Contents

Introduction

Capacity Planning Tool (CPT)

Capacity Planning Tool is a one solution Web-Based tool for all activities with respect to managing projects and resources. Using this we can keep track of capacity of an Resource, ongoing projects, holidays, and other non-working days for the organization as well as an individual. With the help of this tool, we can have all entry like Projects, Resources, Holidays, Markets, etc. directly from dedicated Master pages, furthermore from Project Allocation Page we can perform resource to project mapping within few seconds.

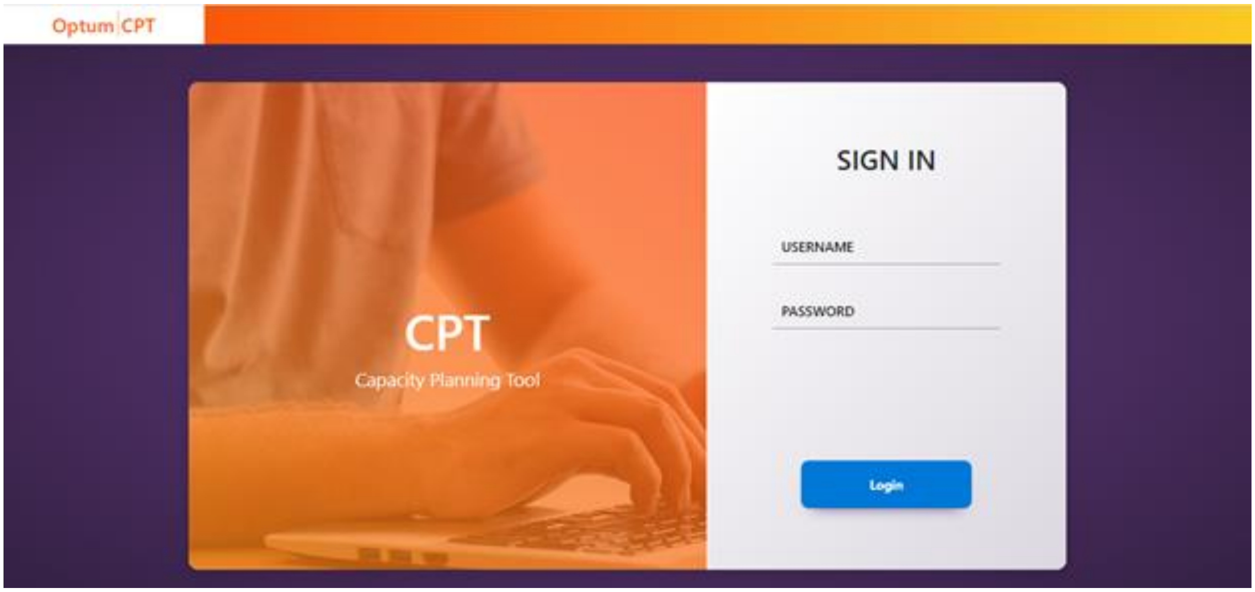
Agenda for this implementation is to bring multiple applications such as PPM Optics, TFS sprint, etc. on one platform for different markets. With the help of this tool, we can have all entry like Projects, Resources, Holidays, Markets, etc. directly from dedicated Master pages, furthermore from Project Allocation Page we can perform resource to project mapping within few seconds.

For better aid in utilization of the data capture from process, we have Power BI reports to represent different aspects of data analysis and visualization.

Pages and Capabilities

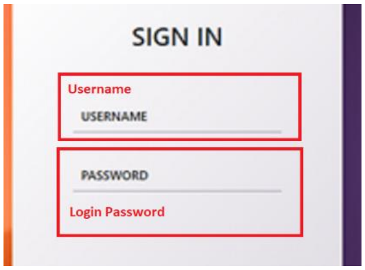
Login Screen

This is the first screen where a user is navigated, and this provides the interface through which a valid user can use.

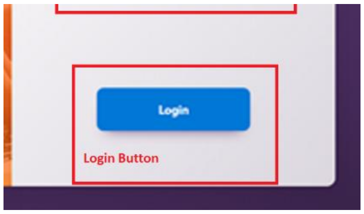


Screen provided for users to login using valid credentials. Using this screen, users with valid credentials can login. And use the app.

Step 1: User provides login credentials.



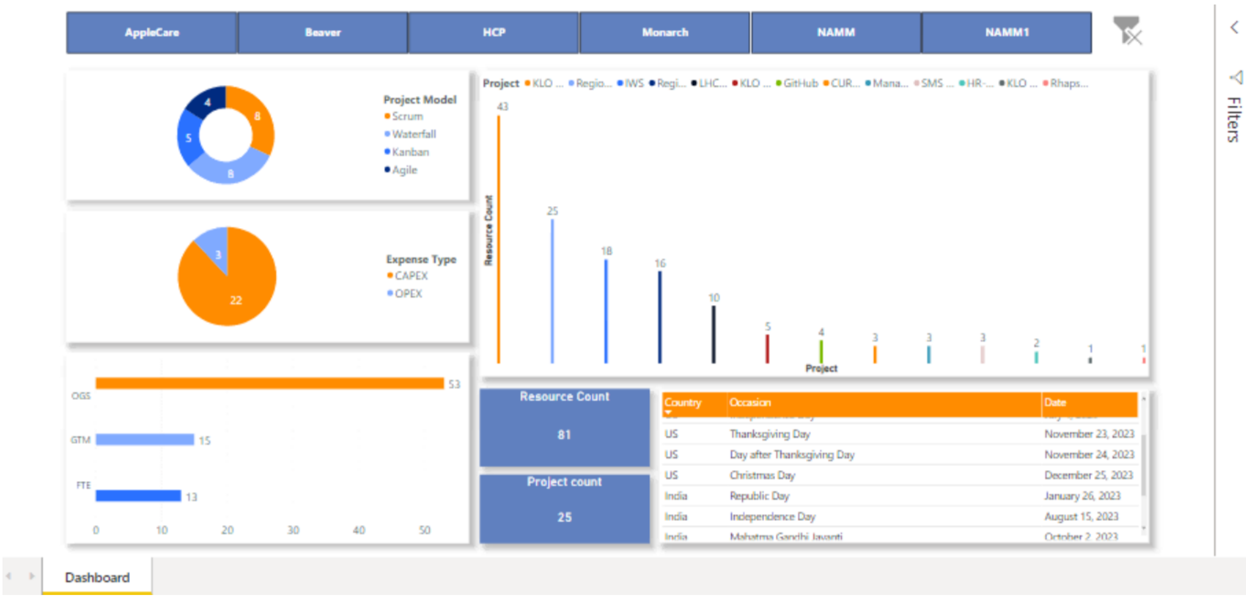
Step 2: User clicks the Login button



After clicking the Login button, both username as well as the password provided by the user is validated from the backend and if the credentials are valid, login is successful and user lands on the dashboard.

Dashboard

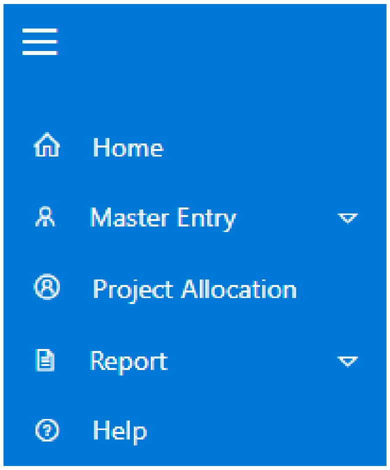
The dashboard shows Markets, Project models, Expense Type and Holiday data. We have visuals on Project models along with Expense Type for project in a selected market. It also shows projects along with the number of resources working in the project using bar chart. The holiday list shows holidays along with location for selected Market.



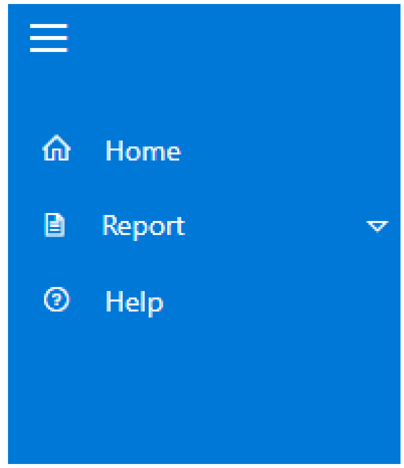
Dashboard with different graphs and charts related to ongoing projects and resources.

Role Based Access

Admin



General User

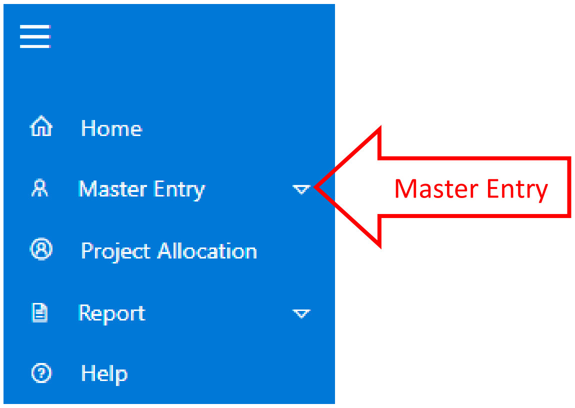


We have two different kinds of roles namely admin and user, depending upon the role of the user we have different capabilities accessible to the users and it can be seen in the attached images above.

For a normal user we have limited the access to reports only however for admins we have the access to master entry as well which leads to a host of other market management capacities.

Master Entry

Master Entry provides an interface for the management of different resources and events i.e. any valid admin can add, see and update. A valid admin can manage Market Details, Resource Details, Project Details and Holiday Details. And it can be accessed from the sidebar on the left.

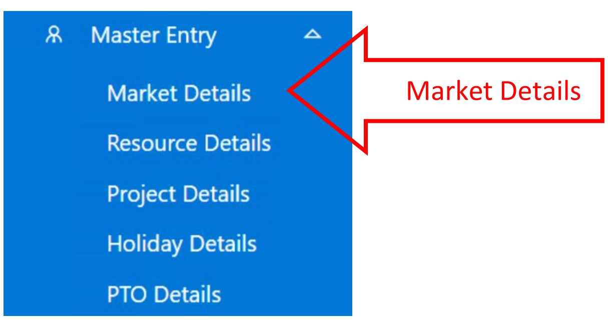


Market Details

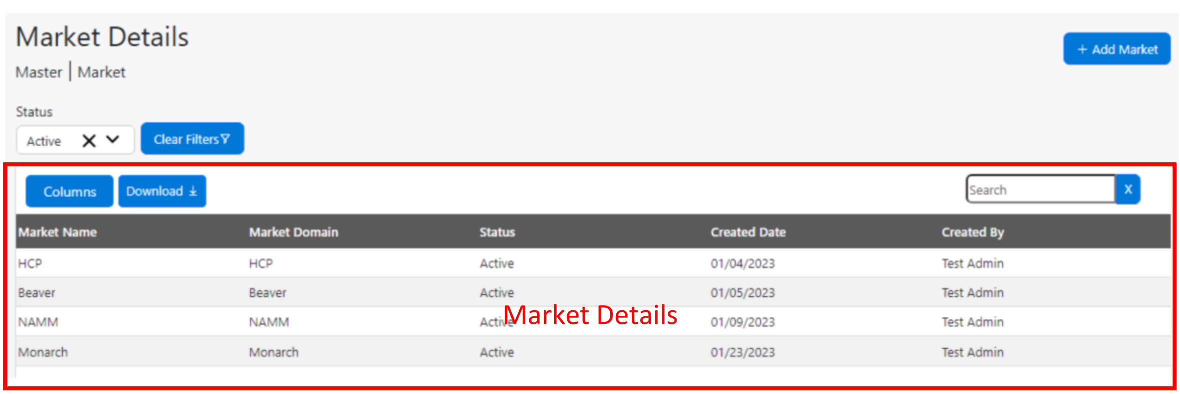
Market Details provides controls to manage different markets and their details such as their domain, status etc.

Accessing Market Details:

Step 1: To access Market Details admin clicks on the Market Details dropdown under Master Entry.



Step 2: Admin gets navigated to following screen



We have a search functionality using that we can search based on different values.

Capabilities available within the Market Details Tab

Admin can access details related to Markets associated with us. Accessible details are Market Name, Market Domain, Status (Active or Inactive), date of creation and who has created a Market.

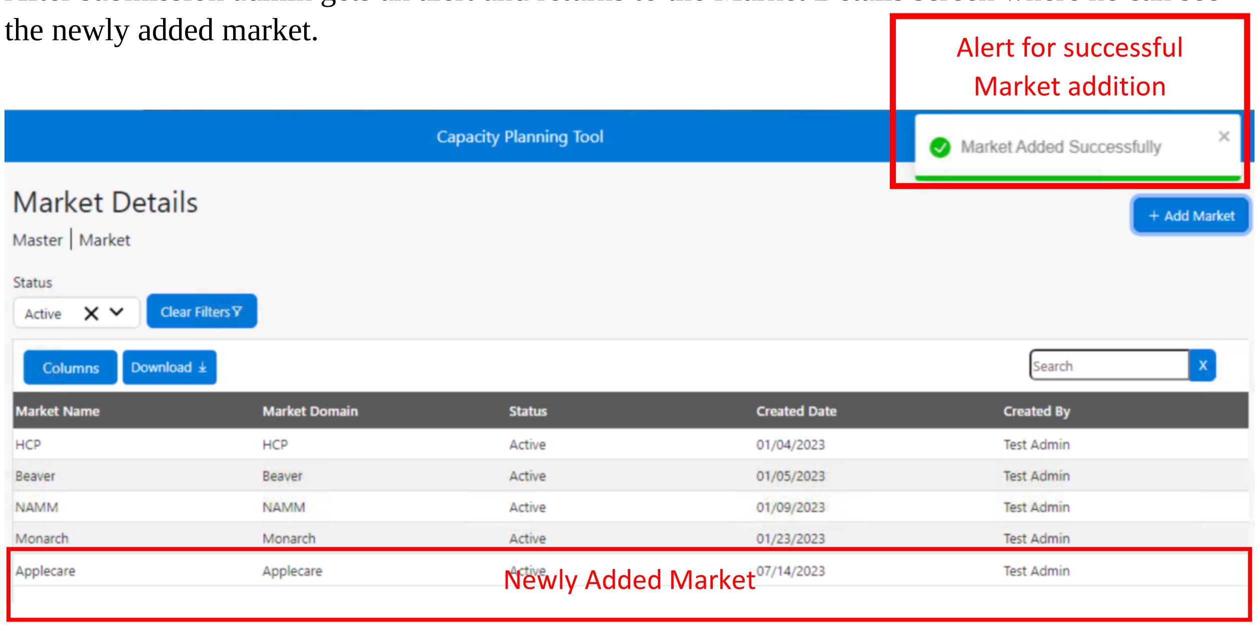
Admin can search, using which admins can get details for a market. Apart from search admin can also add Markets that are associating.

Steps to add a market

Step 1: On the Market Details tab admin can find a button "+ Add Market" available on top right corner below the Username and profile picture. Admin clicks on the button then a form with required fields opens-up.

Step 2: Admin fills in the required details and submits the form.

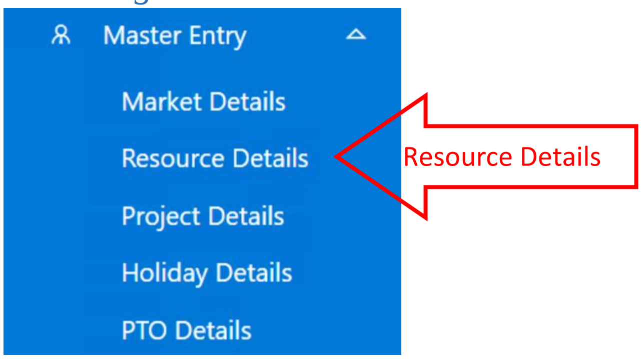
After submission admin gets an alert and returns to the Market Details screen where he can see the newly added market.



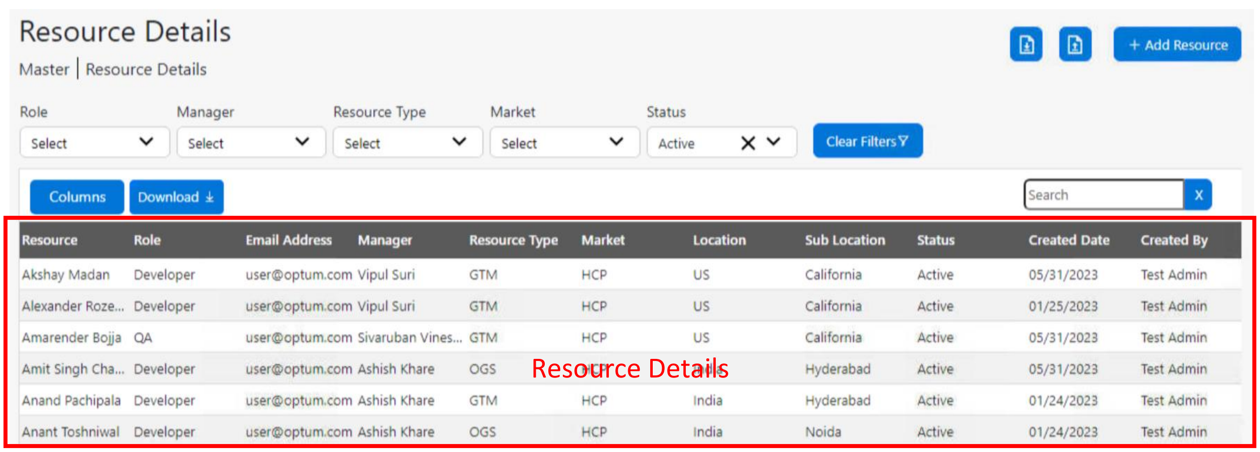
Resource Details

Resource Details provides the capability to manage the Resources and the projects they are working on or have worked on in the past along with the number of hours on respective projects and some other details.

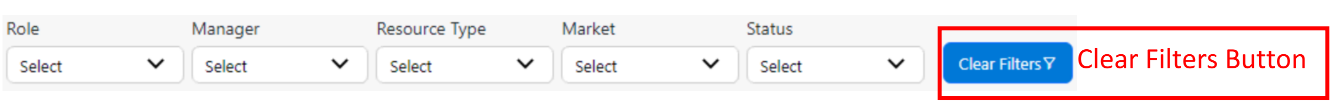
Accessing Resource Details



To access Resource Details admin selects Resource Details tab under Master Entry of the sidebar, then it navigates to the following screen.



Here we also have search functionality using it we can search different fields and on the basis of that we get all the records. Apart from search we also have filters and clear filter functionality. We can filter Resources on the basis of role, manager, resource type, market and their status of activeness.



Using the clear filters button we can cancel all filters and get the unfiltered records on the screen.

Download Selected Columns

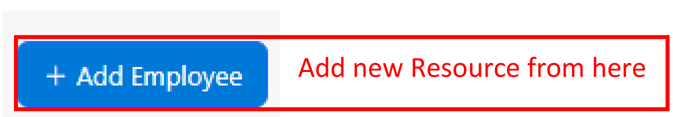
On all the master pages, we have a column dropdown on this screen. It has some alreay selected selecction fields for the columns that are visible on the screen and some fields are unselected but we can filter the columns that we want to download. But, if we don't filter the columns then already selected columns would be exprted.

Capabilities accessible from the Resource Details screen.

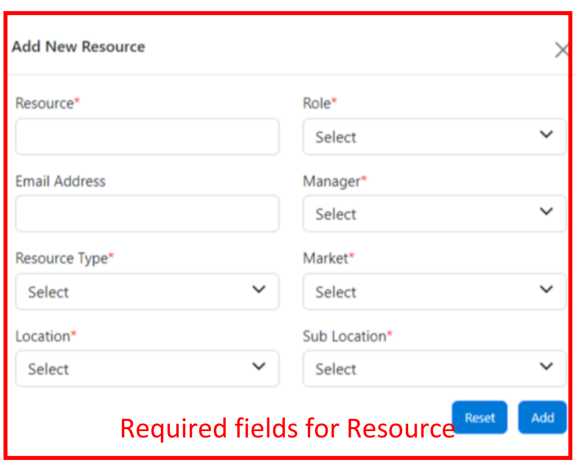
1. Admin can see details related to Resources
2. Admin can also download the list of Resources with afore-mentioned fields using the Export button beneath the filter.
3. Admin can see a list of Resources and the list can be filtered as well onSh1hi the basis of different filters namely
    a. Role
    b. Manager
    c. Resource Type
    d. Market
    e. Status
4. Admin can also search an Resource.
5. Downloading the Bulk upload template
6. Adding Resources details in bulk
7. Adding Resources details individually
8. Edit or Update Resource Details

Steps for Adding Individual Resources:

Step 1: Admin clicks on the "+ Add Resource" button available on the top right corner then a form with required details opens-up.



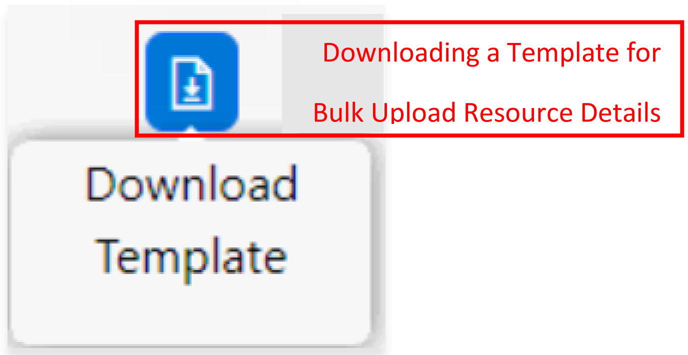
Step 2: After filling in all the required fields admin can submit it.



After submission with all the valid details Resource gets added and the admin gets an alert of successful addition, and the newly added Resource can be found on the Resource details screen.

Downloading A Template of Resource Details

Admin can simply download a template with all the required details of all the Resources by clicking the highlighted button.

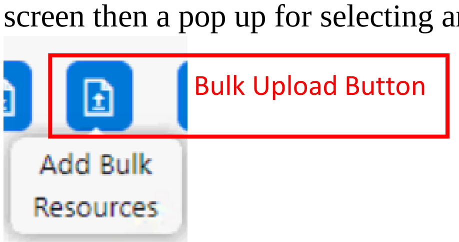


Export Resource Details

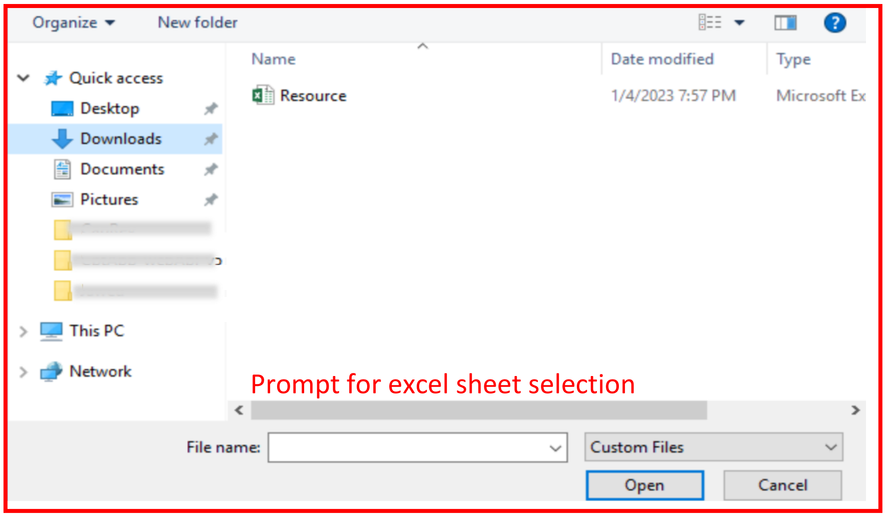
For all the master pages, admins can export Resource details filtered or total clicking the Download button available below the filter, and it would prompt admin to select the download file type which could be either a pdf or an excel file. If we select any filters before clicking the export button, then the exported file would contain all the filtered details but if we don't select any filters then all the details would be exported.

Steps for adding Resources' details in bulk:

Step 1: Admin selects the second button available on top right corner of the Resource Details screen then a pop up for selecting an excel sheet with all the required fields.



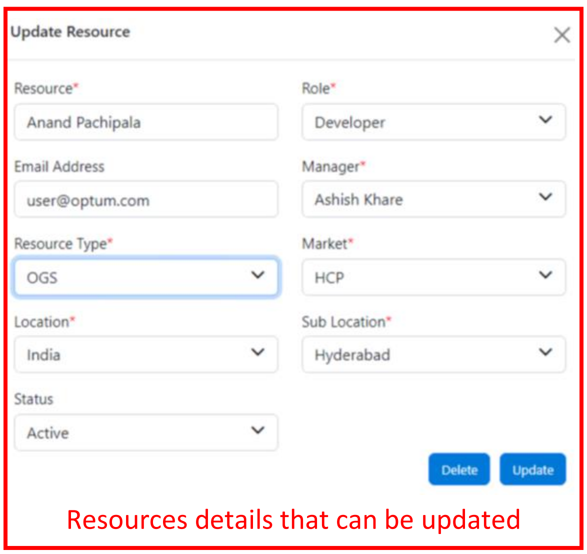
Step 2: After selecting an excel sheet with all the required fields for adding individual Resource details. After selecting the file admin submits.



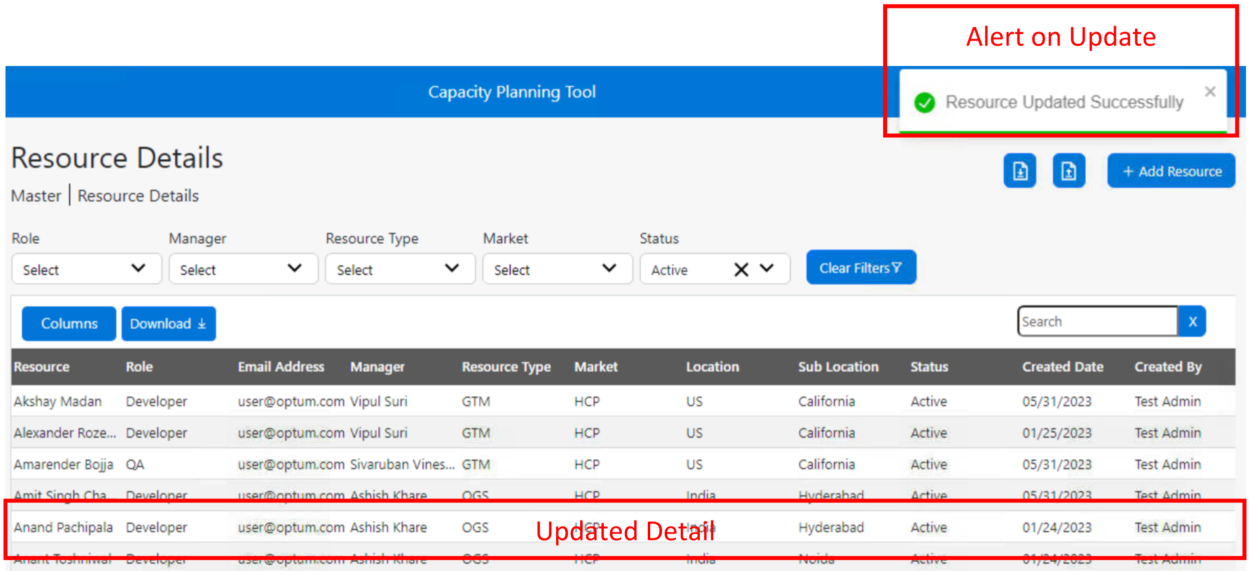
After successful upload, all the valid details get updated, and admin gets an alert. All newly added Resources can be seen on the Resource details screen.

Steps for Updating a Resource Details

Step 1: Admin double clicks on a resource detail row then a prepopulated form opens from the right side of the screen. If an admin does not want to update, he can click outside the form or can click on the “x” button available on the top right corner of the form.



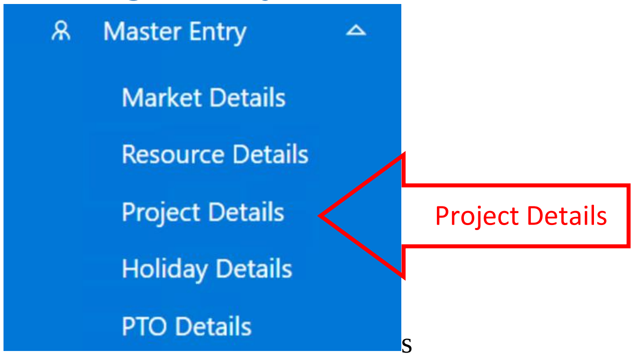
Step 2: Admin can update the details with valid set of information and can submit it. All the updated information can be seen on the Resource details screen itself.



Project Details

This screen provides project management capability. From this screen admin can see projects, their code, market, manager, model, and some other details. And admin can also add, search and filter projects

Accessing the Project Details Screen



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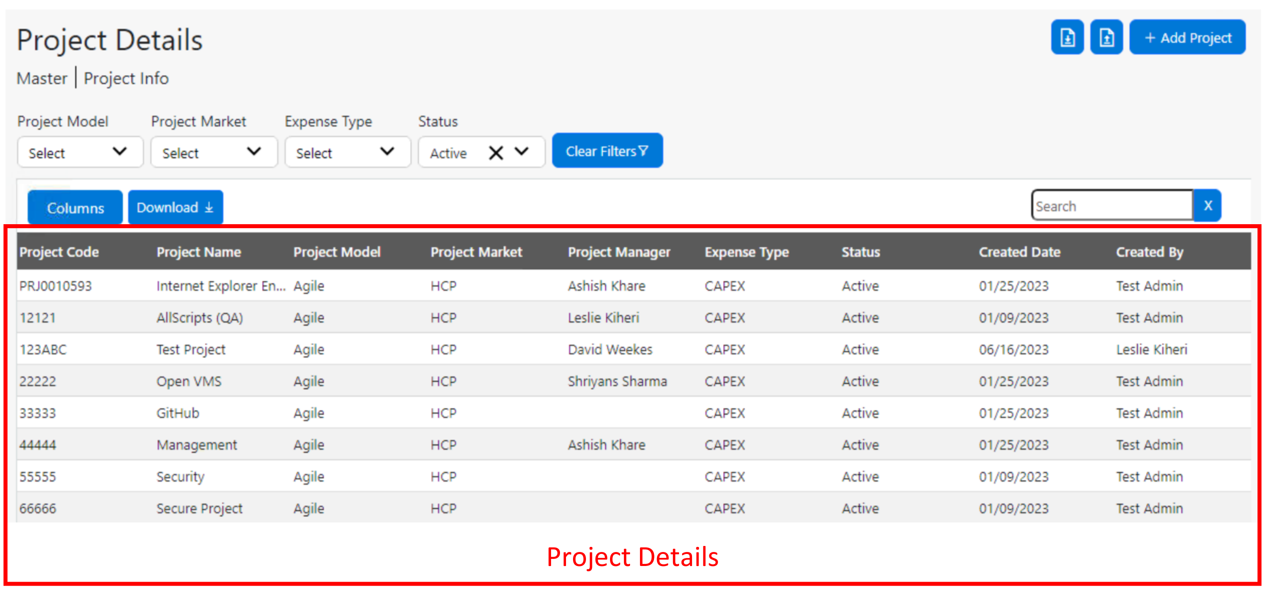
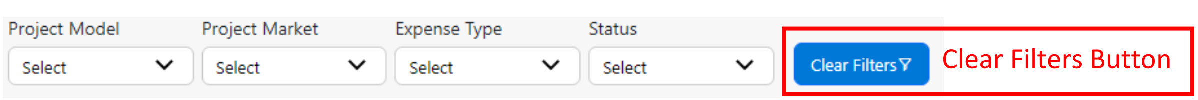
To access Project Details admin selects Project Details dropdown under Master Entry of the sidebar, then it navigates to the following screen.



Project Code	Project Name	Project Model	Project Market	Project Manager	Expense Type	Status	Created Date	Created By
PRJ0010593	Internet Explorer En...	Agile	HCP	Ashish Khare	CAPEX	Active	01/25/2023	Test Admin
12121	AllScripts (QA)	Agile	HCP	Leslie Kiheri	CAPEX	Active	01/09/2023	Test Admin
123ABC	Test Project	Agile	HCP	David Weekes	CAPEX	Active	06/16/2023	Leslie Kiheri
22222	Open VMS	Agile	HCP	Shriyans Sharma	CAPEX	Active	01/25/2023	Test Admin
33333	GitHub	Agile	HCP		CAPEX	Active	01/25/2023	Test Admin
44444	Management	Agile	HCP	Ashish Khare	CAPEX	Active	01/25/2023	Test Admin
55555	Security	Agile	HCP		CAPEX	Active	01/09/2023	Test Admin
66666	Secure Project	Agile	HCP		CAPEX	Active	01/09/2023	Test Admin

By leveraging the search functionality we can search on the basis of different fields. Apart from search we can also filter projects on the basis of project model, market, expense type and their status.



And once we are done with filters we can cancel all filters using the clear filter button.

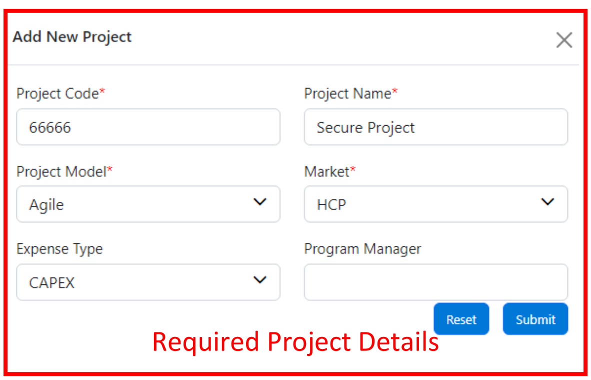
Capabilities accessible from the Project Details screen.

1. Admin can see details related to projects
2. Admin can see a list of projects and the list can be filtered as well based on different filters namely
    a. Project Model
    b. Market
    c. Expense Type
    d. Status
3. Admin can also search a project.
4. Adding Project Detail
5. Adding Projects in bulk
6. Editing Project Detail

Steps to Add a Project

Step 1: Admin clicks on the "+ Add Project" button available on the top right corner of the Project Details screen, then following form opens-up with required fields.

Step 2: Admin fills in the required field of the form and submits it. Project Model, Market and Expense Type are predefined set of information, and they are restricted to available options only.



After successful addition of the project admin gets and alert and the newly added project can be seen on the project details screen as in the following screen.

Project Code	Project Name	Project Model	Project Market	Program Manager	Expense Type	Status	Created Date	Created By
PRJ0010593	Internet Explorer En...	Agile	HCP	Ashish Khare	CAPEX	Active	2023-01-25	Test Admin
12121	AllScripts (QA)	Agile	HCP	Leslie Kiheri	CAPEX	Active	2023-01-09	Test Admin
22222	Open VMS	Agile	HCP	Shriyans Sharma	CAPEX	Active	2023-01-25	Test Admin
33333	GitHub	Agile	HCP		CAPEX	Active	2023-01-25	Test Admin
44444	Management	Agile	HCP	Ashish Khare	CAPEX	Active	2023-01-25	Test Admin
55555	Security	Agile	HCP		CAPEX	Active	2023-01-09	Test Admin
66666	Secure Project	Agile	HCP		CAPEX	Active	2023-01-09	Test Admin

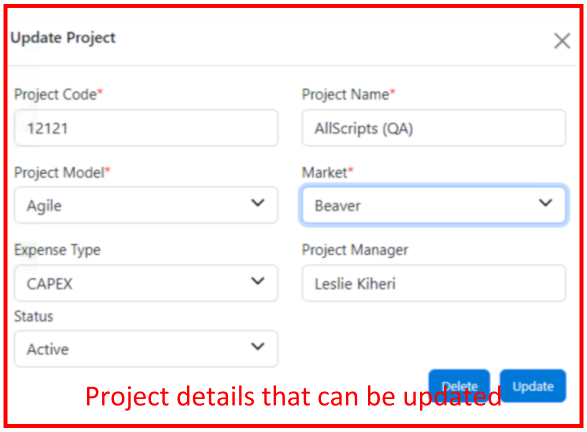
Newly Added Project

Steps to Adding Project in bulk

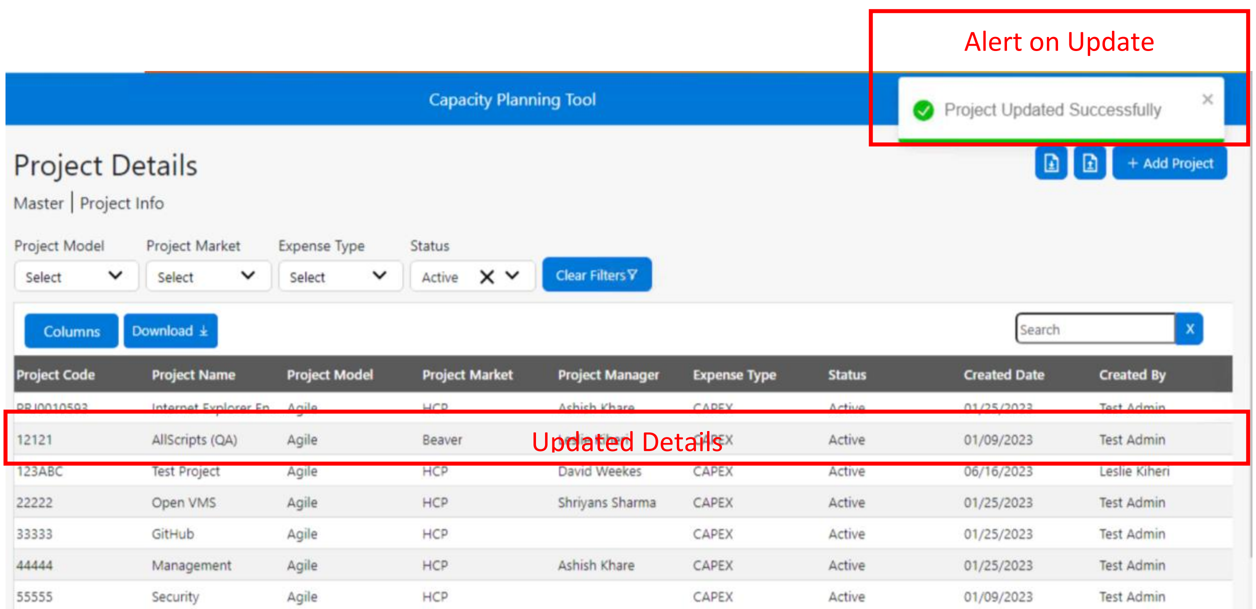
Similar to adding resources in bulk we also have bulk upload button for projects, when clicked it prompts for uploading a excel sheet and after validation it adds all the valid projects.

Steps to Update a Project

Step 1: Admin double clicks on a project details row available on the project details screen then a prepopulated form opens from the right side of the screen. If an admin does not want to update, he can click outside the form or can click on the "x" button available on the top right corner of the form.



Step 2: Admin can update the details with valid set of information and can submit it. All the updated information can be seen on the project details screen itself.

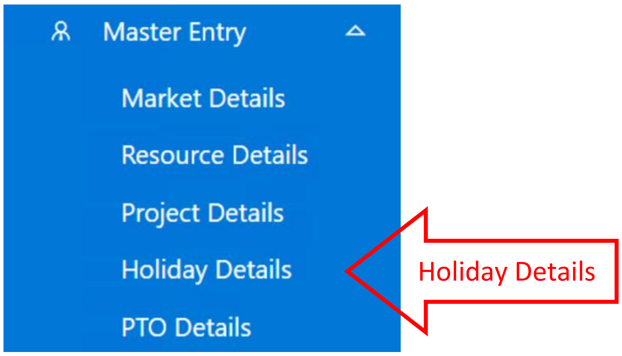


Holiday Details

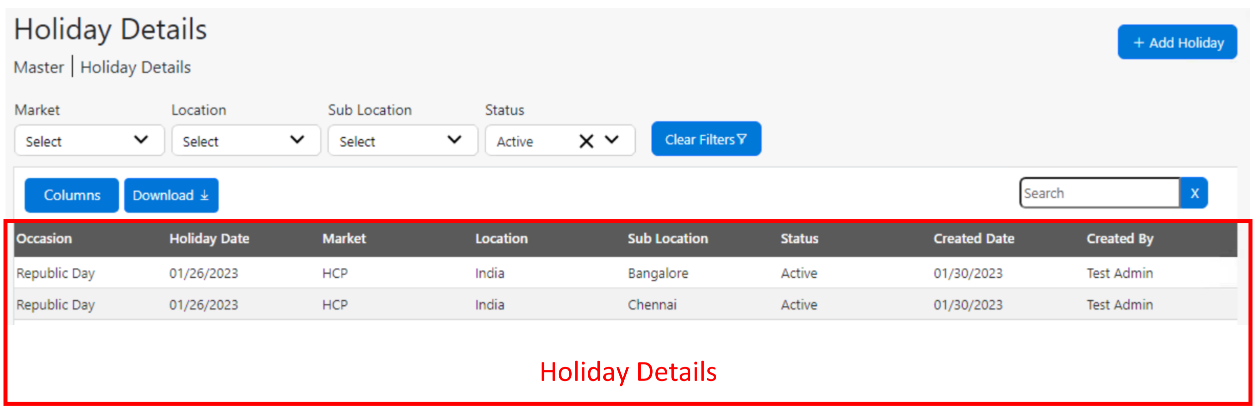
This screen provides capability to manage holidays, it provides details like market, location and other details applicable for a particular holiday.

Accessing the Holiday Details screen:

To access the Holiday Details Screen admin selects Holiday Details from the Master Entry dropdown of the left sidebar.

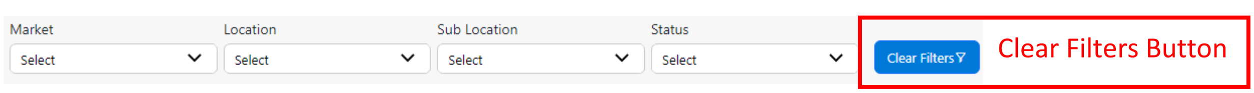


And after clicking the Holiday Details it navigates to following screen.



On this screen admin can see some details related to a holiday like the ocassion, date, market, location, sublocation and some other details as well.

On this screen we have a search functionality using it we can search on the basis of different fields. We also have filters and clear filter functionality. We can filter holidays on the basis of market, location, sublocation and their status whether they are active or inactive.

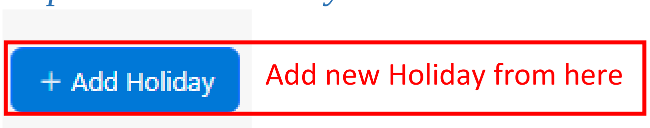


And once we are done with filters we can cancel all filters using the clear filter button.

Capabilities available on this screen:

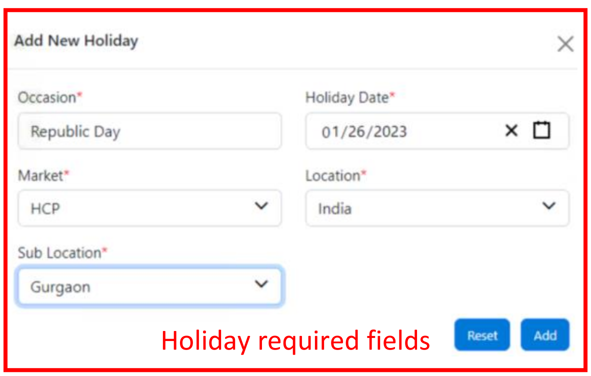
1. Admin can see details related to Holidays
2. Admin can see a list of Holidays and the list can be filtered as well based on different filters namely
    a. Market
    b. Location
    c. Sub Location
    d. Status
3. Admin can also search a holiday.
4. Adding Holiday detail
5. Updating Holiday details

Steps to add a Holiday

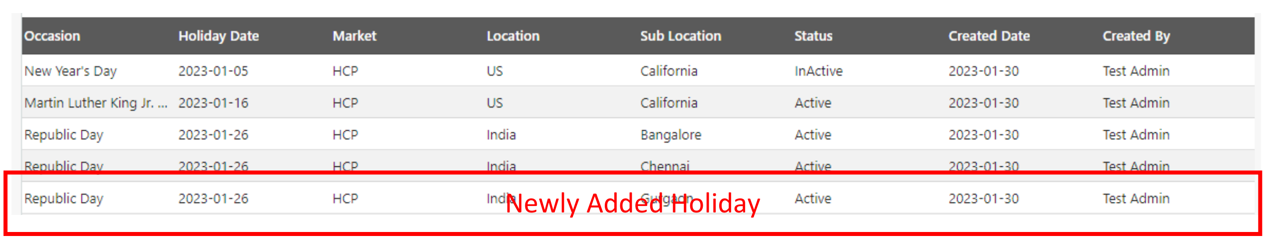


Step 1: Admin clicks on the "+ Add Holiday" button available on the top right corner of the Holiday Details screen, then following form opens-up with required fields.

Step 2: Admin fills in the required field of the form and submits it.



After successful addition admin gets alert and the holiday can be seen on the holiday details screen as in the following screen.

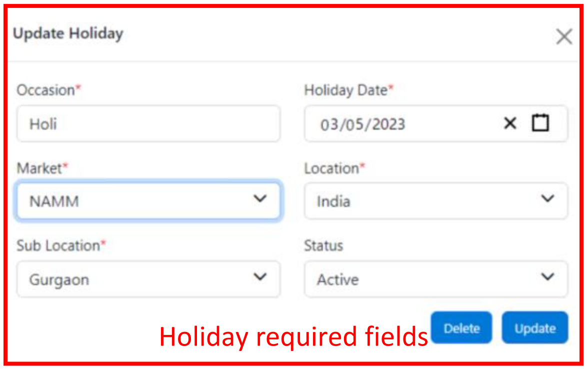


Occasion	Holiday Date	Market	Location	Sub Location	Status	Created Date	Created By
New Year's Day	2023-01-05	HCP	US	California	InActive	2023-01-30	Test Admin
Martin Luther King Jr. ...	2023-01-16	HCP	US	California	Active	2023-01-30	Test Admin
Republic Day	2023-01-26	HCP	India	Bangalore	Active	2023-01-30	Test Admin
Republic Day	2023-01-26	HCP	India	Chennai	Active	2023-01-30	Test Admin
Republic Day	2023-01-26	HCP	India	Gurgaon	Active	2023-01-30	Test Admin

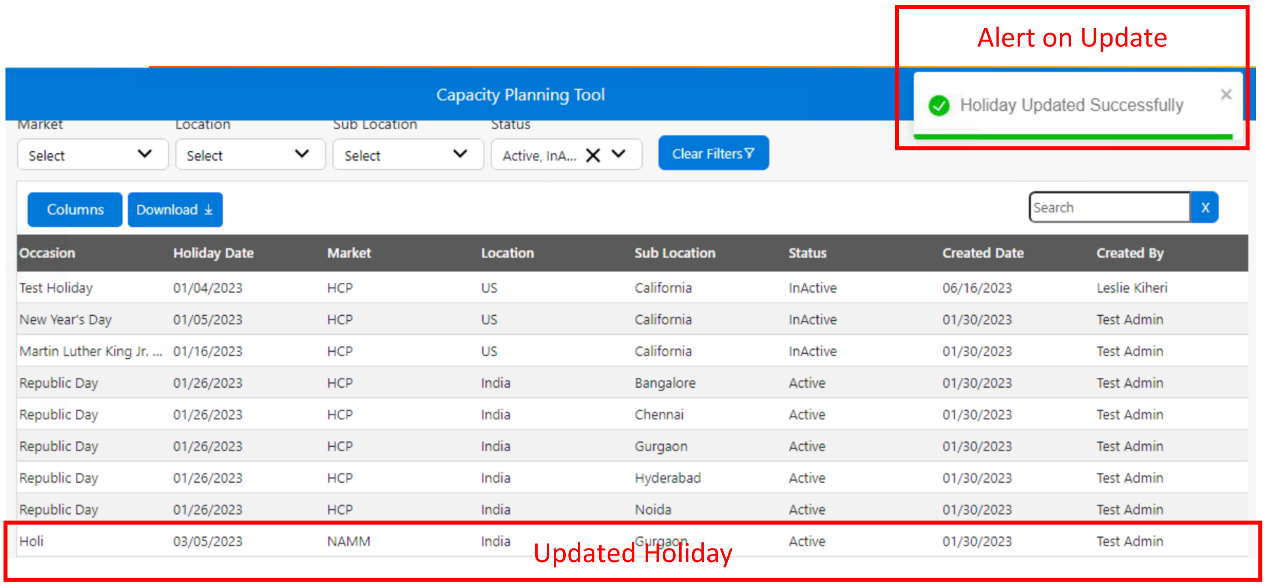
Steps to update a Holiday

Step 1: Admin double clicks the record he intends to update, then following form opens-up with required fields.

Step 2: Admin fills in the required field of the form and submits it.



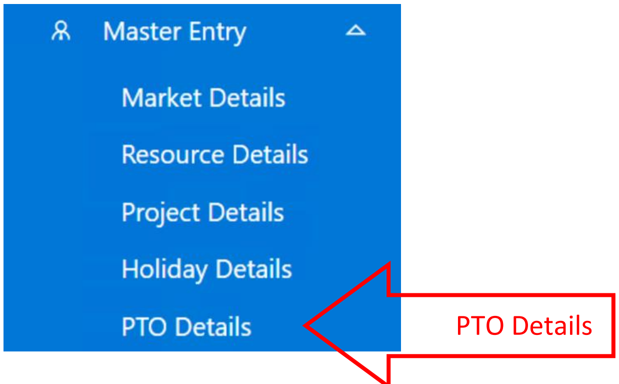
After successful update admin gets alert and the updated holiday can be seen on the holiday details screen as in the following screen.



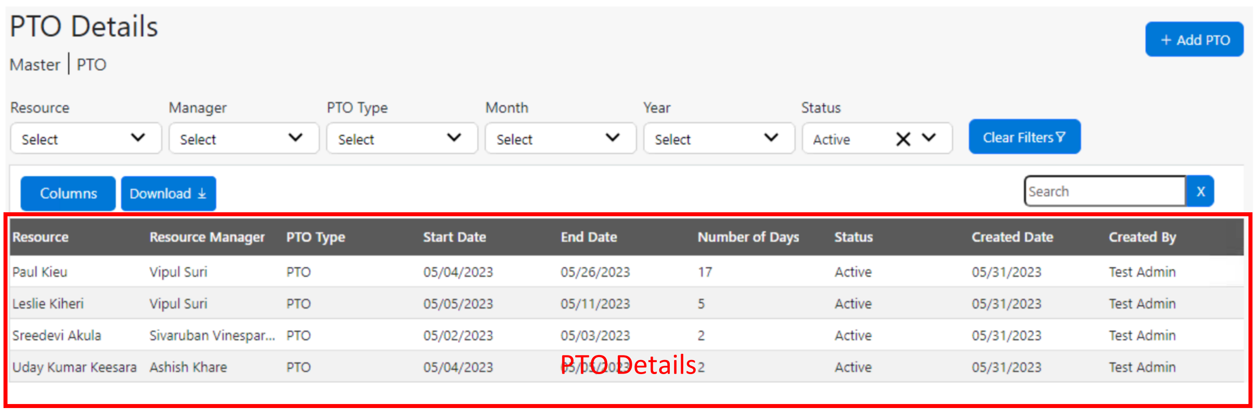
PTO Details

This screen provides an interface from where admin can monitor and manage the PTOs for the resources. Here, admins can see the resources who have taken PTOs with their relevant details like the start date, end date, month, PTO types, and number of days of the PTO taken etc.

Accessing the PTO Details Screen



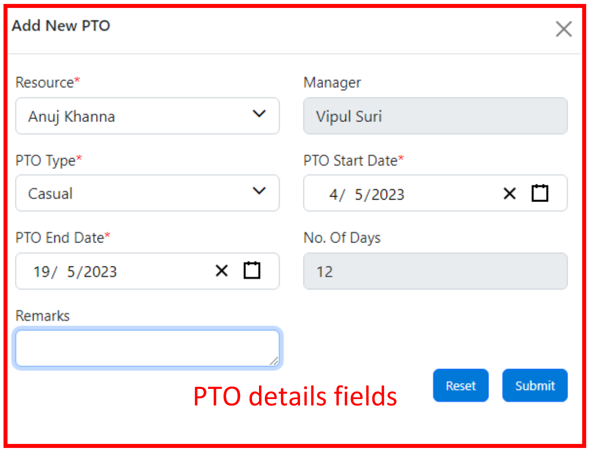
To access PTO Details admin selects PTO Details dropdown under Master Entry of the sidebar, then it navigates to the following screen.



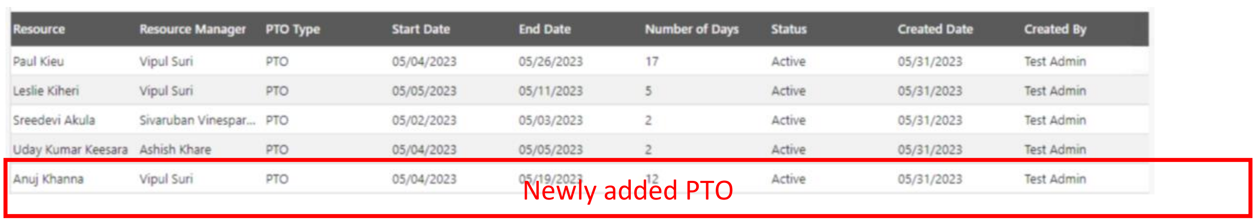
Here also, we have search and filter functionality and by using them we can filter these details as per our requirement and we can export filtered records in pdf or excel format. For filtering columns, we must select the columns from the column's dropdown.

Steps to add a PTO

Step 1: To add a new resource's PTO admin clicks on the "+ Add PTO" button available on the top right just below the profile icon. And it opens the following form with the fields for a PTO.


Add New PTO
Resource* Anuj Khanna
Manager Vipul Suri
PTO Type* Casual
PTO Start Date* 4/ 5/2023
PTO End Date* 19/ 5/2023
No. Of Days 12
Remarks
Reset Submit
PTO details fields

For valid filled in details PTO would be added successfully, admin get a notification and the newly added PTO can be seen on the PTO details screen.



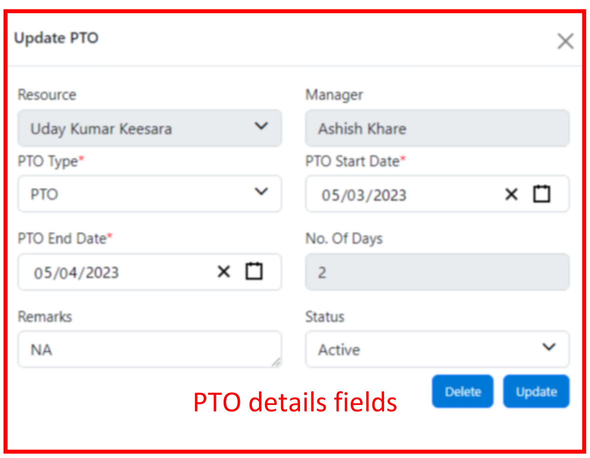
Resource	Resource Manager	PTO Type	Start Date	End Date	Number of Days	Status	Created Date	Created By
Paul Kieu	Vipul Suri	PTO	05/04/2023	05/26/2023	17	Active	05/31/2023	Test Admin
Leslie Kiheri	Vipul Suri	PTO	05/05/2023	05/11/2023	5	Active	05/31/2023	Test Admin
Sreedevi Akula	Sivaruban Vinespar...	PTO	05/02/2023	05/03/2023	2	Active	05/31/2023	Test Admin
Uday Kumar Keesara	Ashish Khare	PTO	05/04/2023	05/05/2023	2	Active	05/31/2023	Test Admin
Anuj Khanna	Vipul Suri	PTO	05/04/2023	05/19/2023	12	Active	05/31/2023	Test Admin

Newly added PTO

Steps to update a PTO

Step 1: Admin double clicks the record he intends to update, then following form opens-up with required fields.

Step 2: Admin fills in the required field of the form and submits it.


Update PTO
Resource Uday Kumar Keesara
Manager Ashish Khare
PTO Type* PTO
PTO Start Date* 05/03/2023
PTO End Date* 05/04/2023
No. Of Days 2
Remarks NA
Status Active
Delete Update
PTO details fields

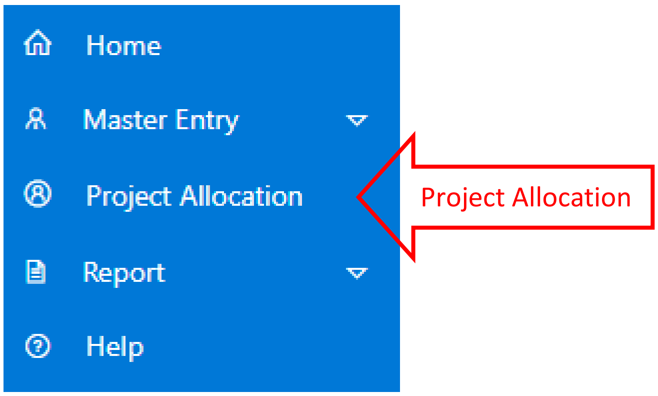
For valid filled in details PTO would be updated successfully, admin get a notification and updated PTO can be seen on the PTO details screen.

Resource	Resource Man...	PTO Type	Start Date	End Date	Number of Days	Remarks	Status	Created Date	Created By
Paul Kieu	Vipul Suri	PTO	05/04/2023	05/26/2023	17	Privilege	Active	05/31/2023	Test Admin
Leslie Kiheri	Vipul Suri	PTO	05/05/2023	05/11/2023	5	Casual	Active	05/31/2023	Test Admin
Sreedevi Akula	Sivaruban Vinesp...	PTO	05/02/2023	05/03/2023	2	Sick Leave	Active	05/31/2023	Test Admin
Uday Kumar Kees...	Ashish Khare	PTO	05/04/2023	05/05/2023	2	NA	Active	05/31/2023	Test Admin

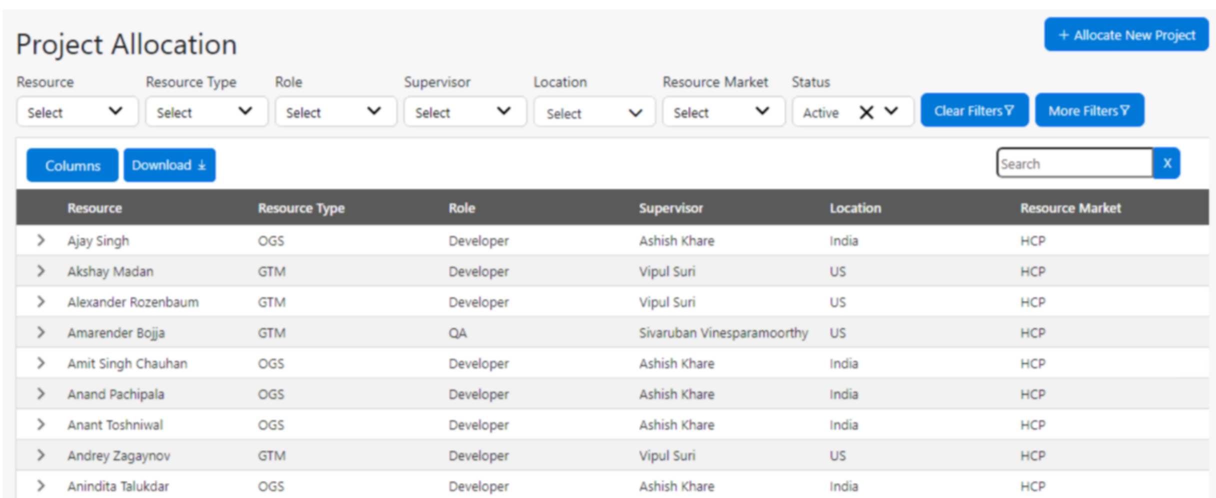
Updated PTO

Project Allocation

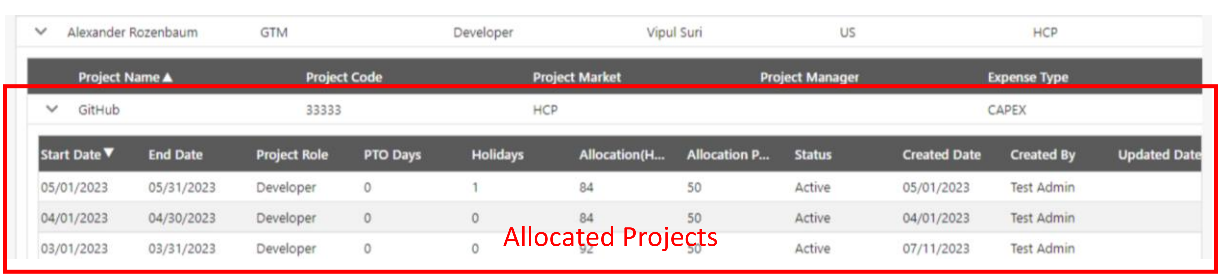
This screen provides capability to see and manage resources' allocated hours and other project related details. Whenever a resource is aligned to a project then an admin can allocate the project by providing the resource name, project name, start date, end date and the percentage of the allocation for the project. And based on resource name and selected dates PTOs and other fields would be calculated and auto populated.



To access the Project Allocation Screen, admin must click on the Project Allocation button from the sidebar and then admin gets navigated to the following screen

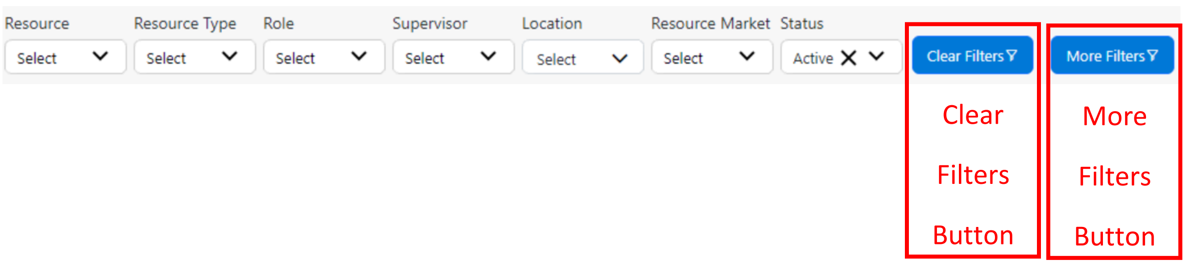


On this screen details like resource, resource type, role, supervisor, location, market can be seen by the admin. Once a row is clicked, it would expand and open all the projects that a resource is aligned to. As it is visible in following screen

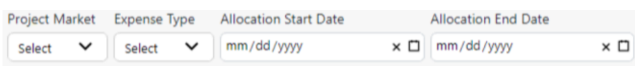


And now once a project is clicked, all allocations corresponding to a particular resource and project opens and to modify the details related to an allocation admin has to double click on allocation that he must edit.

Here we also have search functionality using it we can search on the basis of different fields. Apart from search we also have filters and clear filter functionality. We can filter allocated projects on the basis of market, location, sublocation and their status of activeness.



We can cancel all the applied filters using the clear filter button and more filters button exposes some more filters as shown below.



Download Selected Columns

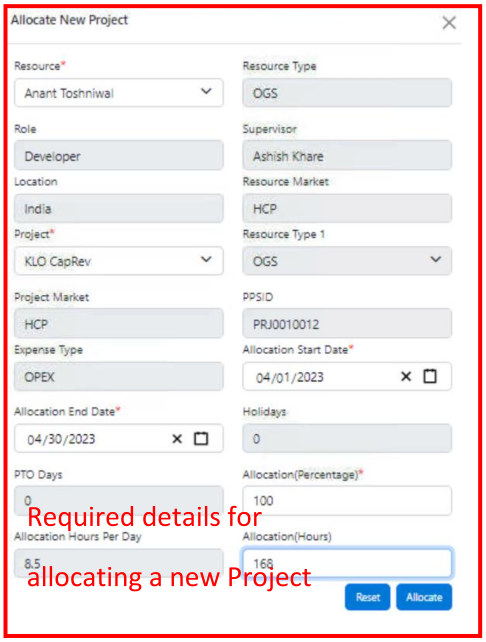
We have a column dropdown on this screen that has alreay selected selecction fields for the columns that are visible on the screen but we can filter the columns that we want to download. But, if we don’t filter the columns then already selected columns would be exprted.

Steps for allocating a project

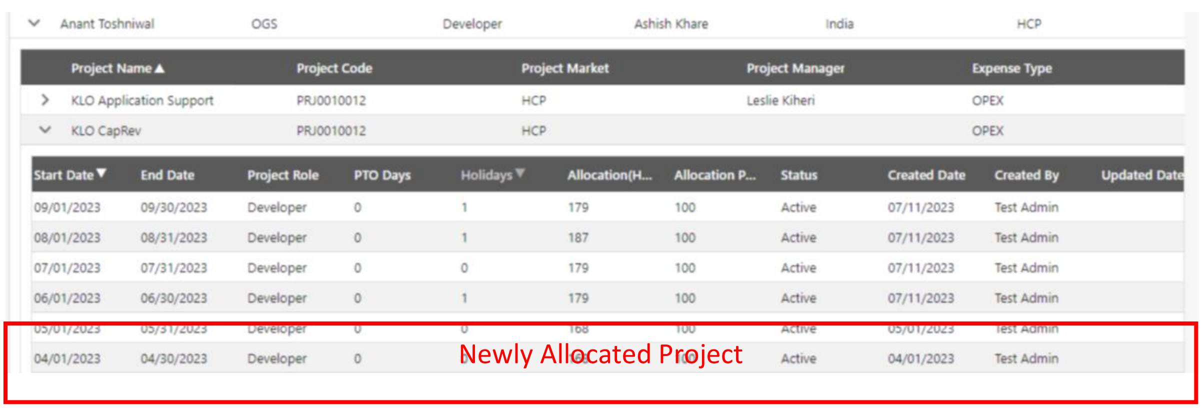
Step 1: Admin clicks on the “+ Allocate New Project” button available on the top right corner of the Project Allocation screen,

then following form opens-up with required fields.

Step 2: Admin fills in the required field of the form and submits it.



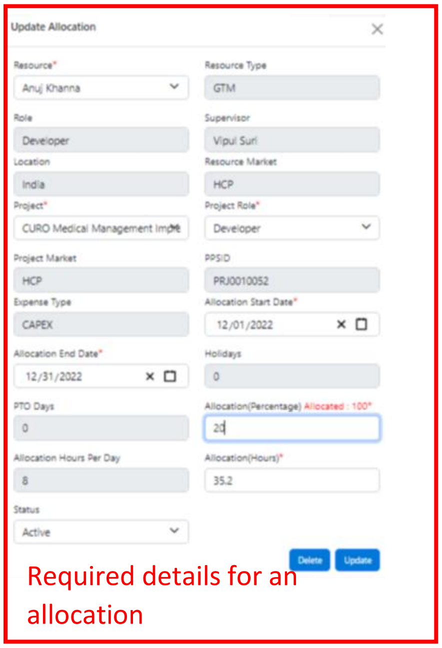
After successful addition admin gets alert and the resource on a new project and date can be seen on the project allocation screen as in the following screen.



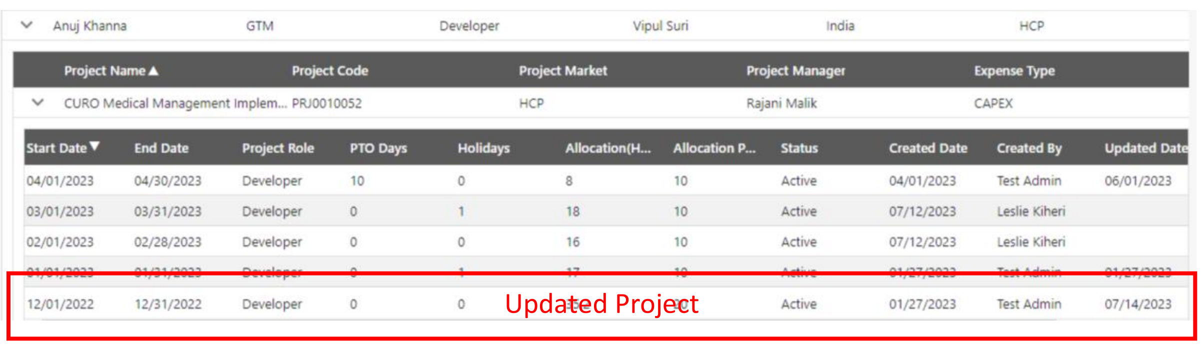
Steps for updating an allocation

Step 1: Admin clicks on the resource for whom allocation is to be edited and then following form opens-up

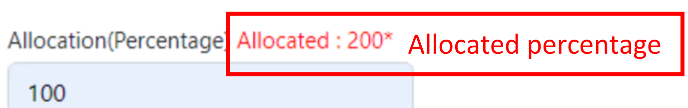
Step 2: Admin fills in the required field of the form and submits it.



After successful update, admin gets alert and the resource on an updated project and date can be seen on the project allocation screen as in the following screen.



Allocation (Percentage)



We have this control that indicates the percentage of allocation hours that have already been allocated for some other project for the selected resource for the corresponding time span. If we have selected a time span that contains on one month that has been already allocated to a project for a particular resource, then it would reflect the sum of the percentage allocations for the already allocated month. And the allocated hours will appear only if we change any of these three fields namely resource, start sate and end date.

Allocation Hours Per Day

We also have allocation hours per day that indicates the hours per day a resource can be allocated for any project, and it is based on the resource and its type.

Allocation Hours Calculation

When we select resource, resource type, start date, end date and allocation percentage then we get an auto populated field allocation hours and allocation hours is being calculated according to following formula

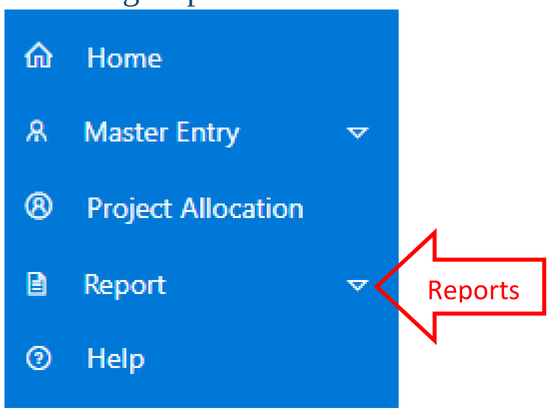
$$\text{Allocation hours} = \text{total working days} * \text{allocation hours per day} * \text{allocation percentage}$$

Where, total working days is the number of days in the selected time span except the number of PTOs, Saturdays, Sundays, and holidays.

Reports

This collection of dropdowns provides capability to generate reports based on different set of data available on the database.

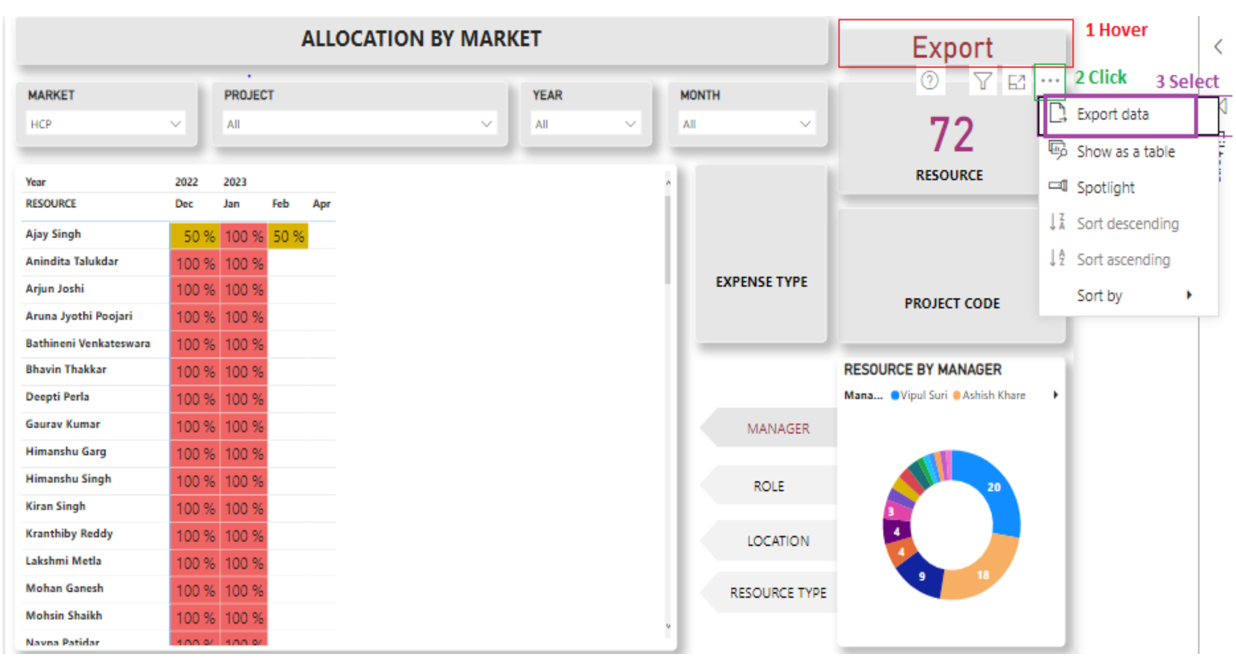
Accessing Reports Screen



To access this set of screens admin/user must select a dropdown from the Report tab of the left sidebar, and it navigates the admin/user to screen with respective report.

Allocation By Market

This Report gives details related to Market like number of projects under each market and resources under each project and shows Allocation Percentage for each resource under a particular project in each market. Initially it will show Allocation Percentage for all resources in a particular market unless a particular project selected and it is provided with dropdowns for selecting year and months to filter the report according to year and month.



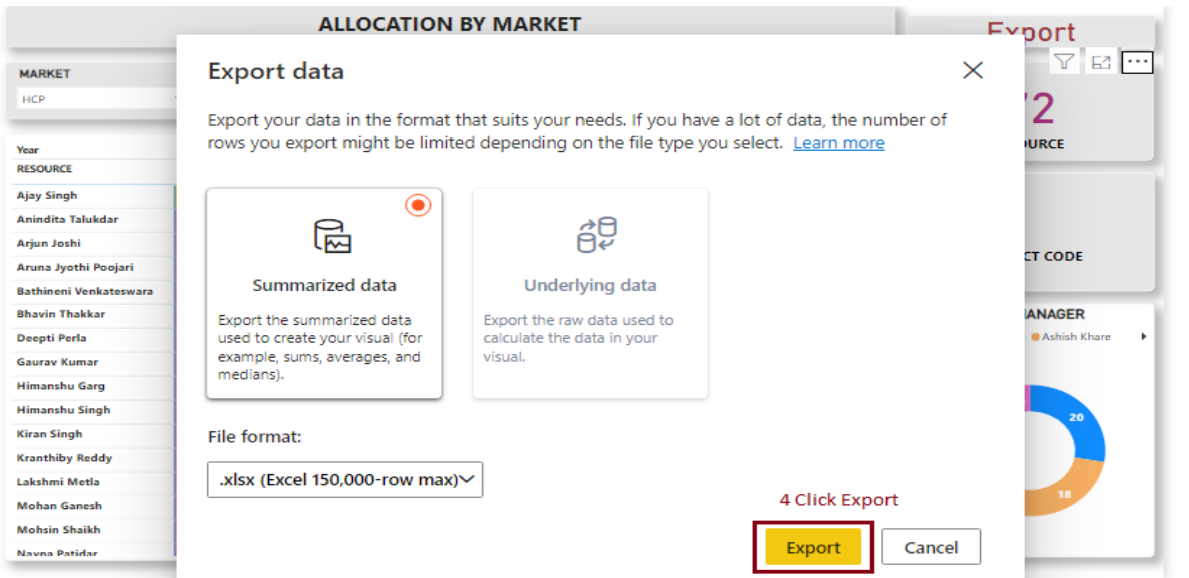
Export Report - To export the data to excel one must follow 4 steps

Step 1: Hover over the "Export visual"

Step 2: Click on more options represented with 3 dots (…)

Step 3: Select "Export data"

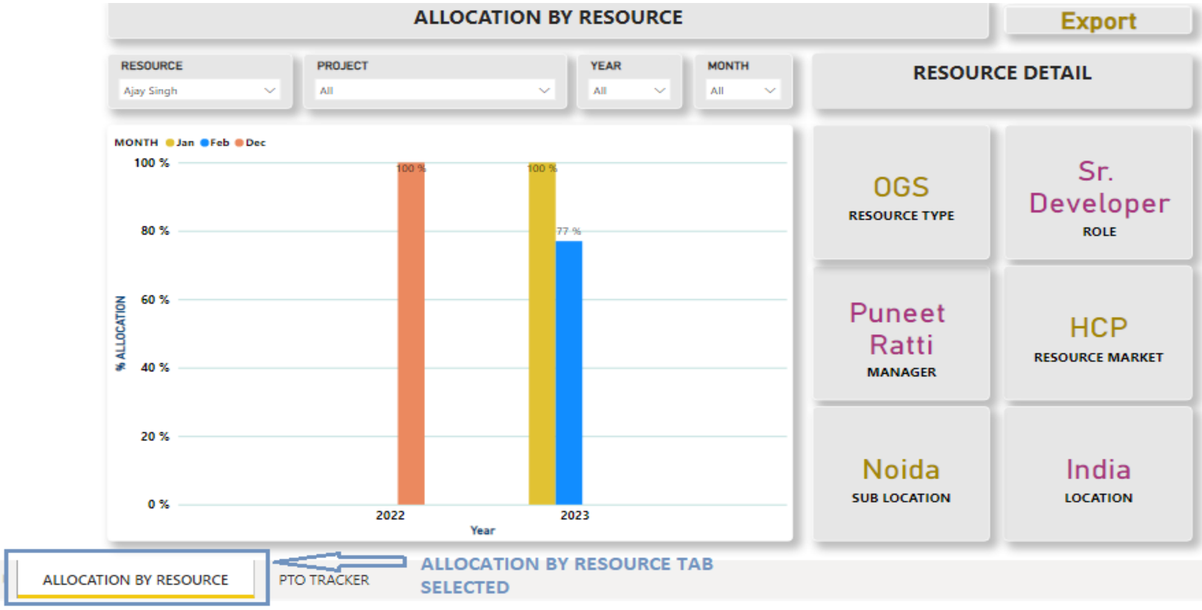
Step 4: A new visual box will appear and just click "Export" button. The excel file will be downloaded to your system.



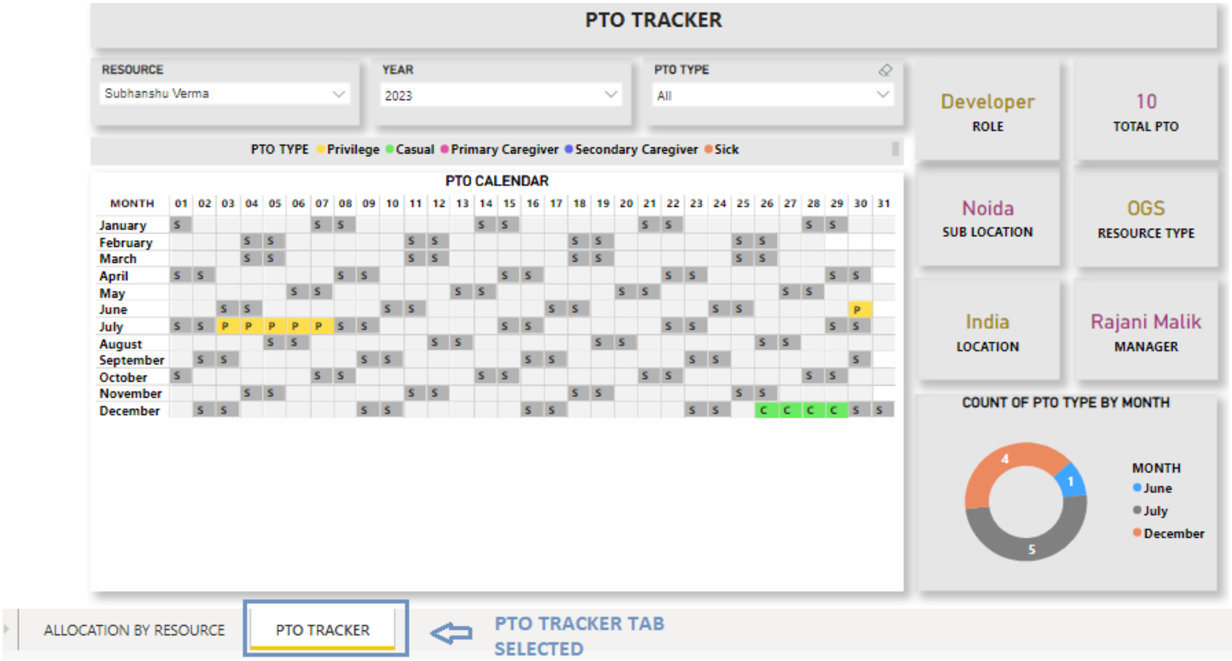
Allocation By Resource & PTO Tracker

This Report contains 2 tabs which is present at the bottom of the report. One contains the Allocation By Resource and other one contains the PTO details for all the resources.

Allocation By Resource Tab gives the details of resources and their Allocation Percentages in various Projects and can select the year and months to filter the report for that provided with dropdowns for year and months. Apart from that it gives other details such as Resource Type, Role, Manager, Program Manager for a particular project and sublocation and location associated with resource. The Export functionality for downloading excel file is also provided in this report as well. The steps are like Allocation by Market.

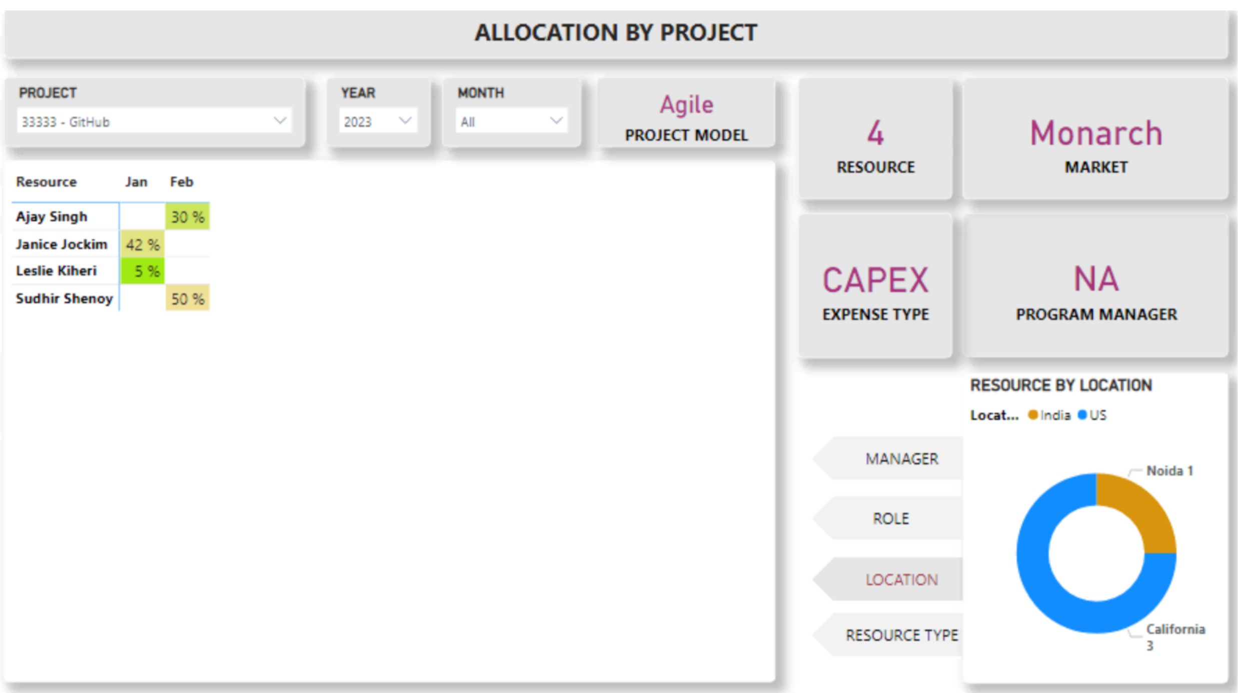


PTO Tracker Tab contains the three dropdowns namely the Resource, Year and PTO Type. On the right-hand side of the report, there is detail related to the resource and the Total PTO card for displaying the total PTO taken in this year by a particular resource. At the bottom right corner, there is one visual for counting PTO Type by month which will tell what the months in which PTO are taken and what is the PTO Type for that. At the bottom left corner, the PTO Calendar is there. Months are on the row side and the days of month are on the column side. The PTO are represented with different colors depending upon the PTO Type. At the top of PTO Calendar, the notation of PTO Type with different colors are shown. Also, the PTO Types are represented in abbreviated form in the PTO Calendar. Casual leave is represented with '*C*', Privilege leave is represented with '*P*', Sick leave is represented with '*SL*', Primary Caregiver is represented with '*PC*' and Secondary Caregiver is represented with '*SC*'.



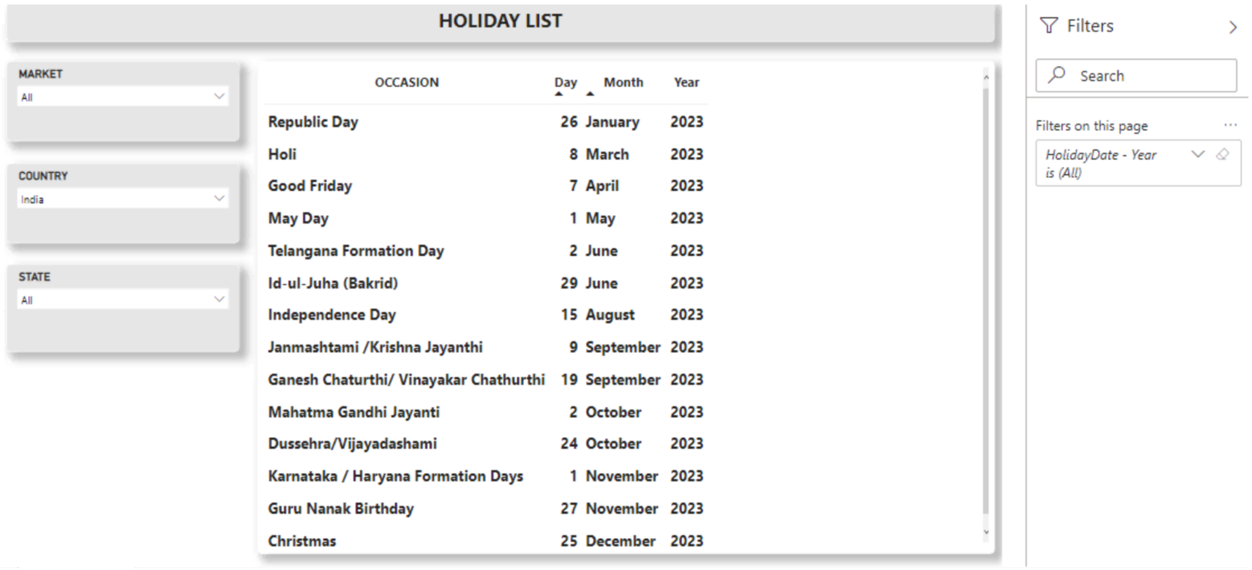
Allocation By Project

This Report gives details related to Projects, Resources included in a particular project and its Allocation Percentage within each project. It gives other details such as Project model, Expense Type, Market associated with it. The report is provided with dropdown for year and months to filter the report based on year and months.



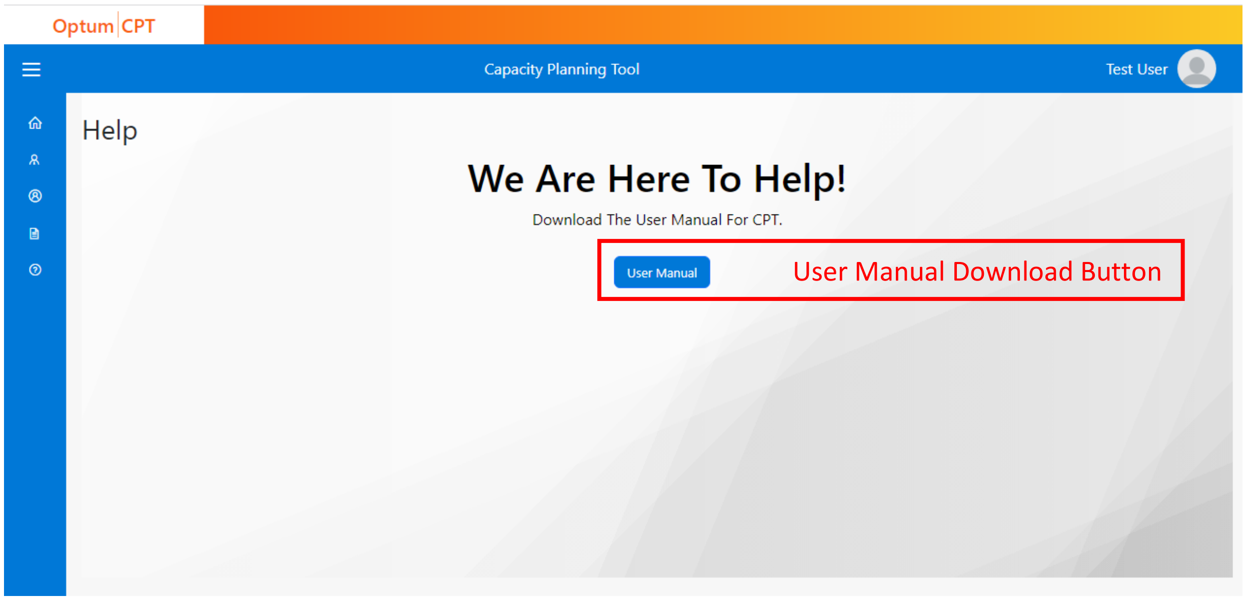
Holiday List

This Report gives details related to holiday for current year for each market and for each location and sub location. The filter dropdown for market, location and sublocation is provided in left pane and the Holiday List is shown on the right pane of the report.



Help

Users can download User Manual by click the highlighted button



Logout

User can logout after clicking the Logout button which is accessible after clicking the user icon on the top right corner.