission..............................................................................................74
13.2 Permissions............................................................................................................................74
13.2.1 Issue Visibility....................................................................................................................75
13.3 Start Of Week................................................................................................................................75
14. PDF & CSV......................................................................................................................................76
15. REST API........................................................................................................................................76
15.1 List Time/Expense Sheets.......................................................................................................76
15.2 Create Time/Expense Sheet.....................................................................................................78
15.3 Get Time/Expense Sheet.........................................................................................................79
15.4 Update Time/Expense Sheet...................................................................................................81
15.5 Delete Time/Expense Sheet.....................................................................................................83
15.6 Delete Time/Expense Entries.................................................................................................83
16. CODE HOOKS................................................................................................................................84
17. CUSTOMIZATION........................................................................................................................85
18. TROUBLESHOOTING..................................................................................................................85
1. Introduction

ERPmine is a free open source ERP for Service Industries. It runs as a plugin within Redmine, it has the following modules:

2. Time & Expense

2.1 Timesheet

Timesheet is used to log the spent time for projects by their members for a week. The member should have log time permission to fill out the timesheet.

2.1.1 Timesheet List

The list page by default displays the timesheets for the current month. Date range filters can be applied to the list page. The users with “Edit time logs” permission will have additional filters; project, member, group and status drop downs. The list page displays the list of timesheets satisfying the filter criteria. The project/group dropdown is used for filtering the member dropdown. User custom fields which are marked as filters can also be used to filter time/expense sheets.
Note: Users who have edit permissions on all projects within a timesheet will be allowed to delete a timesheet from this list page.

2.1.2 Send Reminder
Manager and TE admins can send reminders to the user to submit and approve the time/expense sheet. The reminders will be sent based on the filtered time/expense sheet list. The submission reminder will be sent to the corresponding user and the approval reminder will be sent to the user’s manager.

![Send Reminder Email]

2.1.3 New timesheet
Here are the steps to add a new timesheet.

- Click on the top menu “ERPmine”.
- Select the tab “Time & Expense”
- Click on “New Timesheet” hyperlink
- Enter the start date of the week for the new timesheet and if previous week template is needed check the previous week template checkbox, else uncheck it
- Click “Continue” to create timesheet.

The screenshot represent the timesheet page. Using the “Add row” link, the user can enter new time entry. Choose the project, issue and activity from their respective dropdowns. Rows can be deleted using the delete icon at the end of the row.

The Previous and Next link helps the user to navigate to the previous and next week timesheet.

2.1.4 Custom fields
Custom fields can be added at the Timesheet level and also at the individual spent time level.
Administrators can create custom fields by navigating to Administration → Custom fields menu → New custom field link. To create individual spent time custom fields choose the “Spent time” option and for timesheet custom fields choose the “Weekly Time” option from the Custom fields page.

2.1.4.1 Spent time Custom Fields
The spent time custom fields are applicable to the individual cells within a timesheet; these are attributes of Spent Time entity. These custom fields can be configured for a row (discussed in section 6.5.7 and 6.5.8) instead of a cell and by default it will be shown in detail time entry popup (discussed in section 6.4).

2.1.4.2 Timesheet Custom Fields
These custom fields are applicable to the whole timesheet and are created from the Weekly Time tab from the Custom fields page. For e.g., the Purchase Order field applies to the whole timesheet.

2.2 Expense Sheet
Expense sheet is used to fill out the expenses incurred on various projects. It works same as the timesheet. In addition to project, issue and activity fields, it has the currency field as well. Even though different currencies can be used for different rows, the currency from the last row is used for the day total and week total. Custom fields are not available for Expense Sheet.

2.2.1 Expense Sheet List
This page list the expense sheets based on the filter criteria chosen on the page. This page is similar to the timesheet list page described in section 2.1.

2.2.2 New Expense Sheet
The steps for adding a new expense sheet is same as that of the timesheet.
2.2.3 Detail and Report Page

The expense detail and report page resembles the spent time detail and report page of redmine.

The navigation for the expense Detail and Report page is Projects ➔ Edit project ➔ Expense Report.

The project members with ‘View Spent Time’ permission have access to this page.

The details tab will list individual expense entries made for the project. We can edit and delete expense entries from here as well. The edit link will take the user to the corresponding expense sheet. Individual expense entries can be deleted from this page as well. The report tab can be used to summarize data at various levels; member, tracker etc.

2.3 Approval System

The ERPmine sheets can be approved / rejected by supervisors after it is submitted by Project Members.

2.3.1 Status

The various statuses of the Time & Expense sheets are:

- New
- Submitted
- Approved
The time & expense sheet is in “New” status when it is created. Once the timesheet is submitted, it goes to the “Submitted” status. It goes to “Approved” status when the supervisor approves it. When the timesheet is rejected, it goes to the “Rejected” status and goes backs to the project member for resubmission. The Time & Expense Sheet returns to the “New” status when it gets un-submitted.

### 2.3.2 Workflow

The workflow of Approval system is as follows.

1. The Time & Expense sheet has the Submit button in addition to the Save button.
2. A team member can save a time & expense sheet any number of times, but can only submit once.
3. Once a time & expense sheet is submitted, the user with “Approve time logs” permission can approve / reject it, the project member can also un-submit his time & expense sheet, if he wants to take back his submission.
4. Once approved, the time & expense sheets can never be edited.
5. If the time & expense sheet is rejected, then it goes back to the project member for resubmission. An email about the rejection is sent to the Project Member.
vi) Once approved, a time & expense sheet can be unapproved; it sends the time & expense sheet back to submitted state.

vii) If the timesheet is not submitted before deadline, then an email notification will be sent to the project member.

3. Attendance

Attendance module is enabled when "Enable attendance module and Enable clock in / clock out" is checked in the settings page. It allows the user to enable/disable attendance module and clock in and clock-out from the timesheet page. User is also allowed to do multiple clock-in and clock-out on the same day.

TE admin can add and edit other user’s clock in and clock out time. The Start textbox shows the clock in time, End textbox shows the clock out time, Total number of hours worked in a day excluding the break time hours is shown below the end time. Remaining hours are the number of hours left to be logged.
3.1 Leave Summary

The leave tab shows the summary of accrual, leave taken during the month. The list page shows closing balance for up to five configured leave information. User filters can be applied.

The detail page shows opening balance, accrual, leave taken in hours, remaining hours for each leave configured. TE admin are allowed to edit other user’s leave information.
If the setting “Approver Can Approve their own Time & Expense” is enabled, then TE admin can edit his/her own leave information.

A scheduled job will be run at start of each month to calculate the leave accruals. The following rules are applied in calculating accruals:

- Accrual will be given only when the user has attendance for at least 11 full days of month. For example, if the “Default work time” configured to 8 hours, then the user should have attendance for at least 88 hours to get accrual.

- If the ‘reset month’ is configured for a leave, then the balance will be reset to zero during that month. If the user has values in negative then it will be carry forwarded to the next period.

- If the ‘accrual after’ is configured, then accrual will start only after passing the initial period configured.

### 3.2 Clock in/out

The list page by default displays the daily clock in/out for the current month. Date range and Group filters can be applied to the list page.
4. Payroll

This module allows the user to setup the payroll for the employees. The payroll settings can be done at the company level and can be overrides at the employee level. Once the payroll setup is done, the payroll can be generated on a periodic basis (monthly, weekly, bi-weekly etc). The payroll generation can be automated as well.

4.1 Payroll List

The list page by default displays the payroll for the current month. Date range and group filters can be applied to the list page and generate the salary.
4.2 User Settings

To override an user payroll setting from the company level payroll setting, the User Setting tab is used. The list page by default displays the list of users. User, status and Group filters can be applied to the list page. The Edit page can be used to override the payroll setting for the individual user.

User Salary Settings

![User Salary Settings](image)

<table>
<thead>
<tr>
<th>User</th>
<th>Salary Date</th>
<th>Basic Pay</th>
<th>Allowances</th>
<th>Deductions</th>
<th>Gross</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>dhinesh adhi</td>
<td>2017-06-01</td>
<td>$15000.00</td>
<td>$12000.00</td>
<td>$2070.00</td>
<td>$27000.00</td>
<td>$24990.00</td>
</tr>
<tr>
<td>dhinesh adhi</td>
<td>2017-05-01</td>
<td>$15000.00</td>
<td>$12000.00</td>
<td>$2070.00</td>
<td>$27000.00</td>
<td>$24990.00</td>
</tr>
<tr>
<td>karthick adhi</td>
<td>2017-06-01</td>
<td>$15000.00</td>
<td>$12000.00</td>
<td>$2235.00</td>
<td>$27000.00</td>
<td>$24765.00</td>
</tr>
<tr>
<td>karthick adhi</td>
<td>2017-05-01</td>
<td>$15000.00</td>
<td>$12000.00</td>
<td>$2235.00</td>
<td>$27000.00</td>
<td>$24765.00</td>
</tr>
</tbody>
</table>

Total: $108000.00

Net: $21712.00
5. CRM

This Module allows the user to manage CRM entities like Leads, account contacts, opportunities and activities.

5.1 Leads

The list page by default displays the Leads details. Once Leads are converted, they are no longer visible in the Leads List View. Lead name wildcard search and Status filters can be applied to the list page.

5.1.2 Add/Edit Lead

To add a new Lead, click on “New Lead” hyperlink
5.2 Accounts

Accounts are clients for whom the projects are executed, there can be multiple projects for an account. The list page by default displays the list of accounts. Account name wildcard search can be applied to the list page.

5.2.1 New Account

To add a new account, click on “New Account” hyperlink
5.3 Opportunities

Any sales opportunities within an account can be captured. The list page by default displays the list of opportunities. Opportunity name wildcard search, account and Date range filters can be applied to the list page. Opportunity can be removed.
5.3.1 Add/Edit Opportunities

To add a new Opportunity, click on “New Opportunity” hyperlink

![Opportunity Form]

5.4 Activities

The sales activities performed by the sales team can be tracked. The list page by default displays the list of activities. Activity type, Related To and Date range filters can be applied to the list page. Activity can be removed.

![Activities List]
5.4.1 Add/Edit Activities

To add a new Activity, click on “New Activity” hyperlink.

5.5 Contacts

A contact is an individual, they may work for an account. The list page by default displays the list of Contacts. Contact name wildcard search and account filters can be applied to the list page. Contact can be removed.
5.5.1 Add/Edit Contacts

To add a new Contact, click on “New Contact” hyperlink

6. Billing

This module allows the Billing admin to setup the Billable projects, generate invoice and print the invoice. Billing admin can manage accounts, contracts, taxes and billable projects. Once the Billing setup is done, the invoice can be generated on a periodic basis (quarterly, monthly, weekly, bi-weekly etc). The invoice generation can be automated as well.

6.1 Contracts

A contract is a signed agreement between an Account, Contact and the Company, they are typically signed before starting on a project. The list page by default displays the account and Contact contracts. Account, project filters can be applied to the list page.
6.1.1  New contract
To add a new contract, click on “New Contract” hyperlink

6.2  Billable Projects
Billable Projects are the ones which are setup for billing, they are created by associating projects to accounts. The list page by default displays the list of billable projects. Account and project filters can be applied to the list page. Account projects can be deleted using delete icon.
6.2.1 New Billing Projects
To add a new Billable Project, click on “New Billing Projects” hyperlink

The new/edit billing projects page associate the type, name and projects and define the properties such as; account/contact billing types, account/contact projects taxes and billing items and add the billing schedules. Billing schedules are required for Fixed Cost projects.

6.3 Invoice List
The list page by default displays the invoice for the current month. Date range, account and project filters can be applied to the list page. The invoices for a period can be generated from this page also. View the unbilled invoice using `Unbilled Invoice` link.
6.3.1 New Invoice

To add a new invoice click on “New Invoice” hyperlink

6.3.2 Edit Invoice

The invoice edit page displays the invoice details such as invoice number, project name, account name, invoice date, status, modified by and invoice items. Invoice items can be edited and new invoice items can be added also. Taxes are automatically applied. Invoices can be printed using ‘print invoice’ link.
6.3.3 Unbilled invoice

All unbilled items can be viewed by clicking on the ‘Unbilled Invoice’ link.
6.3.4 Print invoice

![Invoice Image]

6.4 Payments

Payments can be accepted for invoices, multiple invoices can be paid by a single payment. The list page by default displays the payments for the current month. Contact, account, project and Date range filters can be applied to the list page.

6.4.1 Edit Payment

The payment edit page displays the payment details such as payment date, payment type, reference number, account and contacts and projects and payments items. Payment items can be edited.
7. **Accounting**

This module allows the Accounting user to create/update the financial transaction and Ledgers.

7.1 **GL Transaction**

The list page by default displays the transaction details for the current month. Date range and ledgers filters can be applied to the list page.
7.1.1 New/Edit GL Transaction

The transaction edit page displays the transaction details such as transaction number, type, date, comments and ledgers. Transaction details can be edited and new transaction details can be added also.

Following are some validation rules used when entering a GL transaction.
<table>
<thead>
<tr>
<th>#</th>
<th>Transaction Type</th>
<th>Cr</th>
<th>Dr</th>
<th>Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Contra</td>
<td>Bank Ac / Cash</td>
<td>Bank Ac / Cash</td>
<td>Contra should contain bank and cash ledgers only.</td>
</tr>
<tr>
<td>2</td>
<td>Payment</td>
<td>Bank Ac / Cash</td>
<td></td>
<td>Payment should have bank or cash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>as Credit.</td>
</tr>
<tr>
<td>3</td>
<td>Receipt</td>
<td></td>
<td>Bank Ac / Cash</td>
<td>Receipt should have bank or cash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>as Debit</td>
</tr>
<tr>
<td>4</td>
<td>Purchase</td>
<td>Sundry creditors,</td>
<td>Purchase Group</td>
<td>Purchase should have sundry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bank Ac / Cash</td>
<td></td>
<td>creditors/debitors, cash and bank as credit and purchase group as</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>debit</td>
</tr>
<tr>
<td>5</td>
<td>Sales</td>
<td>Sales Group</td>
<td>Sundry creditors,</td>
<td>Sales should have sundry</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bank Ac / Cash</td>
<td>creditors/debitors, cash and bank as debit and sales group as</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>credit</td>
</tr>
<tr>
<td>6</td>
<td>Credit note</td>
<td>Sundry creditors,</td>
<td>Except Bank Ac /</td>
<td>Credit note should have sundry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sundry debtors,</td>
<td>Cash</td>
<td>creditors/debitors, cash and bank as credit and should not have cash</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bank Ac / Cash</td>
<td></td>
<td>and bank as debit.</td>
</tr>
<tr>
<td>7</td>
<td>Debit note</td>
<td>Except Bank Ac /</td>
<td>Sundry creditors,</td>
<td>Debit note should have sundry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash</td>
<td>Sundry debtors,</td>
<td>creditors/debitors, cash and bank as debit and should not have cash</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bank Ac / Cash</td>
<td>and bank as credit.</td>
</tr>
</tbody>
</table>

### 7.2 Ledgers

The list page by default displays the list of ledgers. Ledger name wildcard search and ledger type filters can be applied to the list page. Ledger can be removed.
7.2.1 New/Edit Ledger
To add a new tax click on “New Tax” hyperlink

8. Purchasing

This module allows the Purchasing users and admin to create the Request for Quote (RFQ), quote, and purchase order. A new supplier invoice can be accepted against a purchase order and a payment can be made against the supplier invoice.

8.1 RFQ
The list page by default displays the list of RFQ. RFQ name wildcard search and Date filters can be applied to the list page. RFQ can be removed.

8.1.1 New/Edit RFQ
To add a new RFQ click on “New RFQ” hyperlink
8.2 Quote

A quote is a proposal by a supplier to supply goods to a prospective customer. It will have items details with specification and price. The list page by default displays the list of quote. Date range, supplier account, contact, project and RFQ filters can be applied to the list page. Quote can be removed.

8.2.1 New/Edit Quote

To add a new Quote click on “New Quote” hyperlink. Quote can be edited to enable/disable the winning quote. If a quote is accepted for purchase it should be marked as a winning quote.
8.2.1.1 Print Quote

A quote can be printed using the print link, it will open up the printer friendly Quote report.

**QUOTES**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Item Type</th>
<th>Rate</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELL Keyboard V1.0</td>
<td>Invoice</td>
<td>$42.00</td>
<td>434.00</td>
<td>$18662.00</td>
</tr>
<tr>
<td>GST</td>
<td>Tax</td>
<td>$2662</td>
<td>1</td>
<td>$1862</td>
</tr>
</tbody>
</table>

SubTotal : 20524.00

**8.3 Purchase Order**

A Purchase order is nothing but a confirmation from the customer purchasing goods from a supplier, it should be created from a winning quote. The list page by default displays the list of purchasing order. Date range, supplier account, contact, project and RFQ filters can be applied to the list page. Purchasing order can be removed.
8.3.1 New/Edit Purchase Order

To add a new purchase order click on “New purchase order” hyperlink. A purchase order should be created from RFQ and winning quote. Purchase order items can be populated from winning quote.

8.3.1.1 Print Purchase Order

A purchase order can be printed using the print link, it will open up the printer friendly purchase order report.
8.4 Supplier Invoice

Once the goods are received from the supplier, the supplier invoice can be entered into the system. The list page by default displays the list of supplier invoice. Date range, supplier account, contact, project and RFQ filters can be applied to the list page. Supplier invoice can be removed.

8.4.1 New/Edit Supplier Invoice

To add a new supplier invoice click on “New supplier invoice” hyperlink. Supplier invoice items can be populating from purchase order.
8.4.1.1 Print Supplier Invoice

A supplier invoice can be printed using the print link, it will open up the printer friendly supplier invoice report.

8.5 Supplier Payment

Supplier payments can be made against a supplier invoices, multiple supplier invoices can be paid by a single payment. The list page by default displays the payments for the current month. Contact, supplier account, project and Date range filters can be applied to the list page.
8.5.1 New/Edit Supplier Payment

The supplier payment edit page displays the payment details such as payment date, payment type, reference number, account and contacts and projects and payments items. Payment items can be edited.
8.6 Supplier Accounts
Supplier accounts are Vendors for whom the goods are purchased, there can be multiple purchase order for a supplier. The list page by default displays the list of supplier accounts. Supplier Account name wildcard search can be applied to the list page.

8.6.1 New/Edit Supplier Account
To add a new supplier, click on “New Supplier Account” hyperlink

8.7 Supplier Contact
A supplier contact is an individual they may work for an Supplier. The list page by default displays the list of Supplier Contacts. Supplier Contact name wildcard search and account filters can be applied to the list page. Supplier Contact can be removed.
8.7.1 Add/Edit Supplier Contacts

To add a new Supplier Contact, click on “New Contact” hyperlink

9. Inventory

This module allows the Inventory users and admin to create the Product, Items, shipments and log materials. A new shipment can be created against a supplier invoice.

9.1 Products

The list page by default displays the list of Products. Products name and category filters can be applied to the list page. Products can also be removed.
9.1.1 Category
To add a new product category click on “category” hyperlink. The list page by default displays the list of categories. The category can be added/updated in the list page. Category can also be removed.

9.1.2 New/Edit Product
To add a new Product, click on “New Product” hyperlink.
9.2 Brand

The list page by default displays the list of brands. Brand name (wildcard search) filter can be applied to the list page. Brand can also be removed.

9.2.1 New/Edit Brand

To add a new Brand, click on "New Brand" hyperlink. Models are listed on the Appropriate brand detail page. Model can also be removed.
9.2.2 New Model

To add a new model click on “New Model” hyperlink in the brand detail page.

9.3 Attributes

These are attributes of a product, they are groped as attribute groupups, for example

<table>
<thead>
<tr>
<th></th>
<th>Attribute Group</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1</td>
<td>Size</td>
<td>S, M, L, XL, XXL</td>
</tr>
<tr>
<td></td>
<td>Style</td>
<td>S, R, L</td>
</tr>
<tr>
<td></td>
<td>Width</td>
<td>12”, 14”, 16”</td>
</tr>
</tbody>
</table>
The list page by default displays the list of Attribute groups. Attribute group name (wildcard search) filter can be applied to the list page. Attribute group can also be removed.

9.3.1 New/Edit Attribute Group
To add a new Attribute, click on “New Attribute Group” hyperlink. Attribute are listed on the Appropriate Attribute group detail page.

9.3.2 New Attribute
To add a new attribute click on “New Attribute” hyperlink in the Attribute group detail page.
9.4 **Unit of Measure**

The list page by default displays the list of Unit of Measure (UOM). The UOM can be added/updated in the list page. UOM can also be removed.

9.5 **Product Items**

Product item is an instance of the product belonging to a particular brand and model, with a unique set of attributes. Products and brand filters can be applied to the list page. Product Items can also be removed.
9.5.1 New/Edit Product Item

To add a new Product Item, click on “New Product Item” hyperlink. To transfer the items click on “Transfer To” hyper link in product item details page.

9.6 Shipments

A shipment is a collection of product items received from a supplier. Date range, supplier account and contact filters can be applied to the list page. Shipment can also be removed.
9.6.1 New/Edit Shipment

To add a new shipment click on “New Shipment” hyperlink. A shipment can be created from supplier invoice.
9.7 Log Material

The materials used on a task / issue can be logged using the log time page. Log Material page allows users to number of items used on a specific issue or project.

![Log Material Screenshot](image)

9.7.1 Material Log Details

The spent material details can be viewed using the spent time page. The Material Details page is accessible from the Overview > Spent Time > Details menu.

![Material Log Details Screenshot](image)
9.7.2 Material Report
The Material report page is accessible from the Overview > Spent Time > Details menu. Product Item group by filters also added on the filter.

10. Settings

10.1 Enumeration
The group of drop down values can be altered using the Enumeration page. Enumeration name (wildcard search) and type filters can be applied to the list page. Enumerations can also be removed.

10.1.1 New/Edit Enumeration
To add a new Enumeration, click on "New Enumeration" hyperlink.
10.2 Location

These are the different locations / branches of the company. Location name (wildcard search) and type filters can be applied to the list page. Location can also be removed.

10.2.1 New/Edit Location

To add a new Enumeration, click on “New Location” hyperlink.
10.3 Taxes
The list page by default displays the list of taxes. Tax name wildcard search can be applied to the list page. Tax can be removed.

10.3.1 New/Edit Tax
To add a new tax click on “New Tax” hyperlink
The tax name and rate can be added/updated.

10.4 Exchange Rate
When multiple currencies are involved, the exchange rate needs to be keyed in. The list page by default displays the list of exchange rates. The exchange rate can be added/updated in the list page. Exchange rate can be removed.

11. Reports
11.1 Attendance
Attendance report shows the monthly view of attendance. Date range and Group filters can be applied. The report displays the general information of the user along with the leave summary and attendance entries for the month. The leave taken by the user will be marked with short name of the leave. TE Admins have the privilege to look into other user’s attendance.
11.2 **Timesheet**

Time report shows the weekly view of spent time. Date range and Group filters can be applied. The report displays the name, week, projects, issues, activity, comment, custom fields and spent time.

**Timesheet**

*Name:* suganya T  
*Week:* 2016-07-10 - 2016-07-16

<table>
<thead>
<tr>
<th>Project</th>
<th>Issue</th>
<th>Activity</th>
<th>Comment</th>
<th>Estimated hours</th>
<th>Difficulties</th>
<th>Sun Jul 10</th>
<th>Mon Jul 11</th>
<th>Tue Jul 12</th>
<th>Wed Jul 13</th>
<th>Thu Jul 14</th>
<th>Fri Jul 15</th>
<th>Sat Jul 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA</td>
<td>GL Interface</td>
<td>Design</td>
<td></td>
<td>8.00</td>
<td></td>
<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

Total = 40.00, 0.00, 8.00, 8.00, 8.00, 8.00, 8.00, 8.00, 8.00

I Acknowledge that the hours entered are accurate to the best of my knowledge

*Signature:*
Submitted by ___________________________

Approved By ___________________________

11.3 **ExpenseSheet**

Expense report shows the weekly expense entries made for the project. Date range and Group filters can be applied. The report displays the name, week, projects, issues, activity, comment and currency.
11.4 Spent Time

Attendance report shows the monthly view of attendance. Date range and Group filters can be applied. The report displays the general information of the user along with the leave summary and spent time entries for the month. The leave taken by the user will be marked with short name of the leave. TE Admins have the privilege to look into other user’s attendance.

11.5 Payroll Report

Payroll report shows the view of salary register. Date range and Group filters can be applied. The report displays the general information of the user along with the basic, allowances and deduction for the salary period. TE Admins have the privilege view other user’s salary data.
11.6 Payslip Report

Payslip report shows the view of salary payslip for individual user. Date range and Group filters can be applied. The report displays the general information of the user along with the basic, allowances and deduction for the month. TE Admins have the privilege to view other user’s Payslip.

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Gender</th>
<th>Designation</th>
<th>Basic Pay</th>
<th>Medical</th>
<th>HRA</th>
<th>SPM</th>
<th>SPM(1)</th>
<th>Eds</th>
<th>Leave</th>
<th>Bonus</th>
<th>PF</th>
<th>Cab</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>Chhanuj</td>
<td>M</td>
<td>GM</td>
<td>10000.00</td>
<td>250.00</td>
<td>1000.00</td>
<td>0.0</td>
<td>1000.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1200.00</td>
<td>0.0</td>
</tr>
<tr>
<td>55</td>
<td>Jasa</td>
<td>M</td>
<td>Software</td>
<td>15000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1800.00</td>
<td>1000.00</td>
</tr>
<tr>
<td>52</td>
<td>Devra</td>
<td>M</td>
<td>Software</td>
<td>15000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1800.00</td>
<td>1000.00</td>
</tr>
<tr>
<td>50</td>
<td>Jethu</td>
<td>M</td>
<td>Admin</td>
<td>10000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1200.00</td>
<td>0.0</td>
</tr>
<tr>
<td>55</td>
<td>Veera</td>
<td>M</td>
<td>Software</td>
<td>26000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
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<td>0.0</td>
</tr>
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<td>43</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2700.00</td>
<td>0.0</td>
</tr>
<tr>
<td>63</td>
<td>Satha</td>
<td>M</td>
<td>Software</td>
<td>100.00</td>
<td>100.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>12.00</td>
<td>500.00</td>
</tr>
<tr>
<td>46</td>
<td>Redrama</td>
<td>M</td>
<td>Software</td>
<td>10000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1200.00</td>
<td>0.0</td>
</tr>
<tr>
<td>69</td>
<td>Thanga</td>
<td>M</td>
<td>Test Manager</td>
<td>25000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>3000.00</td>
<td>0.0</td>
</tr>
<tr>
<td>55</td>
<td>Karthik</td>
<td>M</td>
<td>Test Manager</td>
<td>15000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1800.00</td>
<td>0.0</td>
</tr>
<tr>
<td>66</td>
<td>Ammu</td>
<td>F</td>
<td>Test Manager</td>
<td>10000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1200.00</td>
<td>0.0</td>
</tr>
<tr>
<td>49</td>
<td>Surend</td>
<td>M</td>
<td>Test Manager</td>
<td>1000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>12.00</td>
<td>500.00</td>
</tr>
<tr>
<td>47</td>
<td>Rama</td>
<td>M</td>
<td>Test Manager</td>
<td>2451550.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2999999.97</td>
<td>0.0</td>
</tr>
<tr>
<td>31</td>
<td>Sivarama</td>
<td>M</td>
<td>Test Manager</td>
<td>251550.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2999999.97</td>
<td>0.0</td>
</tr>
<tr>
<td>22</td>
<td>Thapa</td>
<td>M</td>
<td>Test Manager</td>
<td>15000.00</td>
<td>250.00</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<td>0.0</td>
</tr>
<tr>
<td>6</td>
<td>Shyamsingh</td>
<td>M</td>
<td>Director</td>
<td>15000.00</td>
<td>250.00</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1200.00</td>
<td>0.0</td>
</tr>
</tbody>
</table>

11.7 Profit & Loss A/c Report

Profit & Loss a/c shows the view of income and expense of financial transaction. Date range filter can be applied. Accounting Admins and Users have the privilege to view the data.

11.8 Balance Sheet

Balance Sheet shows the view of inflow and outflow of financial transaction. Date range filter can be applied. Accounting Admins and Users have the privilege to view the data.
11.9  Lead Conversion

Lead Conversion report shows the view a list of all leads. Conversion ratio is number of converted leads over total number of leads. Date range and user filter can be applied. CRM Admins and Users have the privilege to view the data.

<table>
<thead>
<tr>
<th>Lead</th>
<th>Status</th>
<th>Created</th>
<th>Converted</th>
<th>Sales Cycle Days</th>
<th>Assignee</th>
</tr>
</thead>
<tbody>
<tr>
<td>James</td>
<td>Converted</td>
<td>2017-02-07 10:38:24</td>
<td>2017-02-07 10:39:58</td>
<td>0.0</td>
<td>Saravana Adhi</td>
</tr>
<tr>
<td>Warner</td>
<td>Converted</td>
<td>2017-02-07 13:47:32</td>
<td>2017-02-07 13:58:42</td>
<td>0.01</td>
<td>Saravana Adhi</td>
</tr>
<tr>
<td>kerry</td>
<td>New</td>
<td>2017-02-07 15:29:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wellsey</td>
<td>New</td>
<td>2017-02-07 17:49:23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John</td>
<td>Converted</td>
<td>2017-02-07 17:18:12</td>
<td>2017-05-25 15:04:47</td>
<td>106.91</td>
<td></td>
</tr>
</tbody>
</table>

Conversion Rate: 60.0%

11.10  Sales Activity

Sales activity report shows the view a list of all activities. Date range and user filter can be applied. CRM Admins and Users have the privilege to view the data.

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Subject</th>
<th>Status</th>
<th>Related To</th>
<th>Name</th>
<th>Start Date &amp; Time</th>
<th>Completed Date &amp; Time</th>
<th>Assignee</th>
<th>Duration Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting</td>
<td>contact meeting</td>
<td>Planned</td>
<td>Contact</td>
<td>contact1</td>
<td>2017-01-01 10:15:00</td>
<td>2017-01-01 10:15:00</td>
<td>Janaki adhi</td>
<td>0.0</td>
</tr>
<tr>
<td>Call</td>
<td>Direct call</td>
<td>Planned</td>
<td>Opportunity</td>
<td>mail</td>
<td>2017-02-05 07:00:00</td>
<td>2017-02-05 07:00:00</td>
<td>Janaki adhi</td>
<td>0.0</td>
</tr>
<tr>
<td>Call</td>
<td>forward call</td>
<td>Planned</td>
<td>Account</td>
<td>Hooper</td>
<td>2017-02-01 09:30:00</td>
<td>2017-02-01 09:30:00</td>
<td>Saravana Adhi</td>
<td>0.0</td>
</tr>
<tr>
<td>Task</td>
<td>new task</td>
<td>Not Started</td>
<td>Account</td>
<td>Hooper</td>
<td>2017-01-01 11:45:00</td>
<td>2017-01-01 11:45:00</td>
<td>Saravana Adhi</td>
<td>0.0</td>
</tr>
<tr>
<td>Meeting</td>
<td>Intro meeting</td>
<td>Held</td>
<td>Account</td>
<td>Hooper</td>
<td>2017-01-01 05:30:00</td>
<td>2017-01-01 05:30:00</td>
<td>Saravana Adhi</td>
<td>37.24</td>
</tr>
<tr>
<td>Call</td>
<td>Inquiry call</td>
<td>Held</td>
<td>Account</td>
<td>Hooper</td>
<td>2017-02-06 07:00:00</td>
<td>2017-02-07 12:42:00</td>
<td>Saravana Adhi</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Average Duration: 6.4 Days
11.11 **AR Aging**

AR aging report shows the view a list of all outstanding balance for account and contact. Date range and project filter can be applied. Billing Admins have the privilege to view the data.

<table>
<thead>
<tr>
<th>Account</th>
<th>Previous Balance</th>
<th>2017 Apr</th>
<th>2017 May</th>
<th>Current Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invoice</td>
<td>230.00</td>
<td></td>
<td>579.00</td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td>0.00</td>
<td></td>
<td>-474.00</td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>0.00</td>
<td>230.00</td>
<td>1046.00</td>
<td>1220.00</td>
</tr>
<tr>
<td>Lewis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invoice</td>
<td>3143.00</td>
<td></td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td>0.00</td>
<td></td>
<td>-1230.00</td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>-288.00</td>
<td>3143.00</td>
<td>1230.00</td>
<td>-377.00</td>
</tr>
<tr>
<td>Andrew</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invoice</td>
<td>964.00</td>
<td></td>
<td>547.00</td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td>-252.00</td>
<td></td>
<td>-560.00</td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>0.00</td>
<td>712.00</td>
<td>-13.00</td>
<td>729.00</td>
</tr>
<tr>
<td>Kyle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invoice</td>
<td>0.00</td>
<td></td>
<td>2257.00</td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td>0.00</td>
<td></td>
<td>-1730.00</td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>0.00</td>
<td>0.00</td>
<td>527.00</td>
<td>527.00</td>
</tr>
</tbody>
</table>

**Total:** 2353.00

11.12 **Purchasing Cycle**

Purchasing cycle report shows the list of purchased goods and average time taken for every purchasing stage.

<table>
<thead>
<tr>
<th>RFQ</th>
<th>Winning Quote</th>
<th>Purchase Order</th>
<th>Supplier Invoice</th>
<th>Supplier Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projector</td>
<td>26.00</td>
<td>6.00</td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>Test RFQ</td>
<td>33.00</td>
<td>2.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Plasma TV</td>
<td>0.00</td>
<td>3.00</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Samsung LED TV</td>
<td>22.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Samsung Projector</td>
<td>22.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Test 236</td>
<td>20.25</td>
<td>2.75</td>
<td>4.25</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Average:** 20.25, 2.75, 4.25, 3.00

11.13 **Stock Report**

Stock report shows the list of product items in the warehouse and its stock value.
12. ERPmine Configuration

The plugin can be configured from the plugin settings page to customize its behavior. Only the administrators can access this page. The plugin configurations are grouped into the following categories; Display Settings, Export (for pdf) Settings, Time & Expense Settings, Approval system Settings, Attendance Settings.

The settings defined in the “Time & Expense” section are common to both timesheet and expense sheet. There is also separate section for “Time” and “Expense” as well, the settings which comes under these sections is specific to its sheets.

12.1 General Settings

12.1.1 Enable reports
This setting can be used to enable / disable the report module.

12.1.2 Company Name
This settings can be used to define the organization name.

12.1.3 Address
This settings can be used to define the organization address.

12.1.4 Header Logo
This settings can be used to define the organization address.

12.2 Time & Expense Settings

12.2.1 Include closed issues
The issue dropdown in time & expense sheet will list only issues which are currently open. To include previous weeks closed issues, enable the configuration "Include Previous Weeks' Closed Issues".

Note: The current week's closed issue is not affected by this setting it will always be shown in issue dropdown.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Brand</th>
<th>Model</th>
<th>Attribute</th>
<th>Quantity</th>
<th>Unit Of Measure</th>
<th>Currency</th>
<th>Stock Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washing Machine</td>
<td>Samsung</td>
<td>Sam Washing machine 1222</td>
<td>25.0</td>
<td>Numbers</td>
<td>R$ 445000.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV</td>
<td>Sony</td>
<td>Sony Bravia124</td>
<td>40&quot; inch TV</td>
<td>25.0</td>
<td>Numbers</td>
<td>R$ 315000.0</td>
<td></td>
</tr>
<tr>
<td>Water Purifier</td>
<td>Aqua Guard</td>
<td>Aqua 1205</td>
<td>10ltr Purifier</td>
<td>15.0</td>
<td>Numbers</td>
<td>R$ 94500.0</td>
<td></td>
</tr>
<tr>
<td>TV</td>
<td>Philips</td>
<td>Philips TV 1202</td>
<td>29 inches TV</td>
<td>23.0</td>
<td>Numbers</td>
<td>R$ 343620.0</td>
<td></td>
</tr>
<tr>
<td>CD ROM Disks</td>
<td>Sony</td>
<td>Sony CD123</td>
<td>16 GB CD ROM</td>
<td>20.0</td>
<td>Numbers</td>
<td>R$ 30600.0</td>
<td></td>
</tr>
<tr>
<td>CD ROM Disks</td>
<td>Sony</td>
<td>Sony CD123</td>
<td>32 GB CD ROM</td>
<td>15.0</td>
<td>Numbers</td>
<td>R$ 31050.0</td>
<td></td>
</tr>
<tr>
<td>Air Conditioner</td>
<td>Hitachi</td>
<td>Hitachi 12352</td>
<td>1.5 ton split AC</td>
<td>15.0</td>
<td>Numbers</td>
<td>R$ 189000.0</td>
<td></td>
</tr>
<tr>
<td>MRF Tyres</td>
<td>MRF</td>
<td>MRF 013</td>
<td>12 inch tyre</td>
<td>21.0</td>
<td>Numbers</td>
<td>$ 1365.0</td>
<td></td>
</tr>
</tbody>
</table>

| Total Stock Value  | 1450135.0 |
12.2.2 Previous week template
The new time & expense sheets can be created using previous week sheets as template. There is a checkbox “Previous week's template” in the new time & expense sheet page. If it is checked, then previous week(s) time & expense sheet are used as template.

The number of previous weeks to be considered can be configured using the setting “Number of Weeks to consider for previous week template”.

12.2.3 Issue input format
By default, the issues will be listed as dropdown in time & expense sheet. Issues can be entered as ID or Subject by enabling the configuration “Enter issue as ID/Subject”. If enabled, a checkbox “Enter issue as ID/Subject” appears on the time & expense sheet.

If the checkbox on the time & expense sheet is checked, then both the project and issue dropdown will be replaced by an issue textbox which can be used for entering either issue id or issue subject and complemented by auto completion.

12.2.4 Allow Blank Issue
This Time & Expense entries can be made directly to a project without selecting an issue and this
configuration “Allow Blank Issue” enables that. If the setting is enabled, then the issue dropdown in time & expense sheet will contain a blank option.

12.2.5 Enter comment in row
Comments on the Time & expense entries can be made from the row using this setting “Enter comment in row”. This setting allows for one common comment for all entries of a unique combination of project, issue and activity. If this setting is enabled, there will be a textbox for comment in addition to project, issue and activity dropdown.

12.2.6 Use detail time entry popup
The setting “Use Detail Time Entry Popup” can be used for entering additional details like comments and custom fields on a time & expense entry. If this setting is enabled there will be an icon next to the entry textbox for popping up a detail dialog box.
12.2.7 Allow User Filtering to My Issues.
The setting “Allow User Filtering to My Issues” is used to filter issues which are assigned to them or created by them in time and expense sheet page. If the setting is enabled, then the user will be allowed to override the “Issue Visibility” setting of Redmine core.

![Issues created by or assigned to the user](image)

12.2.8 T&E Admin Groups
The user group configured as “T&E Admin Groups” can view, modify and approve time and expense sheets without needing to have time tracking permissions.

12.2.9 Time Settings
The settings which are defined under this section are only applicable to Time sheets.

12.2.10 Default work time
The setting “Default work time” is used to define the standard work time for a day.

12.2.11 Max hour
Maximum hour for a day can be configured using the “Max hour per day”. This is used to limit the number of hours entered by a project member for a particular day.

12.2.12 Enforce Max hour
If the setting “Enforce Max hour per week/day” is enabled, then validation will be done to check if the entered time per week/day is above the configured “Max hour per week/day”. Min hour

12.2.13 Enforce Min hour
If the setting “Enforce Min hour per week/day” is enabled, then validation will be done to check if the
entered time per week/day is below the configured “**Min hour per week/day**”. Validation will be done only for working days, for the non-working days validation will be done only when user enters time.

**Note:**
1. The min and max configurations are only applicable to timesheet.
2. Non working days can be configured by Administrators (Administration ➔ Settings ➔ Issue tracking ➔ Non-working days).
3. Min hour settings are applicable only when approval system is enabled
4. By default, the max hour is 8 and min hour is 0

12.2.14 **Filter Issue by Tracker**
Tracker is basically used to categorize issues like bug, support etc. This setting “**Filter Issue by Tracker**” is set separately for time and expense. This setting is used to restrict entries for a particular set of trackers. Only the issues from the configured trackers will be listed in the issue dropdown in the time & expense sheet. If no tracker is configured then all issues will be listed in issue dropdown.

12.2.15 **Allow User Filtering by Tracker**
If “**Allow User Filtering by Tracker**” is enabled then user will be allowed to override the tracker filters set on the settings page.

12.2.16 **Enter custom field in row1**
The spent time custom fields are entered through detail popup by default. The setting “**Enter custom field in row1**” can be used to enter a spent time custom field from the row. If this setting is enabled, there will be a textbox for the configured custom field in the row.

12.2.17 **Enter custom field in row2**
Same as **Enter custom field in row1**

**Note:** Only two spent time custom fields can be configured to be in the row.

12.2.18 **Expense Settings**
This section contains settings that are applicable to expense sheets.

12.2.19 **Enable Expense**
This setting can be used to enable / disable expense module.

12.2.20 **Expense project**
Separate list of projects can be configured for Expenses. This setting “**Restrict Expense Entry to these projects**” allow members to charge expense only to those configured projects.
12.2.21 Filter issue by tracker
This is same as section 6.5.5, but in the context of an expense.

12.2.22 Approval Settings
Approval System is common to both Time and Expense except for email notification on non-submission which is applicable only to Time.

12.2.23 Use Approval System
If “Use Approval System” checkbox is checked, then approval system is used.

12.2.24 Auto approve
If the setting “Auto approve Time & Expense” is enabled, then the time & expense sheet gets automatically approved by the system upon submission. The project member will not be able to unsubmit his time/expense sheet since it goes to approved status immediately.

12.2.25 Approve own time/expense sheet
If the setting “Approver Can Approve their own Time & Expense” is enabled, then the project member with “Approve time logs” along with “Edit time logs” and “Log spent time” permission can approve/reject his own time & expense sheet.
12.2.26 Submission ask text
The text given in the “Submission Acknowledgement Text” is the message shown during Time & Expense submission. (Please see screenshot below)

![Submission Acknowledgement Text Screenshot]

12.2.27 Email Notification
The setting “Send email for non submission” is only for Time. If this setting is enabled, then an email notification is sent to the user about his non submission of timesheet for the previous week. Please note, this setting required rufus scheduler gem.

12.2.28 Submission deadline
Timesheet submission deadline can be configured using this setting. If the project member did not submit the timesheet before the configured “Submission Deadline”, then an email notification is sent only when the configuration “Send email for non submission” is enabled.

12.2.29 Non submission email message
The text for non-submission timesheet notification email message can be configured using the setting “Non submission email message”. The text given in this configuration will be used as the email message body along with the name of the project member, submission deadline, the week for which timesheet need to be submitted.

12.2.30 Target group of Non submission email
The selected user group will receive the email notification about non submission of timesheet for the previous week.

12.3 Attendance
This section contains settings that are applicable to Attendance.
12.3.1 Enable attendance module
This setting can be used to enable / disable attendance module.

12.3.2 Enable clock in / clock out
This setting can be used to enable and disable attendance module for Time & Attendance.

12.3.3 Break Time
Break time for a day like lunch intervals can be configured.

12.3.4 Leave
Leaves can be configured with short name, accrual, accrual after, reset month.
12.3.5 Miscellaneous fields
User custom fields can be mapped to the following settings
- Join Date
- Date of birth
- Employee Id
- Designation
- Termination Date
- Gender

12.3.6 Auto import
Attendance data can be automatically imported from an external system / Attendance Devices / Time Clocks. The following file formats are supported.

**Type 1:**
```
<table>
<thead>
<tr>
<th>Userid</th>
<th>Punchtime</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10:00</td>
</tr>
<tr>
<td>2</td>
<td>10:00</td>
</tr>
<tr>
<td>1</td>
<td>20:00</td>
</tr>
<tr>
<td>2</td>
<td>20:00</td>
</tr>
</tbody>
</table>
```

**Type 2:**
```
<table>
<thead>
<tr>
<th>Userid</th>
<th>Clockintime</th>
<th>Clockouttime</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10:00</td>
<td>20:00</td>
</tr>
<tr>
<td>2</td>
<td>10:15</td>
<td>18:15</td>
</tr>
<tr>
<td>3</td>
<td>10:30</td>
<td>19:30</td>
</tr>
</tbody>
</table>
```

**Type 3:**
```
<table>
<thead>
<tr>
<th>Userid</th>
<th>Clockintime</th>
<th>Clockouttime</th>
<th>hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10:00</td>
<td>20:00</td>
<td>10.0</td>
</tr>
<tr>
<td>2</td>
<td>10:15</td>
<td>18:15</td>
<td>8.0</td>
</tr>
<tr>
<td>3</td>
<td>10:30</td>
<td>19:30</td>
<td>9.0</td>
</tr>
</tbody>
</table>
```

12.3.7 Auto Import Every
This is the frequency of the Attendance Import Scheduler. Auto import will be performed for the given interval of time.

12.3.8 Import File Path
This setting is used to locate the file directory for attendance auto import.

12.3.9 File Headers
This setting is used to determine whether import file contains header or not.
12.3.10  **Field Separator**
The Type of field separator used in import file.

12.3.11  **Field Wrapper**
The type of field wrapper used in import file.

12.3.12  **Encoding**
The type of encoding used in import file.

12.3.13  **Date format**
The date time format used in import file.

12.3.14  **Available Fields and Fields in File**
This setting shows the list of available fields. User can pick the fields used in the import file from the available fields.

12.4  **Payroll**
This section contains settings that are applicable to Payroll.

![Payroll settings image]

---

12.4.1  **Enable Payroll module**
This setting can be used to enable / disable payroll module.

12.4.2  **Auto generate salary**
The scheduler job runs automatically to generate the salary at the end of pay period.
12.4.3 Currency
This setting can be used to set currency of payroll.

12.4.4 Pay Period
User can set the pay period.

12.4.5 Pay day
If the pay period is weekly or bi-weekly, then the user sets the pay day.

12.4.6 Loss of pay
The selected leave (from Attendance Module) will be used as loss of pay.

12.4.7 Financial year start
User can set the financial start.

12.4.8 Auto post to General Ledger
When salary is generated, it will automatically post salary to General Ledger.

12.4.9 Credit Ledger
Select the appropriate GL credit ledger for the above setting.

12.4.10 Basic pay
Basic pay can be configured with name, salary type, debit Ledger and factor. Factor is nothing but the wages; it can be an hourly rate or wages.

12.4.11 Allowances
Allowance can be configured with name, frequency, start date, debit ledger, depends on and factor.

<table>
<thead>
<tr>
<th>#</th>
<th>field</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>name</td>
<td>Name of the allowance/deduction</td>
</tr>
<tr>
<td>2</td>
<td>Frequency</td>
<td>Frequency of the allowance, for monthly allowances, it can be left as blank</td>
</tr>
<tr>
<td>3</td>
<td>Start date</td>
<td>Applicable only when a frequency is set</td>
</tr>
<tr>
<td>4</td>
<td>Dr/Cr Ledger</td>
<td>Select the appropriate GL ledger</td>
</tr>
<tr>
<td>5</td>
<td>Depends on</td>
<td>Selected the field on which this depends on</td>
</tr>
<tr>
<td>6</td>
<td>Factor</td>
<td>Factor can be either a % or an amount</td>
</tr>
</tbody>
</table>

12.4.12 Deduction
Deduction can be configured with name, frequency, start date, depend on and factor, please refer the table above.
12.5 Billing
This section contains settings that are applicable to Billing module.

12.5.1 Enable Billing module
This setting can be used to enable / disable billing module.

12.5.2 Auto post to General/Ledger
When generate invoice post invoice to financial transaction .

12.5.3 Credit Ledger
Select the appropriate transaction credit ledger.

12.5.4 Debit Ledger
Select the appropriate transaction debit ledger.

12.5.5 Payment Credit Ledger
Select the appropriate transaction credit ledger for payments.

12.5.6 Payment Debit Ledger
Select the appropriate transaction debit ledger for payments.

12.5.7 Auto generate invoice
The scheduler job runs automatically to generate the invoice at the end of invoice period.
12.5.8 Invoice generation period
User can set the invoice generation period (Quarterly, Monthly, bi-weekly, weekly etc).

12.5.9 Contract number prefix
This setting can be used to add prefix of contract number.

12.5.10 Invoice generation day
If the invoice generation period is weekly or bi-weekly then the user should set the invoice generation day.

12.5.11 Invoice number prefix
This setting can be used to add prefix of invoice number.

12.5.12 Generate Invoice from
The user can set the invoice start date for the whole of application

12.5.13 Time Entry Billing id
The user have to select spent time custom field to store the billed invoice item id for the appropriate spent time.

12.5.14 Rate fields
The Billing rate can come from Project or User. Project custom fields can be mapped to the following settings
- Project Billing Rate
- Project Billing Currency

User custom fields can be mapped to the following settings
- User Billing Rate
- User Billing Currency

12.5.15 Billing Admin group
The user group configured as “Billing Admin Groups” can view, modify invoices.

12.5.16 Invoice Components
The user can configure the invoice components, which will be included in the printed invoice.

12.6 Accounting
This section contains settings that are applicable to Accounting module.
12.6.1 Enable Accounting module
This setting can be used to enable / disable Accounting module

12.6.2 Accounting Group
The user group configured as “Accounting Groups” can view, modify GL transaction.

12.6.2 Accounting Admin Group
The user group configured as “Accounting Admin Groups” can view, modify GL transaction and ledgers.

12.7 CRM
This section contains settings that are applicable to CRM module.

12.7.1 Enable CRM module
This setting can be used to enable / disable CRM module.

12.7.2 CRM User Group
The user group configured as “CRM User Groups” can view, modify leads, accounts, opportunities, activities and contacts.

12.7.3 CRM Admin Group
The user group configured as “CRM Admin Groups” can view, modify leads, accounts, opportunities, activities and contacts.

10.8 Purchasing
This section contains settings that are applicable to Purchase module.
12.7.2 Enable Purchase Module
This setting can be used to enable / disable Purchase module

12.8.2 Purchase User Group
The user group configured as “Purchase User Groups” can view, modify Supplier Account, Supplier contact, Request for Quote (RFQ), Quote, Purchase order, Supplier Invoice and Supplier Payment.

12.8.3 Purchase Admin Group
The user group configured as “Purchase Admin Groups” can view, modify Supplier Account, Supplier contact, Request for Quote (RFQ), Quote, Purchase order, Supplier Invoice and Supplier Payment.

12.8.4 Auto post to General/Ledger
When supplier invoice and supplier payment post to financial transaction.

12.8.5 Credit Ledger
Select the appropriate transaction credit ledger.

12.8.6 Debit Ledger
Select the appropriate transaction debit ledger.

12.8.7 Payment Credit Ledger
Select the appropriate transaction credit ledger for payments
12.8.8 Payment Debit Ledger
Select the appropriate transaction debit ledger for payments

12.8.9 Quote Number Prefix
This setting can be used to add prefix of quote number.

12.8.10 PO Number Prefix
This setting can be used to add prefix of purchase order number.

12.8.11 SI Number Prefix
This setting can be used to add prefix of supplier invoice number.

12.8.12 Quote Components
The user can configure the quote components, which will be included in the printed quote.

12.8.13 Purchase Order Components
The user can configure the purchase order components, which will be included in the printed purchase order.

12.8.14 Supplier Invoice Components
The user can configure the supplier invoice components, which will be included in the printed supplier invoice.

12.8 Inventory
This section contains settings that are applicable to Inventory module.

12.8.1 Enable Inventory Module
This setting can be used to enable / disable Inventory module

12.9.2 Inventory User Group
The user group configured as “Inventory User Groups” can view, modify products, items, shipments, brands, attributes and location.
12.9.3 Inventory Admin Group
The user group configured as "Inventory Admin Groups" can view, modify products, items, shipments, brands, attributes and location.

12.9.4 Auto post to General/Ledger
When supplier invoice and supplier payment post to financial transaction.

12.9.5 Credit Ledger
Select the appropriate transaction credit ledger.

12.9.6 Debit Ledger
Select the appropriate transaction debit ledger.

13. Redmine Settings
There are certain settings of redmine which influence the functionality of the Time & Attendance plugin.

13.1 Approve Time Logs Permission
A new permission is defined for time/expense sheets approval under “Time tracking” section. The user with “Approve time logs” permission along with “Log spent time” and “Edit time logs” permission will be allowed to approve, unapprove and reject time and expense sheets.

13.2 Permissions
The roles (manager, developer, reporter etc.) defined in redmine are assigned with a set of permissions. Administrators can define roles and configure its permission by navigating to Administration → Roles and permissions. A user can have different roles for different projects and also a project member can have multiple roles assigned for single project.

Following are some of the privileges defined in time tracking section [An extract from Redmine User Guide]

<table>
<thead>
<tr>
<th>#</th>
<th>Feature</th>
<th>View spent time</th>
<th>Log spent time</th>
<th>Edit own time logs</th>
<th>Edit time logs</th>
<th>Approve time logs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Time &amp; Expense List Page</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>New Time &amp; Expense Sheet</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Edit Time &amp; Expense sheet</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Edit Other’s Time &amp; Expense Sheet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>Approve Time &amp; Expense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Note: There are no separate permissions for expense; it uses the permission from spent time.

13.2.1 Issue Visibility

[An extract from Redmine User Guide]
Assuming that the role includes the View Issues permission, the following rules apply to the issues of the projects the user is tied to through it:

All issues - the user can see all issues. This is the default.
All non-private issues - the user can see all issues which are not marked as private.
Issues created by or assigned to the user - the user can only see issues created by or assigned to

---

### Roles » Manager

<table>
<thead>
<tr>
<th>Name</th>
<th>Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issues can be assigned to this role</td>
<td>✓</td>
</tr>
<tr>
<td>Issues visibility</td>
<td></td>
</tr>
<tr>
<td>All issues</td>
<td></td>
</tr>
<tr>
<td>All non private issues</td>
<td></td>
</tr>
<tr>
<td>Issues created by or assigned to the user</td>
<td></td>
</tr>
</tbody>
</table>

The issue dropdown in time & expense sheet is filled based on Issue Visibility for the role assigned to project members.

13.3 Start of Week
The start of the week on the time & expense sheet can be configured to “Monday”, “Saturday”, “Sunday” or “Based on user’s language”. If “Based on user’s language” is set, then start of the week will be the day defined in language file. Start of the week can be configured by navigating to Administration ➔ Settings ➔ Display ➔ Start calendars on
14. PDF & CSV
The time & expense sheet can be exported into pdf or csv format. To take a csv report click on the csv link and for the pdf report click on the pdf link.

15. REST API
Time & Attendance REST API supports both XML and JSON. It supports following functionalities.

- Get list of time/expense sheets
- Create time/expense sheet
- Get a time/expense sheet
- Update a time/expense sheet
- Delete a time/expense sheet
- Delete a time/expense entries

Time & Attendance API requires authentication for each request. The API validates the user and responds with 401 Unauthorized if user did not have required privileges. For more information on REST API configuration, please refer to the Redmine User Guide.

15.1 List Time/Expense Sheets
List of time and expense sheet can be retrieved using the list API. By default, it returns time and expense sheets for the current month if the parameters from and to is not specified. If from and to is
specified then time/expense sheet for that particular date range will be retrieved.

<table>
<thead>
<tr>
<th>Request Type</th>
<th>URL</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>GET /wktime/index.xml?user_id=9999&amp;from=2013-01-01 &amp;to=2013-08-01</td>
<td>list of timesheets of a user as xml/json</td>
</tr>
<tr>
<td></td>
<td>GET /wktime/index.json?user_id=9999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GET /wkexpense/index.xml?user_id=9999 &amp;from=2013-01-01&amp;to=2013-08-01</td>
<td>list of expense sheets of a user as xml/json</td>
</tr>
<tr>
<td></td>
<td>GET /wkexpense/index.json?user_id=9999 &amp;from=2013-01-01&amp;to=2013-08-01&amp;limit=25&amp;offset=0</td>
<td></td>
</tr>
</tbody>
</table>

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Mandatory/Optional</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>user_id</td>
<td>Required</td>
<td>user_id for whom, list of time/expense sheet is to be retrieved. If 0, then list of time/expense sheets for all user is retrieved.</td>
</tr>
<tr>
<td>project_id</td>
<td>Optional</td>
<td>Use this parameter, if user_id = 0 is used i.e., to get list of time/expense sheets of all user under one project.</td>
</tr>
<tr>
<td>from</td>
<td>Optional</td>
<td>Specifies the start of the date range</td>
</tr>
<tr>
<td>to</td>
<td>Optional</td>
<td>Specifies the end of the date range</td>
</tr>
<tr>
<td>offset</td>
<td>Optional</td>
<td>The offset of the first item to retrieve</td>
</tr>
<tr>
<td>limit</td>
<td>Optional</td>
<td>Number of records to be retrieved (default is 25)</td>
</tr>
</tbody>
</table>

**Sample XML Response (for Time)**

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wk_times total_count="1" offset="0" limit="25" type="array">
    <wk_time>
        <user id="5" name="Chandra Durairaj"/>
        <hours>10.0</hours>
        <startdate>2013-08-19</startdate>
        <status>n</status>
    </wk_time>
</wk_times>```

**Sample JSON Response (for Time)**

```json
{"wk_times":
 [  
     
     {
         "user":{"id":5,"name":"Chandra Durairaj"},
         "hours":10.0,
         "startdate":"2013-08-19",
         "status":"n"
     }
  ],
  "total_count":1,
  "offset":0,
  "limit":25
}
```
15.2 Create Time/Expense Sheet

Time and Expense sheet can be created using the create API.

<table>
<thead>
<tr>
<th>Request Type</th>
<th>URL</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>POST /wktime/update.xml?wktime_save=Save</td>
<td>200 OK. Creates a timesheet</td>
</tr>
<tr>
<td></td>
<td>POST /wktime/update.xml?wktime_submit=Submit</td>
<td>200 OK. Creates and set timesheet to submitted state</td>
</tr>
<tr>
<td>Expense</td>
<td>POST /wkexpense/update.xml?wktime_save=Save</td>
<td>200 OK. Creates an expensesheet</td>
</tr>
<tr>
<td></td>
<td>POST /wkexpense/update.json?wktime_submit=Submit</td>
<td>200 OK. Creates and set expensesheet to submitted state</td>
</tr>
</tbody>
</table>

Sample XML data to be posted (for Time)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wk_time>
  <user name="Chandra Durairaj" id="5"/>
  <startday>2013-08-19</startday>
  <status>New</status>
  <total>6.0</total>
  <custom_fields type="array">
    <custom_field name="Purchase Order" id="12">
      <value/>
    </custom_field>
  </custom_fields>
  <time_entries type="array">
    <time_entry>
      <project name="Vitals Software" id="1"/>
      <issue id="1"/>
      <user name="Chandra Durairaj" id="5"/>
      <activity name="Design" id="10"/
      <hours>4.0</hours>
      <comments/>
      <spent_on>2013-08-19</spent_on>
    </time_entry>
    <custom_fields type="array">
      <custom_field name="Difficulties" id="15">
        <value/>
      </custom_field>
    </custom_fields>
  </time_entry>
  <time_entry>
    <project name="Vitals Software" id="1"/>
    <issue id="1"/>
    <user name="Chandra Durairaj" id="5"/>
    <activity name="Design" id="10"/>
    <hours>2.0</hours>
    <comments/>
    <spent_on>2013-08-21</spent_on>
    <custom_fields type="array">
```
Sample XML data to be posted (For Expense)

```xml
<?xml version="1.0" encoding="utf-8"?>
<wk_expense>
  <user id="5" name="Chandra Durairaj"/>
  <startday>2013-08-26</startday>
  <status>New</status>
  <total>75.0</total>
  <wk_expense_entries type="array">
    <wk_expense_entry>
      <id>84</id>
      <project id="22" name="Expense"/>
      <issue id="50"/>
      <user id="5" name="Chandra Durairaj"/>
      <activity id="8" name="Design"/>
      <amount>25.0</amount>
      <currency>$</currency>
      <comments/>
      <spent_on>2013-08-26</spent_on>
    </wk_expense_entry>
    <wk_expense_entry>
      <id>85</id>
      <project id="22" name="Expense"/>
      <issue id="51"/>
      <user id="5" name="Chandra Durairaj"/>
      <activity id="8" name="Design"/>
      <amount>50.0</amount>
      <currency>$</currency>
      <comments/>
      <spent_on>2013-08-27</spent_on>
    </wk_expense_entry>
  </wk_expense_entries>
</wk_expense>
```

### 15.3 Get Time/Expense Sheet

<table>
<thead>
<tr>
<th>Request Type</th>
<th>URL</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td>GET /wktime/edit.xml?user_id=9999&amp;startday=2013-07-29</td>
<td>Timesheet of a user for a week</td>
</tr>
<tr>
<td></td>
<td>GET /wktime/edit.json?user_id=9999&amp;startday=2013-07-29</td>
<td></td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td>GET /wkexpense/edit.xml?user_id=9999&amp;startday=2013-07-29</td>
<td>Expensesheet of a user for a week</td>
</tr>
<tr>
<td></td>
<td>GET /wkexpense/edit.json?user_id=9999&amp;startday=2013-07-29</td>
<td></td>
</tr>
</tbody>
</table>
Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>user_id</td>
<td>Required</td>
<td>User id for whom time/expense sheet is to be retrieved</td>
</tr>
<tr>
<td>startday</td>
<td>Required</td>
<td>Specifies the start of the week</td>
</tr>
</tbody>
</table>

Sample XML Response (for Time)

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wk_time>
  <user name="Chandra Durairaj" id="5"/>
  <startday>2013-08-19</startday>
  <status>New</status>
  <total>6.0</total>
  <custom_fields type="array">
    <custom_field name="Purchase Order" id="12">
      <value/>
    </custom_field>
  </custom_fields>
  <time_entries type="array">
    <time_entry>
      <id>1506</id>
      <project name="Vitals Software" id="1"/>
      <issue id="1"/>
      <user name="Chandra Durairaj" id="5"/>
      <activity name="Design" id="10"/>
      <hours>4.0</hours>
      <comments/>
      <spent_on>2013-08-19</spent_on>
      <custom_fields type="array">
        <custom_field name="Difficulties" id="15">
          <value/>
        </custom_field>
      </custom_fields>
    </time_entry>
    <time_entry>
      <id>1507</id>
      <project name="Vitals Software" id="1"/>
      <issue id="1"/>
      <user name="Chandra Durairaj" id="5"/>
      <activity name="Design" id="10"/>
      <hours>2.0</hours>
      <comments/>
      <spent_on>2013-08-21</spent_on>
      <custom_fields type="array">
        <custom_field name="Difficulties" id="15">
          <value/>
        </custom_field>
      </custom_fields>
    </time_entry>
  </time_entries>
</wk_time>
```

Sample JSON Response

```json
{"wk_time":
  {
    "user":{"id":5,"name":"Chandra Durairaj"},
    ...
  }
}
```
"startday":"2013-08-19",
"status":"New",
"total":6.0,
"custom_fields":
{
  "id":12,"name":"Purchase Order","value":"233"
},
"time_entries":
{
  
  "id":1506,
  "project":{"id":1,"name":"Vitals Software"},
  "issue":{"id":1},
  "user":{"id":5,"name":"Chandra Durairaj"},
  "activity":{"id":10,"name":"Design"},
  "hours":4.0,
  "spent_on":"2013-08-19",
  "custom_fields":
  {"id":15,"name":"Difficulties"}
},

  
  "id":1507,
  "project":{"id":1,"name":"Vitals Software"},
  "issue":{"id":1},
  "user":{"id":5,"name":"Chandra Durairaj"},
  "activity":{"id":10,"name":"Design"},
  "hours":2.0,
  "spent_on":"2013-08-21",
  "custom_fields":
  {"id":15,"name":"Difficulties"}
}

15.4 Update Time/Expense Sheet
Time & Expense sheet can be updated suing update API. Any one of the following action and its value should be sent for the corresponding functionalities.
- wktime_save=Save
- wktime_submit=Submit
- wktime_unsubmit=Unsubmit
- wktime_approve=Approve
- wktime_reject=Reject
- wktime_unapprove=Unapprove

<table>
<thead>
<tr>
<th>Request Type</th>
<th>URL</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/wktime/update.xml?wktime_save=Save</td>
<td>200 OK. Updates a timesheet</td>
</tr>
<tr>
<td></td>
<td>/wktime/update.xml?wktime_submit=Submit</td>
<td>200 OK. Update and set timesheet status to “Submitted”</td>
</tr>
<tr>
<td></td>
<td>/wktime/update.xml?wktime_unsubmit=Unsubmit</td>
<td>200 OK. Updates the timesheet status to “New”</td>
</tr>
<tr>
<td>Request URL</td>
<td>Status Code</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td><code>/wktime/update.xml?wktime_approve=Approve</code></td>
<td>200 OK</td>
<td>Approves a timesheet</td>
</tr>
<tr>
<td><code>/wktime/update.xml?wktime_reject=Reject</code></td>
<td>200 OK</td>
<td>Rejects a timesheet</td>
</tr>
<tr>
<td><code>/wktime/update.xml?wktime_unapprove=Unapprove</code></td>
<td>200 OK</td>
<td>Unapproves a timesheet</td>
</tr>
<tr>
<td><code>/wkexpense/update.xml?wktime_save=Save</code></td>
<td>200 OK</td>
<td>Updates an expensesheet</td>
</tr>
<tr>
<td><code>/wkexpense/update.xml?wktime_submit=Submit</code></td>
<td>200 OK</td>
<td>Update and set timesheet status to “Submitted”</td>
</tr>
<tr>
<td><code>/wkexpense/update.xml?wktime_unsubmit=Unsubmit</code></td>
<td>200 OK</td>
<td>Updates the expensesheet status to “New”</td>
</tr>
<tr>
<td><code>/wkexpense/update.xml?wktime_approve=Approve</code></td>
<td>200 OK</td>
<td>Approves an expensesheet</td>
</tr>
<tr>
<td><code>/wkexpense/update.json?wktime_reject=Reject</code></td>
<td>200 OK</td>
<td>Rejects an expensesheet</td>
</tr>
<tr>
<td><code>/wkexpense/update.xml?wktime_unapprove=Unapprove</code></td>
<td>200 OK</td>
<td>Unapproves an expensesheet</td>
</tr>
</tbody>
</table>

**Note:** If validation failure occurs, then API response will be **422 Unprocessable Entity** otherwise response will be **200 OK** for successful updates.

**Sample XML data to be posted (for Time)**

In the below sample, two `time_entry` object contains id and one did not have id, then API will update the two entries which has id and creates a new `time_entry` for which id is not specified.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wk_time>
  <user name="Chandra Durairaj" id="5"/>
  <startdate>2013-08-19</startdate>
  <custom_fields type="array">
    <custom_field name="Purchase Order" id="12">
      <value/>
    </custom_field>
  </custom_fields>
  <time_entries type="array">
    <time_entry>
      <id>1506</id>
      <project name="Vitals Software" id="1"/>
      <issue id="1"/>
      <user name="Chandra Durairaj" id="5"/>
      <activity name="Design" id="10"/>
      <hours>4.0</hours>
      <comments/>
      <spent_on>2013-08-19</spent_on>
    </time_entry>
    <time_entry>
      <id>
      </id>
      <project name="" id=""/>
      <issue id=""/>
      <user name="" id=""/>
      <activity name="" id=""/>
      <hours>
      </hours>
      <comments/>
      <spent_on>2013-08-19</spent_on>
    </time_entry>
  </time_entries>
</wk_time>
```
15.5  **Delete Time/Expense Sheet**

The project member with edit permission will be allowed to delete time and expense sheet using delete API.

<table>
<thead>
<tr>
<th>Request Type</th>
<th>URL</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>DELETE /wktime/destroy.xml?user_id=9999&amp;startday=2013-08-12</td>
<td>200 OK. Deletes a timesheet</td>
</tr>
<tr>
<td></td>
<td>/wktime/destroy.json?user_id=9999&amp;startday=2013-08-12</td>
<td></td>
</tr>
<tr>
<td>Expense</td>
<td>DELETE /wkexpense/destroy.xml?user_id=9999&amp;startday=2013-08-12</td>
<td>200 OK. Deletes an expensesheet</td>
</tr>
<tr>
<td></td>
<td>/wkexpense/destroy.json?user_id=9999&amp;startday=2013-08-12</td>
<td></td>
</tr>
</tbody>
</table>

**Parameters**

<table>
<thead>
<tr>
<th>parameter</th>
<th>type</th>
<th>description</th>
</tr>
</thead>
<tbody>
<tr>
<td>user_id</td>
<td>Required</td>
<td>user_id for whom time/expense sheet is to be deleted</td>
</tr>
<tr>
<td>startday</td>
<td>Required</td>
<td>Specifies the start of the week</td>
</tr>
</tbody>
</table>

15.6  **Delete Time/Expense Entries**

The project member with edit permission will be allowed to delete time and expense entries using deleteEntries API.
<table>
<thead>
<tr>
<th>Request Type</th>
<th>URL</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>DELETE /wktime/deleteEntries.xml</td>
<td>200 OK. Deletes a time entries</td>
</tr>
<tr>
<td></td>
<td>/wktime/deleteEntries.json</td>
<td></td>
</tr>
<tr>
<td>Expense</td>
<td>DELETE /wkexpense/deleteEntries.xml</td>
<td>200 OK. Deletes an expense entries</td>
</tr>
<tr>
<td></td>
<td>/wkexpense/deleteEntries.json</td>
<td></td>
</tr>
</tbody>
</table>

Sample XML data to be posted (for Time)

```xml
<?xml version="1.0" encoding="utf-8"?>
<time_entries type="array">
<time_entry>
  <id>1535</id>
  <project id="1" name="Vitals Software"/>
  <issue id="1"/>
  <user id="3" name="Suganya Thulasiraman"/>
  <activity id="10" name="Design"/>
  <hours>4.0</hours>
  <comments/>
  <spent_on>2013-12-23</spent_on>
  <custom_fields type="array">
    <custom_field id="15" name="Difficulties">
      <value/>
    </custom_field>
  </custom_fields>
</time_entry>
<time_entry>
  <id>1537</id>
  <project id="1" name="Vitals Software"/>
  <issue id="1"/>
  <user id="3" name="Suganya Thulasiraman"/>
  <activity id="10" name="Design"/>
  <hours>4.0</hours>
  <comments/>
  <spent_on>2013-12-25</spent_on>
  <custom_fields type="array">
    <custom_field id="15" name="Difficulties">
      <value/>
    </custom_field>
  </custom_fields>
</time_entry>
</time_entries>
```

**16. Code Hooks**

T&E supports code hooks so it can be extended seamlessly. The following are the hooks

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Description</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>view_te_filter</td>
<td>Used to specify filters for the time/expense sheet list page.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>view_member_dropdown</td>
<td>Used to fill member dropdown in New project_id</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>time/expense sheet page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>view_wktime_menu</td>
<td>Used to show or hide “Time &amp; Attendance” menu.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>controller_project_member</td>
<td>Used to fill member dropdown for the selected project on project dropdown change.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>controller_group_member</td>
<td>Used to fill member dropdown for the selected group on group dropdown change.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>controller_get_member</td>
<td>Used to fill member dropdown on list page on page load.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>controller_check_permission</td>
<td>Used to check permission to view time/expense sheet.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>controller_check_approvable</td>
<td>Used to check permission to approve time/expense sheet.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>controller_edit_timelog_permission</td>
<td>Used to check permission for edit/delete time/expense log.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>controller_set_view_projects</td>
<td>Used to fill project dropdown in list page.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>controller_set_manage_projects</td>
<td>Used to fill project dropdown in new time/expense sheet page.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>controller_check_editable</td>
<td>Used to check whether time/expense sheet is editable.</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>controller_check_locked</td>
<td>Used to check whether time/expense sheet is locked.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>controller_get_manager</td>
<td>Used to get the manager of a member</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>controller_get_permmissible_projs</td>
<td>Used to get the allowed project for the user</td>
<td></td>
</tr>
</tbody>
</table>

### 17. Customization

For any Customization / Support, please contact us, our consulting team will be happy to help you

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Here are the Customizations we have done for our clients:

1. Monthly Calendar – Puny Human
2. Supervisor Approvals – Fotonation

### 18. Troubleshooting

1. The issues associated with each project do not show up in the drop down list
   This might be the issue visibility configuration issue. Check under Administration ➔ Roles and Permissions ➔ Edit user role ➔ Issue Visibility.
   (For further detail refer section 5.1.1)

2. Is it possible to change the default currency of expenses
   First one from the currency dropdown is the default. To have the currency of your choice to be the default in currency dropdown, add the following lines within number in the language file (for e.g., config/locale/cs.yml)

   ```yaml
   currency:
   ```
3. There is no submit button
The submit button will be visible only when “Approval System” is enabled.

4. How to approve the manager time-sheet?
If the setting “Approve own time/expense sheet” is enabled, then the manager can approve his own timesheet.

5. Why is the plugin not maintaining comments separately for each time entry?
If we have set “Enter comment in row”, it will allow only one comment per row. The timesheet will allow only one combination of project, issue and activity on multiple rows. To allow for separate comments per time entry, do not use the setting “Enter comment in row”.

6. The pdf export is not working. It is showing Internal error
The rmagick gem is required for displaying the logo in the pdf. If the rmagick gem is not installed, this error is encountered. Other alternative is to remove the logo from the pdf. To remove the logo, go to the plugin configuration page and empty the report logo field.

7. Some of the time entries are disabled on edit for project manager
The project manager (with “Edit time logs” permission) can add/edit a time & expense sheet for their project members.

8. Can we log time using core Redmine when a Time & Expense is in approved state ?
Apart from the Time & Expense plugin, there are two other ways of logging time
- Project ➔ Edit Project ➔ Log time
- Project ➔ Edit Project ➔ Edit Issue ➔ Update

There will be warning messages on both these pages if the timesheet was approved for that week and buttons ‘Create’ and ‘Create and continue’ will be disabled on log time page.
## Spent time

<table>
<thead>
<tr>
<th>Issue</th>
<th>Date</th>
<th>Hours</th>
<th>Comment</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2015-10-08</td>
<td></td>
<td></td>
<td>--- Please select ---</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>test</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>test2</td>
</tr>
</tbody>
</table>

The timesheet for this period is locked, you cannot log time.

**Create**  **Create and continue**