PRC SOFTWARE

Project Risk Consultants, LLC

PRC ENTERPRISE RISK REGISTER

User Manual (v3)
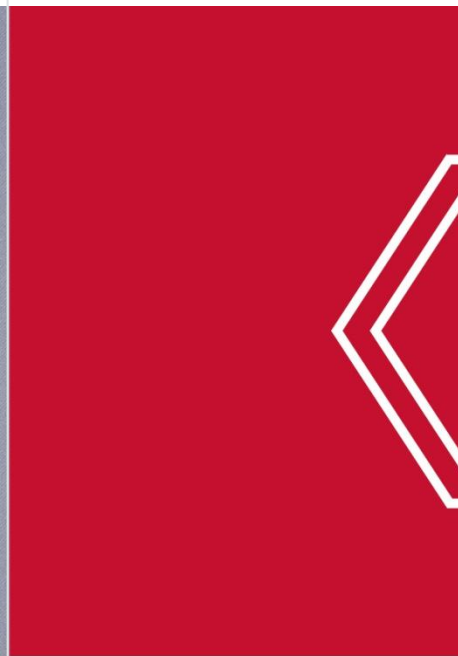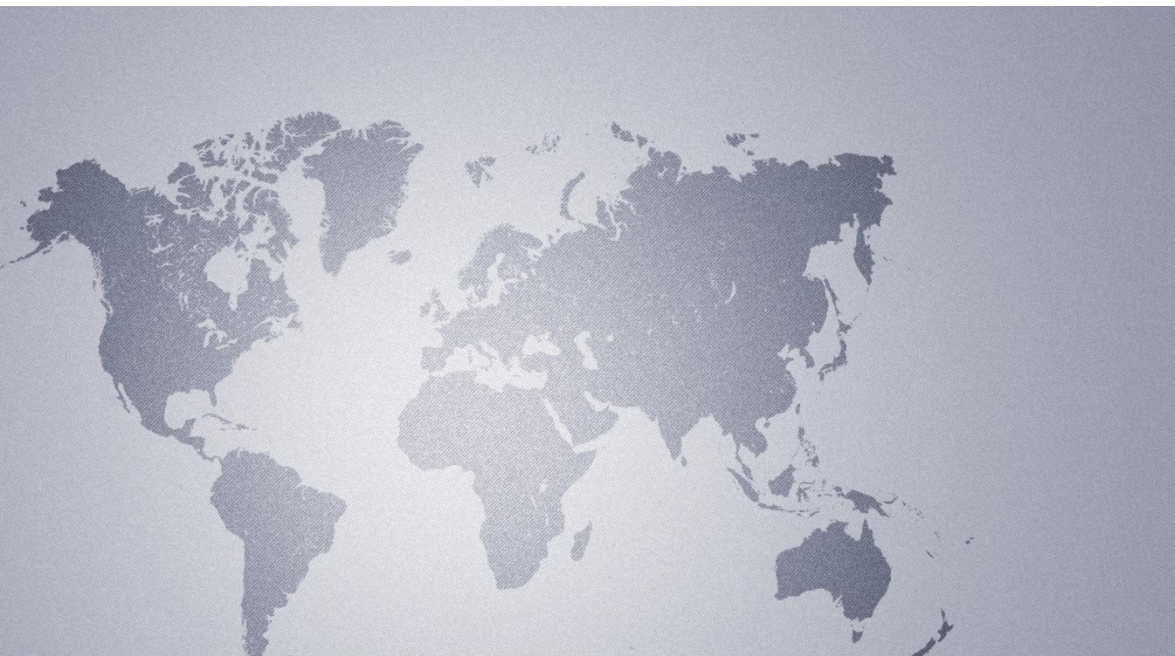
sales@prcsoftware.com
Telephone: 1-877-4PM-RISK (1-877-576-7475)
http://www.prcsoftware.com

PRC SOFTWARE

PRC SOFTWARE

ADMINISTRATION

User Management

User Management section in the PRC Enterprise Risk Register can be viewed only by those users who have either **Read/Write** or **View access**. Users with only **Read/Write** access can create a new user, edit users, add a project for a selected user, delete a user, un-assign a project to a user, and change the access privileges of users.

Users designated with **View Access** may view specific pages, select a user, view user details and view projects assigned. Access to editing functions is not available to these users.

Figure 1

PRC SOFTWARE

Searching For Users:

Searching for users in the PRC Enterprise Risk Register can be done in two different ways. The **Search** function allows the user to search based on a keyword. This method is faster when working with a large amount of data. The **Select** function is commonly used for smaller databases or when the search objective is easy to define.

Using the search function:

Steps:

1. *Administration ---> User Management*
2. Click the **SEARCH** button. (Figure 1)
3. Enter the name (which can be either first name or last name or both) or user name. Click the **SEARCH** button and select the required user. (Figure 2)
4. The **SHOW ALL** button in the search area lists all users available. (Figure 2)

NAME	USER NAME	EMAIL	PHONE	ADDRESS 1	CITY	STATE
Ballard, Garrett	Garrett Ballard	garrett4705@hotmail.com	8326930519	1005 S Shepherd Dr	Houston	Texas
Bobson, Bob	Bob Bobson	Garrett@prcsoftware.com				
Foster, Jodi	JFoster	Garrett4705@gmail.com				
krishna, sunayna	sunayna	sunayna@onsight.co	5626548525	address1		Houston
super123, super123	super	keerthy@onsight.co	9961996	test address 2	Houston	TX

Figure 2

Using the select function (dropdown list):

Steps:

1. *Administration ---> User Management*
2. Click the **SELECT USER** dropdown. (Figure 1)
3. Select the required user from the list shown.

Creating a new user:

Creating a new user in the PRC Enterprise Risk Register is quick and easy. It is important to enter as much information as possible about the user when the new user is created. The **Landing Page** sets the first page the user sees upon login.

Steps:
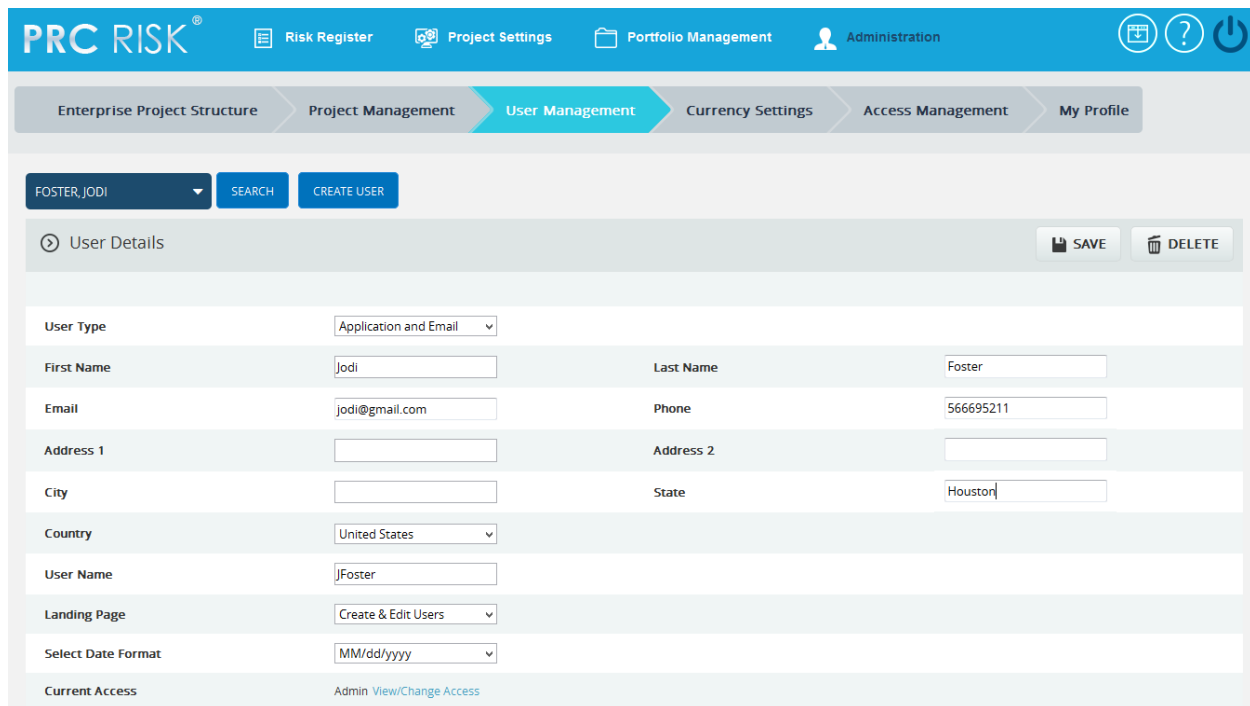
1. *Administration ---> User Management*
2. Click the **CREATE USER** button. (Figure 1)
3. After entering the user data, click the **SAVE** button. (Figure 1)

Editing user information:

When editing user details in the PRC Enterprise Risk Register, all the fields are unlocked and user can modify all user details.

Steps:

1. *Administration ---> User Management*
2. Click the **SEARCH** button. The available details will be listed.
3. Click a record which is to be modified. Then Click the **EDIT** button. (Figure 1)
4. After the data is modified, click the **SAVE** button. (Figure 3)

Figure 3

Assign New Project to User:

This functionality helps to assign a project to a selected user. The Project is selected directly and assigned to the user.

Steps:

1. *Administration ---> User Management*
2. Click the **ASSIGN PROJECT TO USERS** button. (Figure 1)
3. Search for project and Select. (Figure 4)

Figure 4

The **SHOW ALL** button (Figure 4) lists all the projects available from which user can select the required project. If the user knows the project they are searching for, they can enter the name and click the **SEARCH** button. (Figure 4)

The **CANCEL** button cancels the projects selected for user. (Figure 4)

4. To continue, click the **NEXT STEP** button. (Figure 4) A pop up (Figure 5) appears from which user access can be set.
5. After modifying access, click the **FINISH** button (Figure 5) to save changes.

PRC SOFTWARE

Figure 5

Add User to Projects :(For EPS & Business Unit)

This functionality is used to add a user to the projects under **EPS node/Business unit**. This section is visible only after an **EPS** node or **Business Unit** is selected.

If the user is already selected, control goes directly to **step 3**.

Steps:

1. *Administration ---> User Management*
2. Click the **ADD USER TO PROJECT** button. (Figure 1)
3. Select the required user. (Figure 6)
4. A pop up (Figure 5) appears from which the user accesses can be set.
5. After modifying the accesses, click the **FINISH** button to save changes. (Figure 5)

LAST NAME	FIRST NAME	USER NAME	EMAIL	PHONE	ADDRESS 1	CITY	STATE
Ballard	Garrett	Garrett Ballard	garrett4705@hotmail.com	8326930519	1005 S Shepherd Dr	Houston	Texas
Bobson	Bob	Bob Bobson	Garrett@prcsoftware.com				
Foster	Jodi	JFoster	Garrett4705@gmail.com				

Figure 6

Assign project by selecting EPS node:

This section is used to assign users to projects which have already been added to the enterprise project break down structure node. The functionality consists of two lists, **Available nodes and Selected Nodes**. **Available Nodes** (Figure 7) contains all the nodes added to the enterprise project structure. **Selected Nodes** (Figure 7) displays the nodes that have previously been selected. A node can be added to the **Selected Nodes** list using the **Add** button. All the nodes under **Available Nodes** list can be moved to **Selected Nodes** list using the **Add All** button.

A single node from **Selected Nodes** list can be moved back to **Available Nodes** list using the **Remove** button. If **Selected Nodes** list contains more than a node and user needs to move them back to the **Available Nodes** list they can use **Remove All** button.
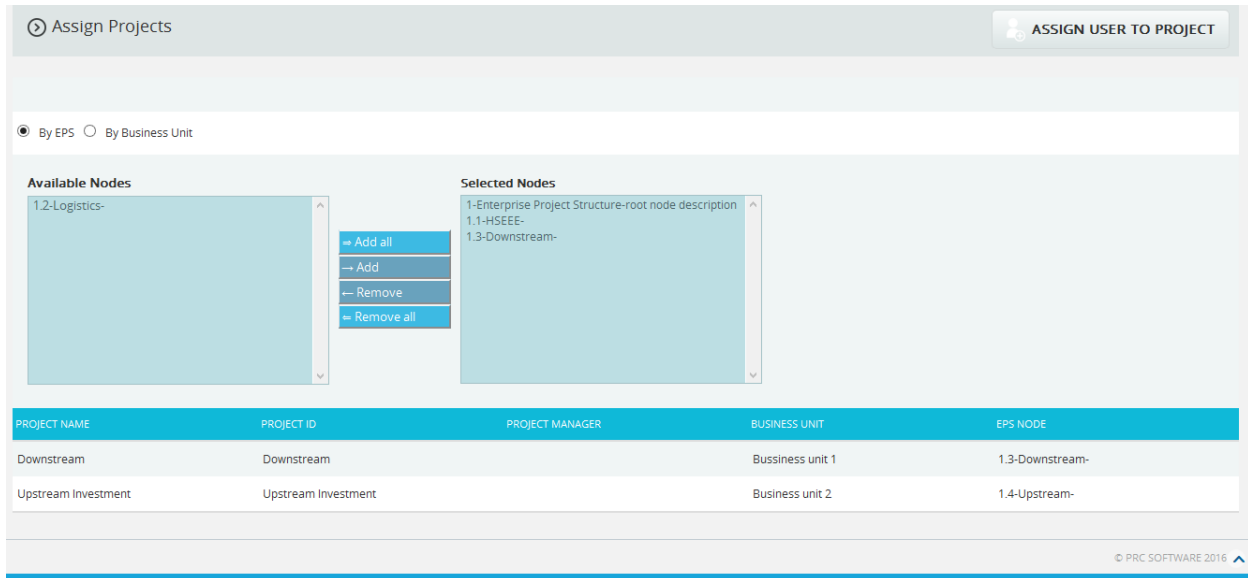
Figure 7

Steps:

1. *Administration ---> User Management*
2. Click the **By EPS** radio button. (Figure 7)
3. Add the required nodes to **Selected Nodes** list by using either the **Add** button or the **Add All** button. (Figure 7) The projects under **Selected Nodes** will be displayed.
4. Click the **ADD USER TO PROJECT** button. (Figure 1) check the steps described under **Assign Projects** section.

Assign project by selecting business unit:

This functionality helps to assign Projects which has been already added to the business unit to the selected user. The functionality consists of two lists one called **Available Nodes** (Figure 8) which contains all the business units available and another called **Selected Nodes** (Figure 8) which displays the business unit selected. A business unit can be added to the **Selected Nodes** list using the **Add** button. The entire business unit under **Available Nodes** list can be moved to **Selected Nodes** list using the **Add All** button. A single business unit from **Selected Nodes** list can be moved back to **Available Nodes** list using the **Remove** button. If **Selected Nodes** list contains more than a business unit and user need to move them back to the **Available Nodes** list they can use the **Remove All** button.
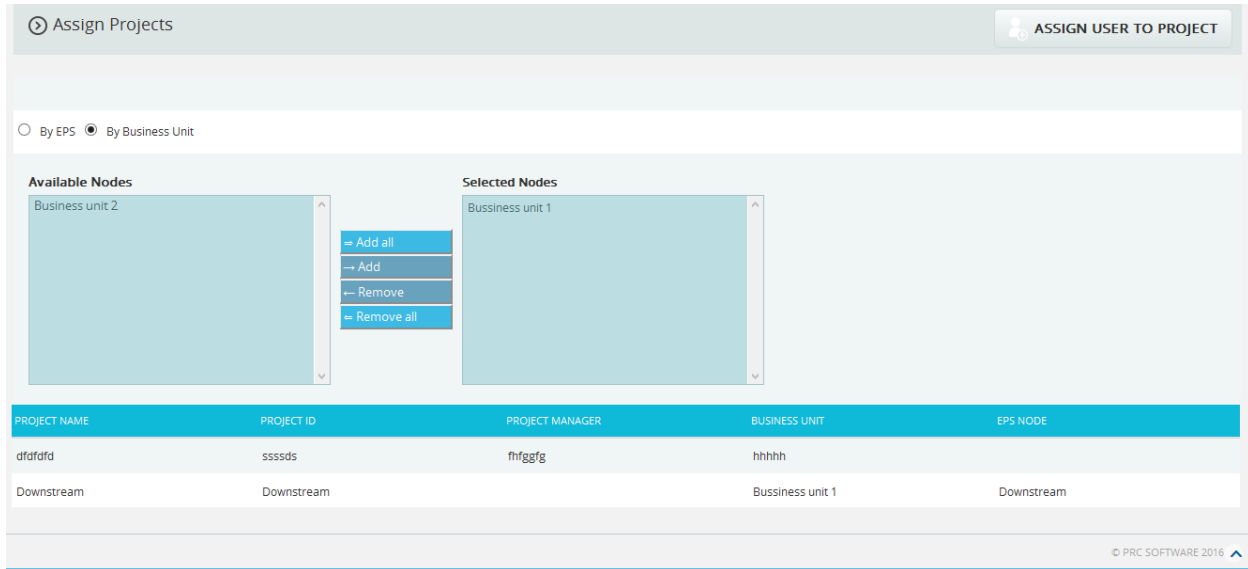
Figure 8

Steps:

1. *Administration ---> User Management*
2. Click the **By Business Unit** radio button. (Figure 8)
3. Add the required nodes to the **Selected Nodes** list by using either the **Add** button or the **Add All** button. (Figure 8) The projects assigned to the business unit under the **Selected Nodes** list will be displayed.
4. Click the **ADD USER TO PROJECT** button. (Figure 1) check the steps described under **Assign Projects** section.

Edit User Accesses:

In order to edit multiple projects' user accesses, select the projects by ticking check boxes under the Select Project column and click the **EDIT USER ACCESSES** button to do the changes.

Steps:

1. *Administration ---> User Management*
2. Click the **Select User** dropdown. (Figure 1)
3. Select the required user from the list shown.
4. Select the projects, by ticking check boxes under the Select Project column for which the user accesses are to be changed. (Figure 9)
5. Click the **EDIT USER ACCESSES** button to do the changes.
6. After modifying access in the pop up appears, click **SAVE** button (Figure 10) to save changes or click **CANCEL**.

PRC SOFTWARE

Figure 9

Figure 10

View / Edit:

In order to view or edit individual project's user access, click **View/Edit** link (Figure 9) under the Assigned Project section.

Steps:

1. *Administration ---> User Management*
2. Click the **Select User** dropdown. (Figure 1)
3. Select the required user from the list shown.
4. Click the **View/Edit** to view or edit individual project's user access.
5. After modifying access in the pop up appears, click the **SAVE** button (Figure 10) to save changes or click **CANCEL**.

Detach Project:

In order to remove a project assigned to a user, select the projects by ticking check boxes under the Select Project column and click the **DETACH PROJECTS** button. (Figure 9)

Steps:

1. *Administration ---> User Management*
2. Click the **Select User** dropdown.   (Figure 1)
3. Select the required user from the list shown.
4. Select the projects, by ticking check boxes under the Select Project column. (Figure 9)
5. Click the **DETACH PROJECTS** button. (Figure 9)
6. A pop up appears. (Figure 11) Click **OK** to detach or click **Cancel**.
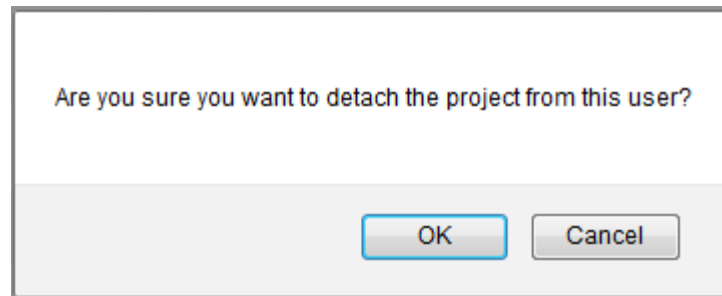
Figure 11

Deleting Users:

The deleted user will be removed from the system. Once the user is deleted, the details are completely removed. The action cannot be undone. In order to delete a user, the user logged in should have **Read/Write** access for delete function.

Steps:

1. *Administration ---> User Management*
2. Select the required user.
3. Click the **DELETE** button (Figure 1) after the user receives the confirmation message and then click the **OK** button**.** The user is now removed from the system.

Reset Password:

This functionality is used to change the password of the selected user.

Steps:

1. *Administration ---> User Management*

2. Select the required user.
3. Click the **RESET PASSWORD** button. (Figure 1)   A pop up appears. (Figure 12)
4. Enter the **New Password** and **Confirm New Password** and click the **CHANGE PASSWORD** button to finish. (Figure 12)
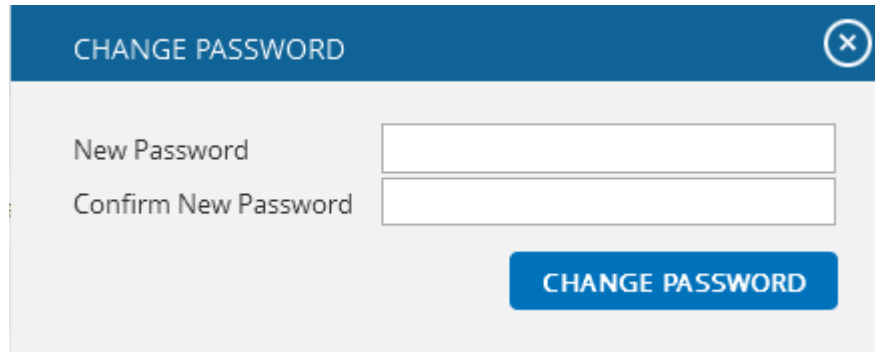
Figure 12

View/Change Access:

This functionality helps to view/change the user access to all the pages by assigning a particular role to the user.

Steps*:*

1. *Administration ---> User Management*
2. Select the required user.
3. Click the **EDIT** button. (Figure 1)
4. Click **View/Change Access** link. (Figure 3) A pop up appears. (Figure 13)
5. Select a role from the **Select Role** drop down list and click **ASSIGN ROLE** button. (Figure 13)

Figure 13

User Type:

This functionality is used to show the user's availability of the Send mail option in the Risk Spreadsheet page and Risk Details page. It contains 3 separate licensing options, **Application and Email, Application only** and **Email only.** There will be separate licensing for number of users for Email, Non-Email and Combination Users.

Steps:

1. *Administration ---> User Management*
2. Click the **EDIT** button. (Figure 1)
3. Select the licensing option from the **User Type** drop down. (Figure 14)
4. Click the **SAVE** button. (Figure 14)

Figure 14

Project Management

The **Project Management** section can be viewed only by those users who have either **Read/Write** or **View Access**. Users with **Read/Write** access can create new projects, edit projects, add users to a selected project, delete a project, remove a user, and change the access privileges of users added to the selected project. Whereas, **View Access** enables users to view project data but blocks the ability to alter existing data or add new data. **View Access** users can select a project, view project details and view users assigned to the project.

Figure 1

The project manager field has an editable select box which enables the user to either select or enter the details. When the page is loaded for the first time; the **currency field** displays the application's default currency, which is specified in the **My Profile** page. The user can edit the currency by changing the selection on the **Currency** dropdown.

PRC SOFTWARE
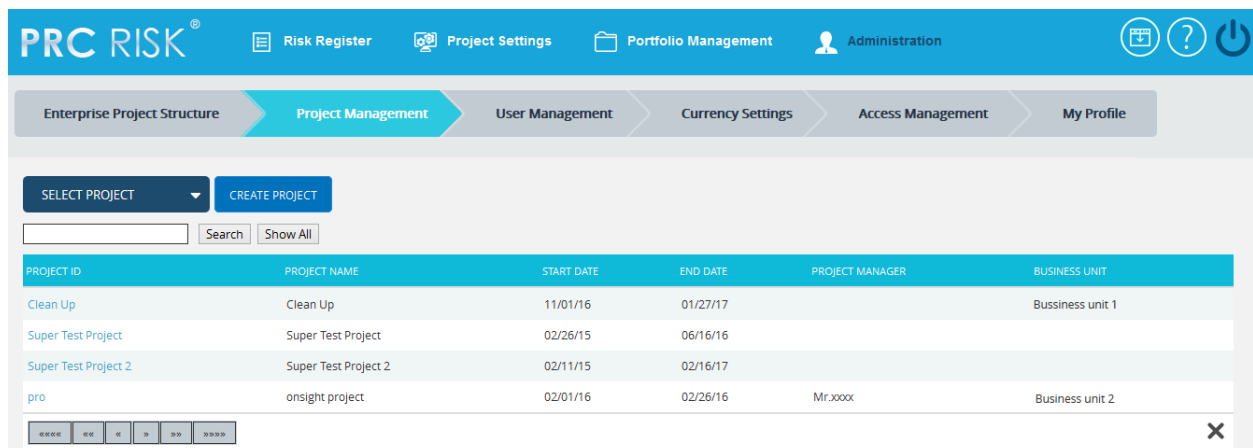
Searching For Projects:

Searching for projects in the PRC Enterprise Risk Register can be done in a couple of ways. The **Search** function allows the user to search for a project based on a keyword. This method is faster when working with a large amount of data. The **Select** function is commonly used for smaller databases or when the search criteria can easily be defined.

Using the search function:

Steps:

1. *Administration ---> Project Management*
2. Click the **SEARCH** button. (Figure 1)
3. Enter the project name or Id and Click the **SEARCH** button. (Figure 2)

Figure 2

The **SHOW ALL** button in the search area lists all the projects available. (Figure 2)

Using the select function (dropdown list):

Steps:

1. *Administration ---> Project Management*
2. Click the **SELECT PROJECT** dropdown. (Figure 1)
3. Select the required project.

Creating a new project:

It is important to enter as much information as possible about the project when the new project is created. A field, such as the **Business Unit** field, will be used later for Breakdown Structure creation and mapping. Projects can also be listed as **Classified**, which means they are hidden to all users except those assigned to it.

Steps:

1. *Administration ---> Project Management*
2. Click the **CREATE PROJECT** button. (Figure 1)
3. After entering the project data, Click the **SAVE** button.

Editing project information:

When editing a project, all the fields are unlocked and user can modify all the project details.

Steps:

1. *Administration ---> Project Management*
2. Click the **EDIT** button. (Figure 1)
3. After the data is modified, Click the **SAVE** button. (Figure 3)

Figure 3

Project Logo:

This functionality is used to upload the project logo for the selected project. This logo is shown in the **Risk Register** Word and PowerPoint file exports, only if **Use Project Logo in Reports** checkbox is ticked.

Steps:

1. *Administration ---> Project Management*
2. Click the **EDIT** button. (Figure 1)
3. Click the **BROWSE** button in the **Project Logo** and select the required image file. (Figure 3)
4. Click the **UPLOAD FILE** button to finish and click the **SAVE** button. (Figure 3)
5. Click **Delete** next to the image uploaded to delete the project logo. (Figure 1)

Import Project Schedule:

This functionality is used to import schedule ID(s) in order to map values for the **Link to Schedule ID(s)** field, in the **Risk Details** page in **Risk Register**. A sample sheet used for import is shown in Figure 4.

Steps:

1. *Administration ---> Project Management*
2. Select the required project.
3. Click the **EDIT** button. (Figure 1)
4. Click the **BROWSE** button in the **Import Project Schedule** and select the required file. (Figure 3)
5. Click the **UPLOAD FILE** button to finish.
6. After the file is uploaded, map the task name and task code fields as shown in Figure 5 and click the **SAVE** button. (Figure 3)
7. Click the **Clear File** button to remove the imported file.

   To delete the schedule IDs not mapped for any threats/opportunities in the project, use the **Click Here to Delete any Unmapped Schedule IDs** link shown in Figure 3.

task_type	duration_type	review_typ	status_code	task_code	task_name
TT_Task	DT_FixedDrtn	RV_OK	TK_Active	P2N2125B1_1	INSTALL TEMP. ELECTRICS
TT_Task	DT_FixedDrtn	RV_OK	TK_NotStart	P2N21301_2	INSTALL POWER & LIGHTING

Figure 4

Add users to Project:

This functionality helps to assign a user to the selected project.

Steps:

1. Click the **ADD USERS TO PROJECT** button. (Figure 1)
2. A pop up appears from which the user can be searched and selected. (Figure 6)

LAST NAME	FIRST NAME	USER NAME	EMAIL	PHONE	ADDRESS 1	CITY	STATE
Ballard	Garrett	Garrett Ballard	garrett4705@hotmail.com	8326930519	1005 S Shepherd Dr	Houston	Texas
Bobson	Bob	Bob Bobson	bob@prcsoftware.com				
Foster	Jodi	JFoster	foster705@gmail.com	5462156526	hilton cross	Houson	TX

Figure 5

3. **SEARCH** button is used to search for the users who have been assigned to the project. The **SHOW ALL** button lists all users. If no user is added to the selected project, click the **CANCEL** button. (Figure 5)
4. A pop up appears from which user accesses can be set. (Figure 6)
5. After modifying the accesses, click the **FINISH** button to save the changes. (Figure 6)
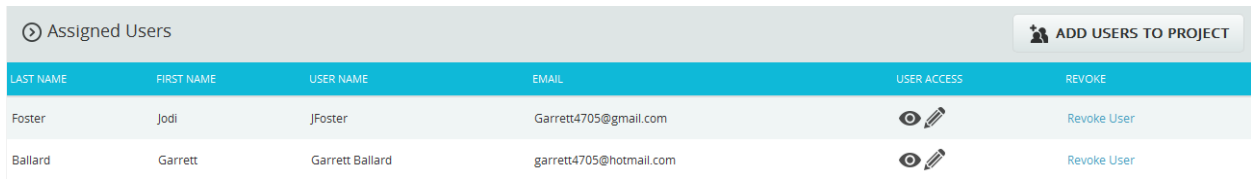
PAGE ACCESS	READ / WRITE	VIEW ONLY	NO ACCESS
Select All	✓	☐	☐
Project Settings Section	✓	☐	☐
Scoring System	✓	☐	☐
Edit Custom Fields	✓	☐	☐
Field Settings	✓	☐	☐
Project Breakdown Structure	✓	☐	☐
Risk Register Section	✓	☐	☐
Import Threats	✓	☐	☐
Import Opportunities	✓	☐	☐
Import Mitigations	✓	☐	☐
Search Risks	✓	☐	☐
Threat Spreadsheet	✓	☐	☐
Threat Details	✓	☐	☐
Opportunity Spreadsheet	✓	☐	☐
Opportunity Details	✓	☐	☐
Mitigation Spreadsheet	✓	☐	☐
Mitigation Details	✓	☐	☐
Project Dashboard	✓	☐	☐
Standard Reports	✓	☐	☐
Global Data Share Options (Project Level)	✓	☐	☐
Standard Reports	✓	☐	☐
Report Scripts	✓	☐	☐
Dashboards	✓	☐	☐
Other Options	✓	☐	☐
Delete Data	✓		☐
Dashboards	✓	☐	☐

Figure 6
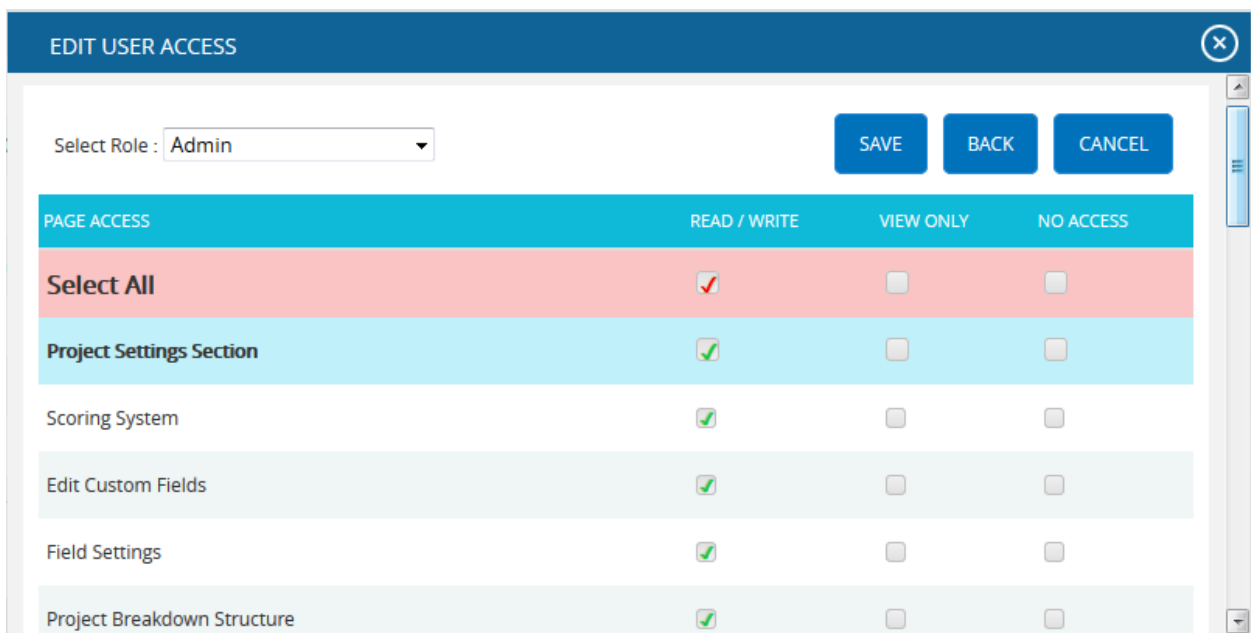
View/Edit Accesses:

Figure 7

To modify the accesses of a user assigned to project, click **View/Edit** icon (Figure 7), a pop up (Figure 7) appears and after modification, click the **SAVE** button to save the changes. (Figure 8)

Figure 8

Revoke user:

In order to remove a user assigned to a project, click **Revoke User** (Figure 7) under **Assigned Users** section.

Deleting projects:

When deleting projects, The PRC Enterprise Risk Register will remove the project and delete any links it has to the system. Deleted projects will not be accessible in the Historical Database.

This button is visible only to the Super User having **Read/Write** access for delete function.

Steps:

1. *Administration ---> Project Management*
2. Select the required Project.
3. Click the **DELETE** button. (Figure 1)

After the user receives the confirmation message, click the **OK** button. The project is now removed from the system.

My Profile

The **My Profile** page allows the users to manage their own user account. Not all fields can be edited in the **My Profile** page due to security reasons.
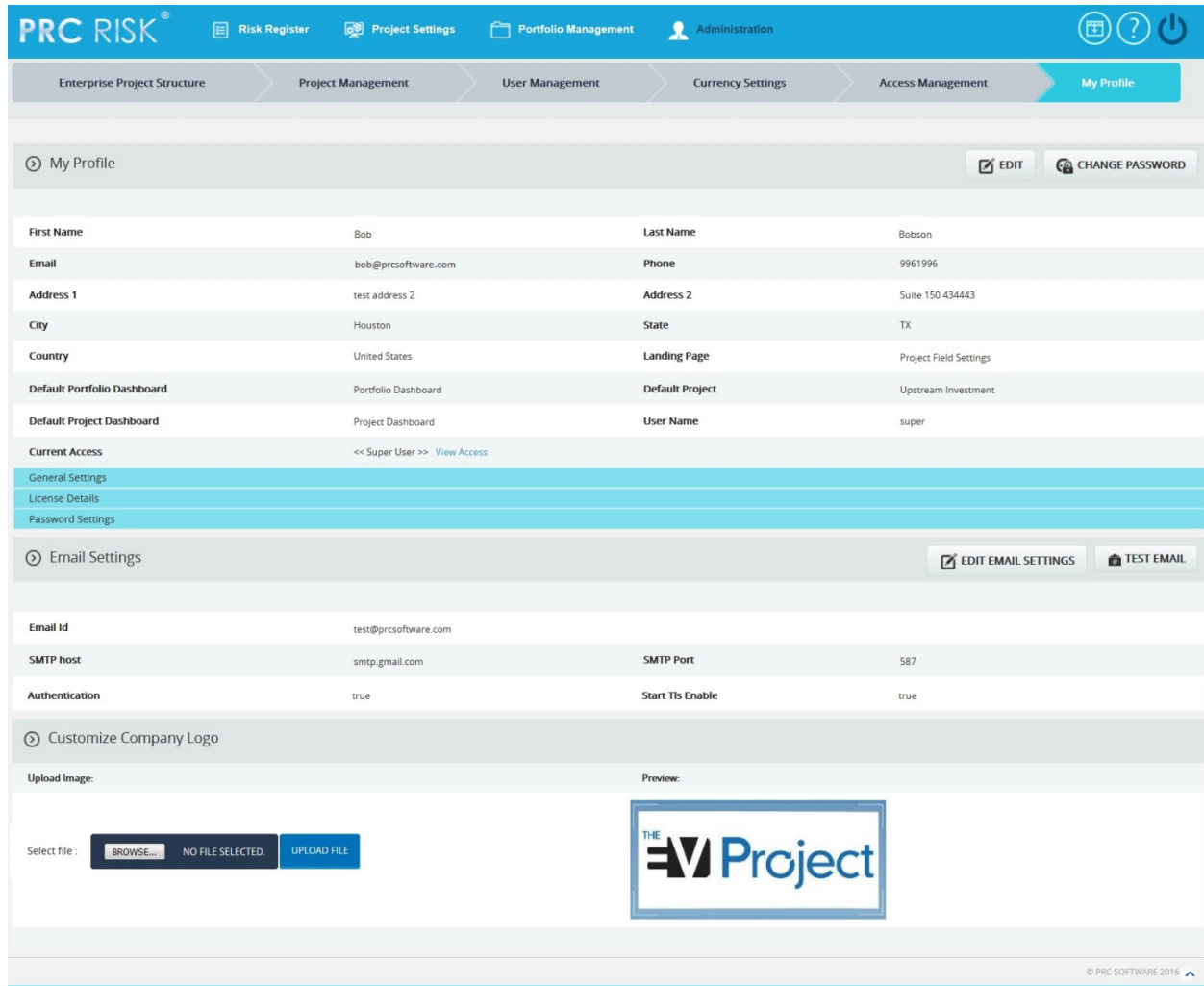
Figure 1

Edit User Account:

This functionality is used to edit the user details. In the user details section only the fields **Landing Page** and **Default Project** are unlocked. The **Landing Page** is used to set the first page the user sees upon login. **Default Project** is the project which will be selected when the **Risk Register** menu or **Project Settings** menu is selected. Under the **General Settings** section there is a drop down where the user can select the date format. The **Application Timeout** field indicates the session log-out time. This field is visible only to the **Super User**. (Figure 1)
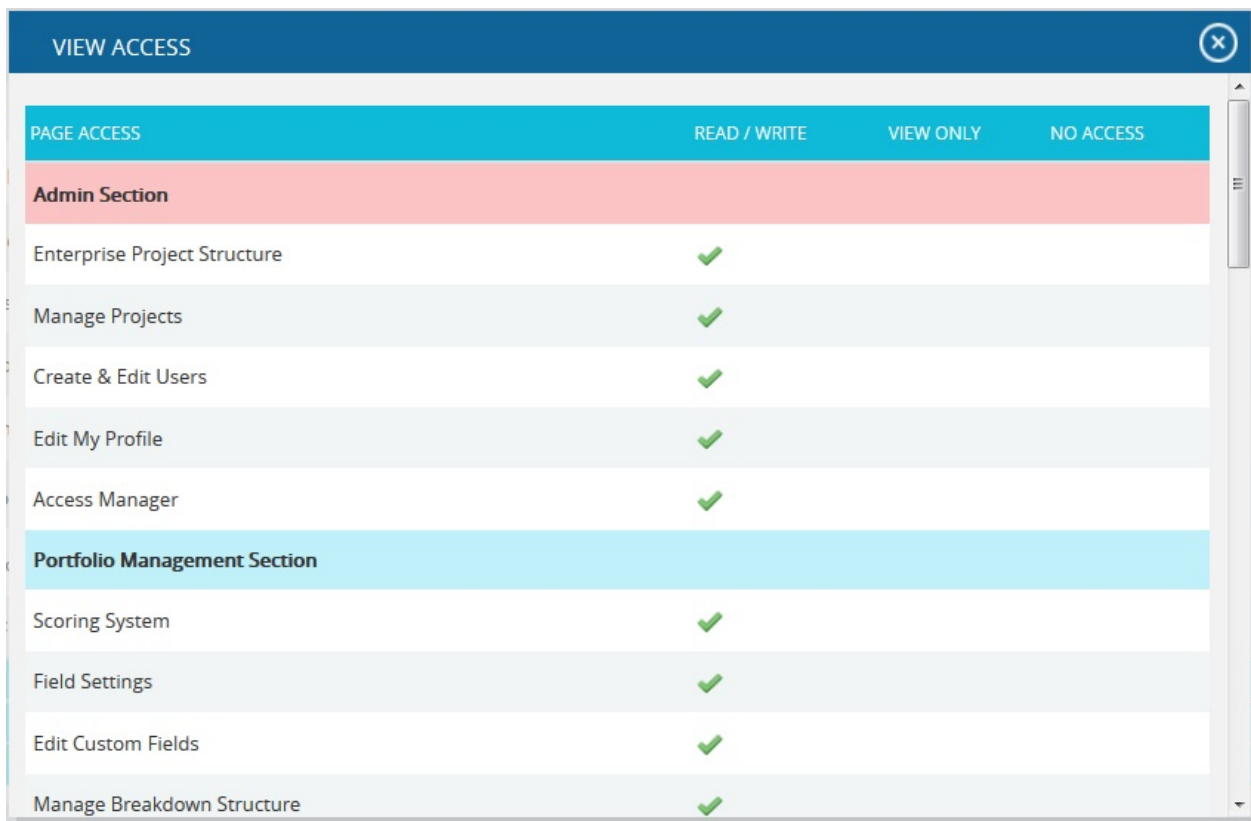
To Edit User Account check the following steps described below.

Steps:

1. *Administration ---> My Profile*
2. Click the **EDIT** button. (Figure 1)
3. Modify the necessary fields; click the **SAVE USER** button to finish.   (Figure 1)

View Access:

This functionality is used to view the accesses assigned to the user. To view the access, click **View Access**. (Figure 1) A pop up appears which shows the accesses for each page. (Figure 2)

Figure 2

Change Password:

This functionality is used to change the password of the logged-in user.

Steps:

1. *Administration ---> My Profile*
2. Click the **CHANGE PASSWORD** button. (Figure 1) A pop up appears. (Figure 3)

3. Enter the **Old Password**, **New Password** and **Confirm New Password** and click the **Change Password** button to finish. (Figure 3)
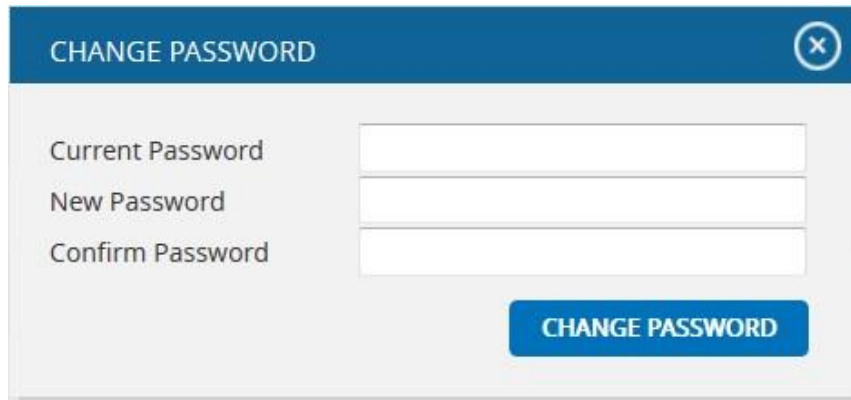
Figure 3

General Settings:

This functionality is used to set the default parameters for application. With the exception of the date format, all other settings will only be visible for the Super user. (Figure 4)

Figure 4

Date Format:

The logged-in user can change the Date format for the application.

Default Currency:

The super user can set the Default Currency for the application.

Application Timeout:

The super user can set the Default time-out of the application.

URL for Email:

The super user can set the application URL which will be enclosed in the email. (Figure 5)

WARM GREETINGS FROM PRC

DEAR Bob Foster,
Please note your account details to login into PRC Application. Once you login to the site you can modify the password again by yourself.

USER NAME: BobFoster
PASSWORD: 123456

Application URL is : http://localhost/PRCRiskRegister2.0
Kind Regards

Project Risk Consultants

Figure 5

Password Settings:

This functionality is used to set the password settings for the application. This section will only be visible for the Super user. Here the Super user can set the minimum password length, the numeric characters and special characters, the expiry period for the password, etc. (Figure 6)

Password Settings

Minimum Length	4
Numeric Characters	○ Must ○ Never ● Optional
Special Characters	○ Must ○ Never ● Optional
Expires	● Never ○ Days
Uppercase and Lowercase Combinations	○ Must ● Optional
Contains First Name or Last Name	○ Must ● Optional

Figure 6

If the **Days** radio button is selected for the expiry period, then a textbox will appear where can enter the number of days for the password expiry (Figure 7). And according to the entered period an alert mail will be sent to Super user before the password expires.
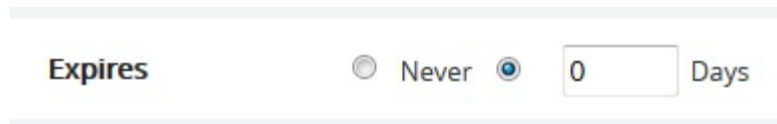
Figure 7

Email Settings:

The **Email Settings** section is used to set the sender's email details, phone, the SMTP host used to send the mail, and SMTP port. This section is only visible to the **Super User.**

Edit Email Settings:

This functionality is used to edit the email settings details.

Steps:

1. *Administration ---> My Profile*
2. Click the **EDIT EMAIL SETTINGS** button. (Figure 1)
3. Modify the required fields, and click the **SAVE** button to finish. (Figure 1)

Test Mail:

This functionality is used to send a test mail to the user whose email ID is specified in the **Email Id** field.

Steps:

1. *Administration ---> My Profile*
2. Click the **TEST EMAIL** button**.** A pop up appears. (Figure 8)
3. Enter the details and click the **SEND EMAIL** button to send the email. (Figure 8)

Figure 8

Company Logo:

This functionality is used to upload the **Company Logo**. Images of type jpg, gif, png, tif, can be uploaded.

Steps:

1. *Administration ---> My Profile*
2. Click the **Browse** button. (Figure 9)
3. Select the required image and click the **UPLOAD FILE** button to finish. (Figure 10)
4. Click the **SAVE LOGO** button to save that image as the company logo. (Figure 11)
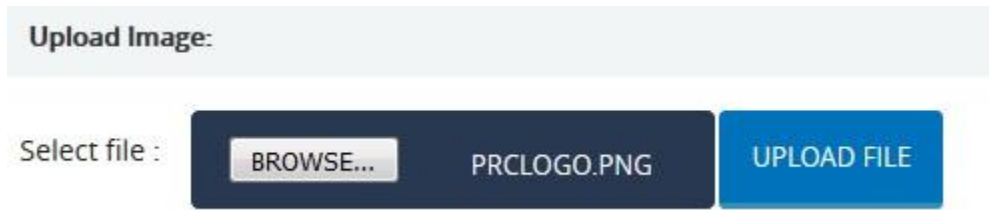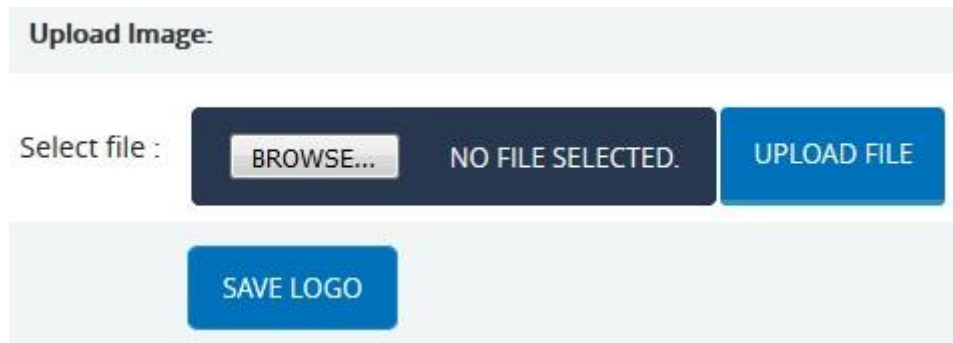
Figure 9

Figure 10

Figure 11

Currency Settings

The Currency settings page is used to set the desired currency for the PRC application. This page can be viewed or edited only by the **super** user.

Figure 1

Update All:

The **UPDATE ALL** button is to update all the currency details added in the application for which the Auto Update is on.

Steps:

1. *Administration ---> Currency Settings*
2. Click the **UPDATE ALL** button to update all the currency details. (Figure 1)

PRC SOFTWARE

Update:

The **Update** icon is used to update each currency details separately, for which the Auto Update is on.

Steps:

1. *Administration ---> Currency Settings*
2. Click the **Update** icon to update each currency details separately. (Figure 1)

Save Rates:

The **SAVE RATES** button is to save the currency exchange rate changes done by the user for which the Auto Update is off. (Figure 2)

Steps:

1. *Administration ---> Currency Settings*
2. Edit the currency exchange rate. (Figure 2)
3. Click the **SAVE RATES** button. (Figure 2)

Figure 2

Schedule Update:

The **Schedule Update** drop down is to select the time interval when the Currency Settings page should be updated. (Figure 3)

Figure 3

If the **Manual** option is selected from the drop down, then the user can change the exchange rates manually for all the currencies as shown in the Figure 4.

PRC SOFTWARE

Steps:

1. *Administration ---> Currency Settings*
2. Edit the currency exchange rate. (Figure 4)
3. Click the **SAVE RATES** button. (Figure 4)

Figure 4

Add Currency:

This functionality is used to add a currency details to the application.

Steps:

1. *Administration ---> Currency Settings*
2. Click the **Select Currency** dropdown that shows the list of currencies in alphabetical order as in http://openexchangerates.org/api/currencies.json link. (Figure 1)

PRC SOFTWARE

3. Select the currency to be added in the application. (Figure 5)
4. Click the **ADD CURRENCY** button. (Figure 5)
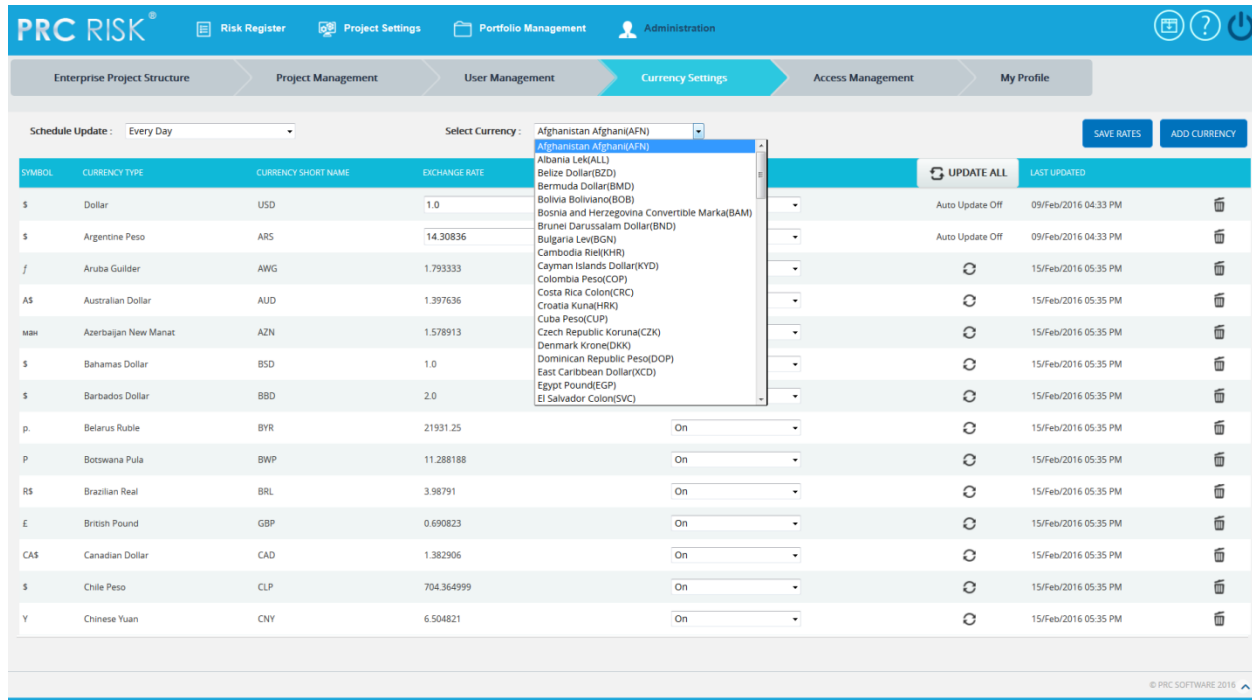
Figure 5

Remove Currency:

This functionality is used to remove currencies from the **Currency Settings.** While removing each currency, it will automatically add it back to the **Select Currency** list from where we can add it later if needed. Only the currencies which are not assigned to any of the Projects/ Threats/ Opportunities can be removed.

Steps:

1. *Administration ---> Currency Settings*
2. Click **Delete icon** corresponding to each currency. (Figure 1)

Access Management

The **Access Management** page is used to set the accesses for the pages in the application. There are three main accesses; **Read/Write**, **View Only** and **No Access.**

To modify the data of a particular page the user must be assigned **Read/Write** access for that page. To view the page, **View Only** access should be assigned. If the user need not get access to a particular page in the application, **No Access** may be assigned for that page. The **Access Management** page is visible only to the user who has **Read/Write** access. The various roles available can be viewed by selecting them from the **Select A Role** drop down. (Figure 1)

Figure 1

Add A New Role:

This functionality is used to add a new role and assign the various access privileges accordingly.

Steps:

1. *Administration ---> Access Management*
2. Check the corresponding checkbox for access. (Figure 1)
3. Click the **SAVE AS NEW ROLE** button. (Figure 1) A pop up appears. (Figure 2)
4. Enter the name in the text box. (Figure 2)
5. Click the **SAVE** button to save. To cancel, click the **CANCEL** button. (Figure 2)
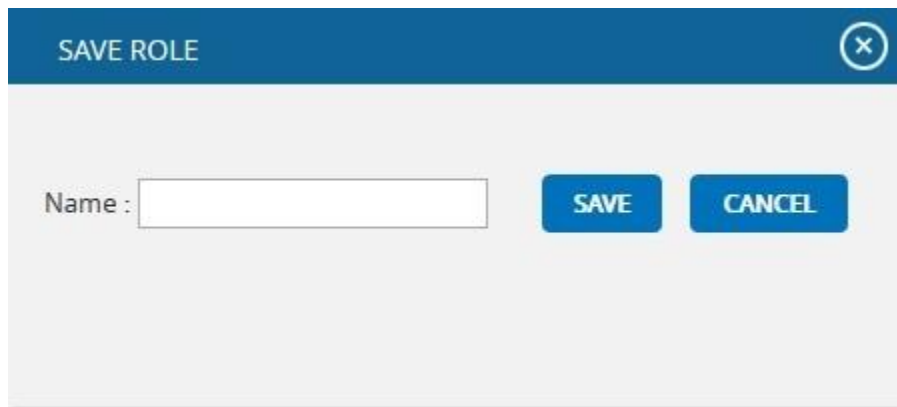
Figure 2

Delete A Role:

This functionality is used to delete a role.

Steps:

1. *Administration ---> Access Management*
2. Select the Role to be deleted.
3. Click the **DELETE ROLE** button. (Figure 3) A pop up appears. (Figure 4)
4. Click the **OK** button to delete a role. To cancel, click the **Cancel** button.
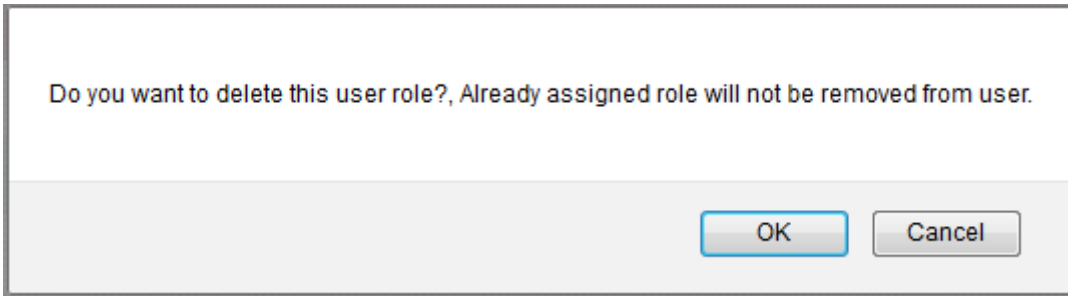
Figure 3

Figure 4

Enterprise Project Structure

The **Enterprise Project Structure** page allows the user to create a hierarchy which helps to organize projects. The EPS structure is made up of nodes which can represent companies, divisions, or business units. Projects can be assigned to different nodes and may be used for reporting and project assignments to users. Only users with **Read/Write** access or **View access** can view this page. Users with **Read/Write** access can add a new node, rename already existing nodes, remove a node, add a project to a node, promote nodes, demote nodes, and change the order of the nodes. The super user with **Read/Write** access can import nodes. Users with **View access** for the **Enterprise Project Structure** page can only view the various nodes and projects assigned to it.
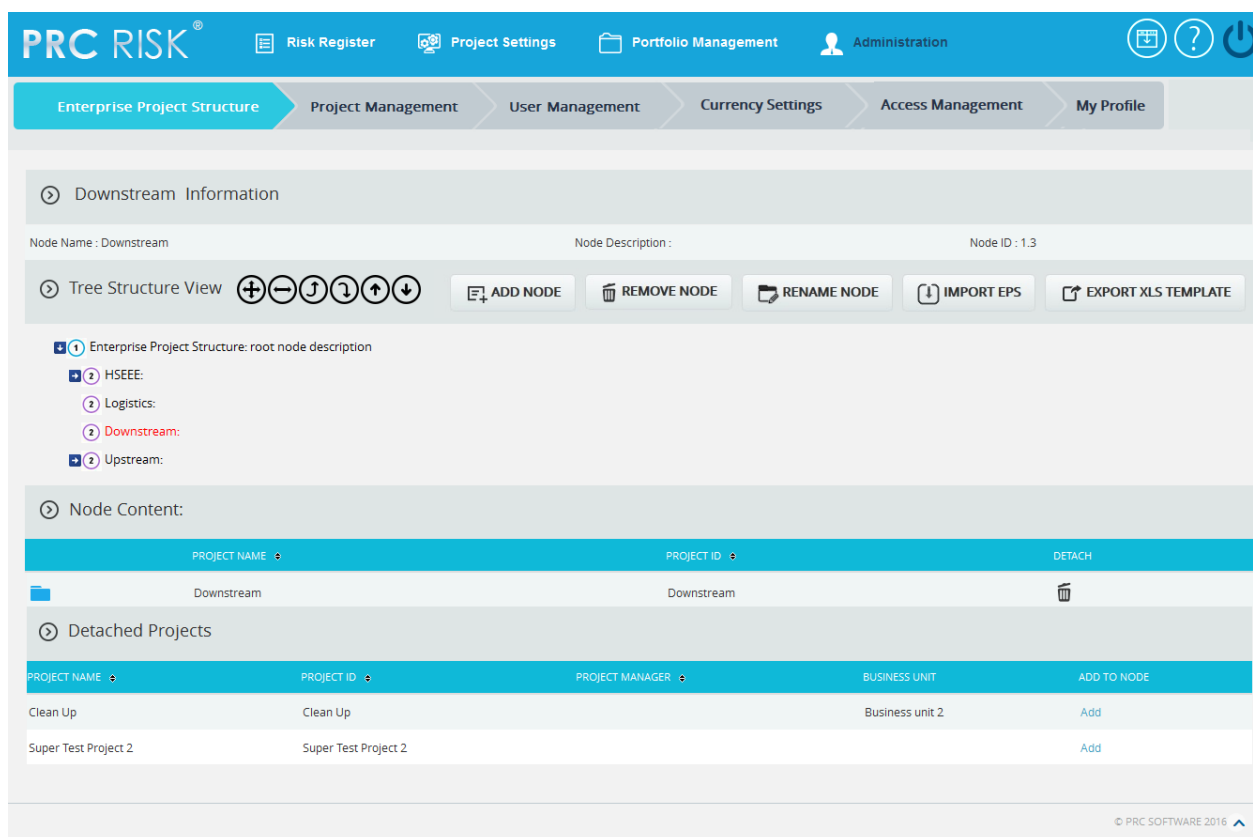
Figure 1

Select Node:

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Click on the node shown in the tree structure to select. (Figure 1)

Import EPS:

EPS nodes can be imported only by **Super Users** and only if the project has not been assigned to any available nodes. The imported file must be of type csv, xls, mpp, xer. Before a file is imported, all nodes except the root node must be deleted in order to accommodate the new nodes.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Click the **IMPORT EPS** button. A Pop up appears. (Figure 2)
3. Click the **BROWSE** button. Select the required file. (Figure 2)
4. Click the **UPLOAD** button to finish. (Figure 2)

Sample sheet used for import:

WBS code	Description	Outline Level
A	ABC123	1
B	ABC124	2
C	ABC125	2

Table 1
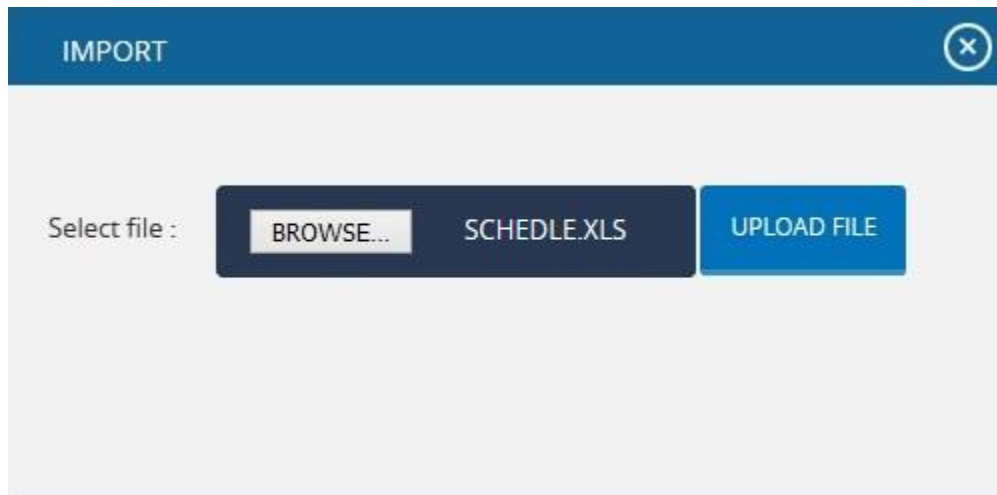
Figure 2

Export XLs template:

This functionality is used to get a sample xls file for importing to the breakdown structures.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Click the **EXPORT XLS TEMPLATE** button. User will get a sample template on excel. (Figure 3)

Sample excel template:

Outline Level	BS code	Description
1	Code 1	Description 1
1.1	Code 11	Description 2
2	Code2	Description 3
2.1	Code21	Description 4
2.2	Code22	Description 5
2.2.1	Code 23	Description 6

Figure 3

Add EPS Node:

This functionality is used to add a new EPS node.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **ADD NODE** button. (Figure 1) A pop up appears. (Figure 4)
4. Enter the node name and description.
5. Click the **SAVE** button to save the details. (Figure 4)
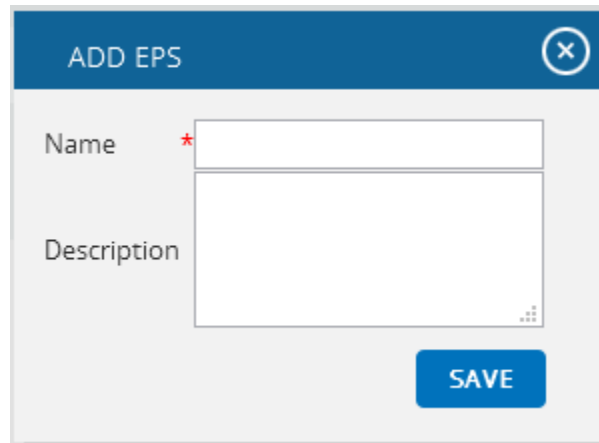
Figure 4

Remove EPS node:

This functionality removes an existing EPS node.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **REMOVE NODE** button. (Figure 1) After receiving the confirmation message, click the **OK** button. The node is removed from the system.

Rename EPS node:

This functionality is used to rename an already existing node.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **RENAME NODE** button. (Figure 1) A pop up appears. (Figure 4)
4. Rename the fields needed.
5. Click the **SAVE** button to save the details. (Figure 4)

Add Projects to node:

This functionality is used to add a project to a selected node.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click **Add** under Detached Projects section to add the project to the node. (Figure 1)

Detach Project:

This functionality is used to detach the project assigned to a node.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **Delete** icon under Node Content section to detach the project. (Figure 1) After you receive the confirmation message, click the **OK** button. The project will be unassigned for the node.

Expand EPS nodes:

This functionality is used to expand all the nodes under enterprise project structure.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **Expand All** icon to expand all the nodes. (Figure 5) Upon Expansion, the tree structure becomes like that shown in Figure 6.

Collapse EPS Nodes:

This functionality is used to collapse the expanded nodes shown in Figure 6.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **Collapse all** icon shown in Figure 6.
4. The Nodes are collapsed and the tree structure becomes like that shown in Figure 5.
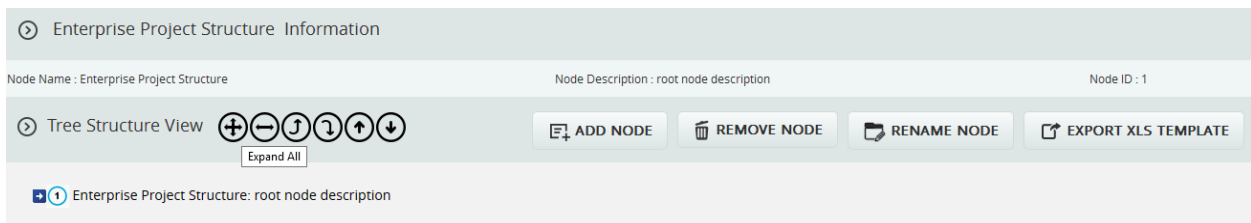
Figure 5
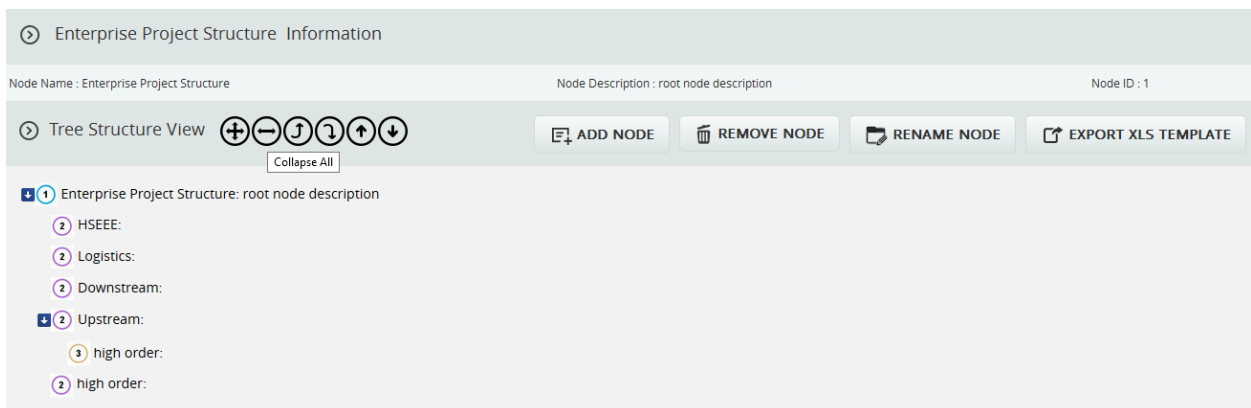
Figure 6

Promote EPS nodes:

This functionality makes the level of the child node the same as that of the immediate parent. For Example, consider the node **eps6: desc6** (Figure 7) which is a child of the node **Upstream**: **desc4**. When promoted, **eps6: desc6** is on the same level as **Upstream**: **desc4** (Figure 8). A node cannot be promoted if it does not have a parent. For example, the Root node cannot be promoted.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **Promote** icon to promote the node.
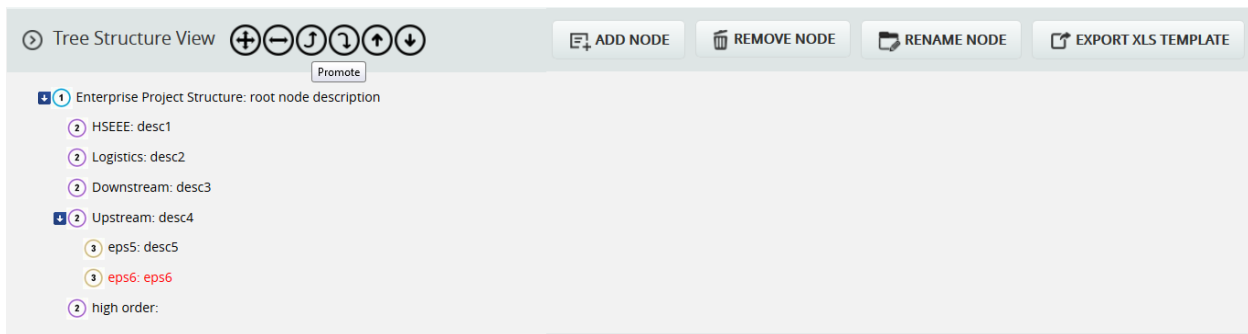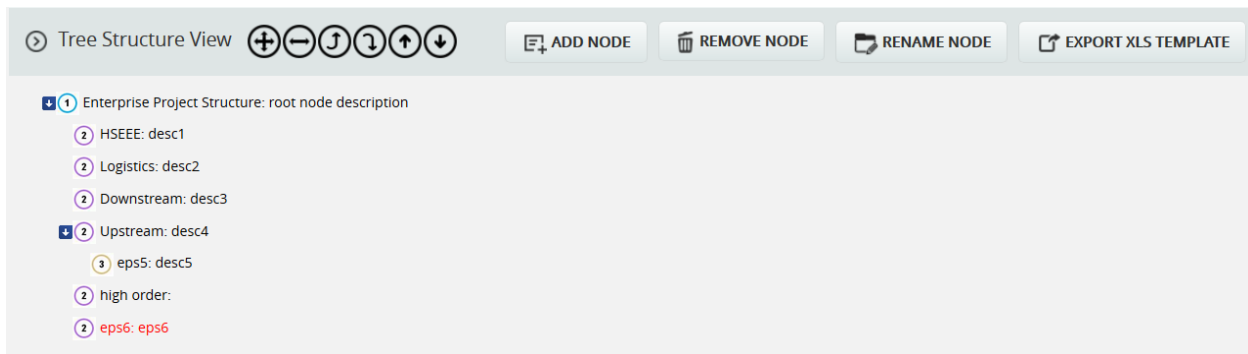
Figure 7

Figure 8

Demote EPS nodes:

When a node is demoted it becomes the child of the node which is of same level and which lies just above it. For Example, Consider node **eps6: desc6**. (Figure 8) which is of same level as nodes **highorder:** etc. When **eps6: desc6** is demoted, it becomes a child node of the node **highorder:** (Figure 9). A node cannot be demoted if there is no other node of same level as the node selected.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **Demote** icon to demote node.
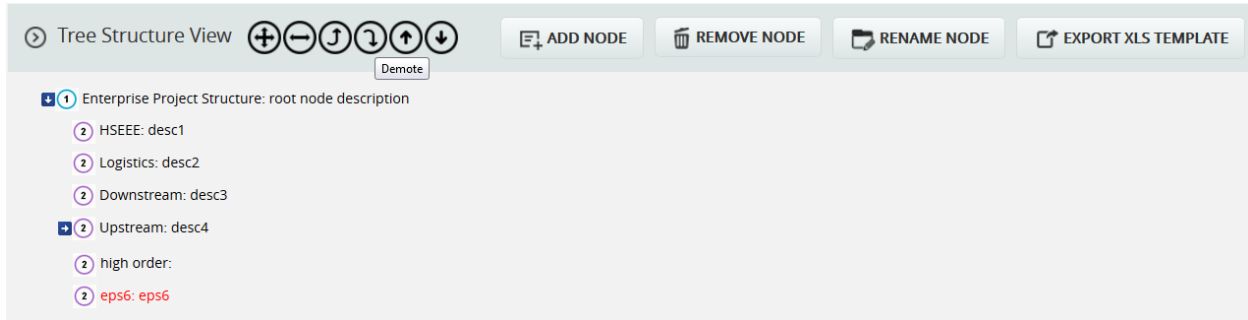
Figure 9

Up Order:

This operation is used to move a node up the tree. This can be applied only to nodes of the same level and this operation is not applicable for the first node. For example, consider the nodes **Downstream: desc3** and **Logistic: desc2** in Figure 9. The node **Downstream: desc3** is located below the node **Logistic: desc2**. When an up order operation is applied to the node design it moves above the node **Logistic: desc2**. Figure 10 shows the tree structure after the up order operation is applied.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **Up order** icon to move the node up a level.
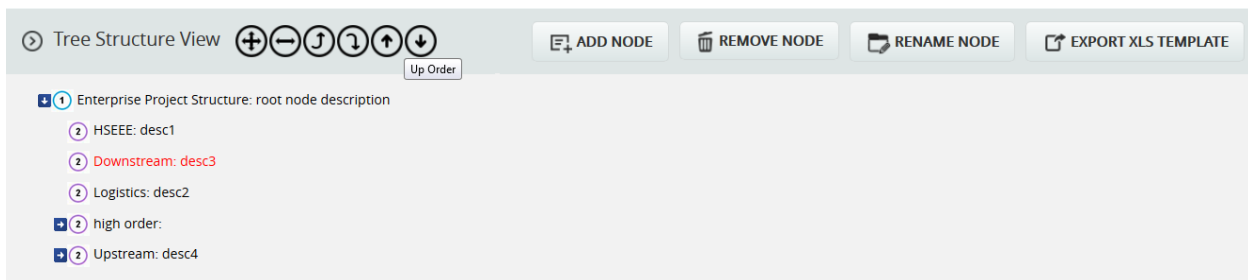
Figure 10

Down Order:

This operation is used to move a node down the tree structure. This can be applied only to nodes of the same level and this operation is not applicable for the last node. For example, consider nodes **Downstream: desc3** and **Logistic: desc2** in Figure 10. **Downstream: desc3** is located above **Logistic: desc2** in Figure 10. When down order operation is applied to the node **Downstream: desc3,** it comes below the node **eps 14: desc 14**, refer Figure 11 which shows the tree structure after down order operation is applied.

Steps:

1. *Administration ---> Enterprise Project Structure*
2. Select a node.
3. Click the **Down order** icon to move the node down a level.
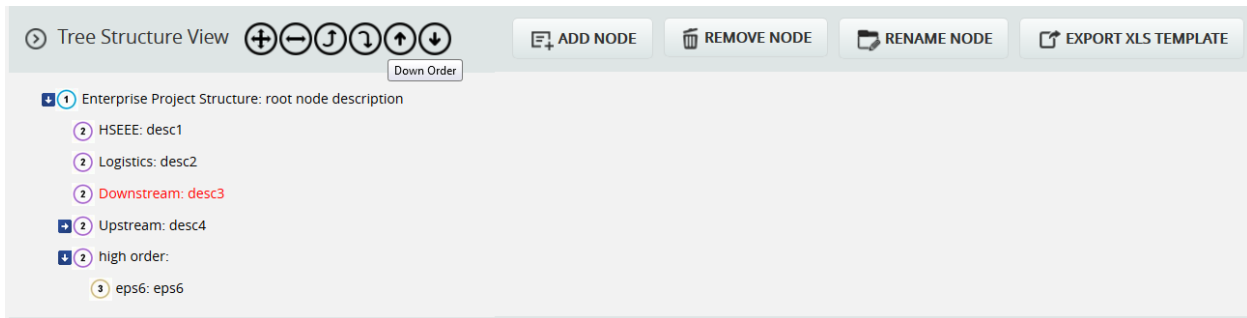
Figure 11

PORTFOLIO MANAGEMENT

Scoring System (Portfolio)

The **Scoring System (Portfolio)** page allows you to create a scoring system template for both **Threats** and **Opportunities** separately that can be applied to your project based on Threat and Opportunity (Figure 1.2). These templates are saved in the system and can be reused for future projects. The **Portfolio Scoring System** page in the PRC Enterprise Risk Register can be viewed only by those users who have either **Read/Write** or **View access.** Users with only **Read/Write** access can create a new template, edit template information, edit probability and tolerance levels, edit impacts, edit risk matrix, add new impacts and delete additional impacts.

Users designated with **View Access** may view templates, view probability and tolerance levels, view impacts and also view the risk matrix.

PRC RISK® 📋 Risk Register   🖥 Project Settings   🗂 Portfolio Management   👤 Administration

Scoring System | Field Settings | Custom Fields | Breakdown Structures | Reports | Dashboards

◉ Threats ○ Opportunities

BABCOCK ▾ | CREATE NEW TEMPLATE | SEARCH

⊙ Template Information
CREATE DEFAULT TEMPLATE | EDIT

Template Name :	Babcock
Template Description :	Babcock

⊙ Probability Scale
VIEW LEVEL DEFINITIONS | EDIT

Probability Scale

Number of Groups : 3

SHORT NAME		LOWER THRESHOLD%		UPPER THRESHOLD%
H	Above	70.00		
M	From	30.00	Upto	70.00
L	Below	30.00		

⊙ Tolerance Scale
VIEW LEVEL DEFINITIONS | EDIT

Tolerance Scale

Number of Groups : 3

SHORT NAME		LOWER THRESHOLD		UPPER THRESHOLD	COLOR
H	Above	5.00			🟩
M	From	3.00	Upto	5.00	🟨
L	Below	3.00			🟥

⊙ Impacts
VIEW LEVEL DEFINITIONS | ADD | EDIT

Number of Groups : 3

Cost — Cost Type : Currency

SHORT NAME		LOWER THRESHOLD		UPPER THRESHOLD
H	Above	500,000.00		
M	From	100,000.00	Upto	500,000.00
L	Below	100,000.00		

Schedule — Duration Type : Weeks

SHORT NAME		LOWER THRESHOLD		UPPER THRESHOLD
H	Above	4.00		
M	From	1.00	Upto	4.00
L	Below	1.00		

⊙ Risk Matrix
EDIT

PROBABILITY AND IMPACT SCORING

	Impacts		
	H	M	L
High %	3.00	6.00	1.00
Medium %	6.00	4.00	2.00
Low %	9.00	6.00	3.00

© PRC SOFTWARE 2016

Figure 1

Figure 2

PRC SOFTWARE

Searching For Templates:

Searching for templates in the **Scoring System Template** can be done in two ways. The **SEARCH** function allows the user to search for a template based on a keyword. This method is faster when you are working with a large amount of data. The **Select Template** function is commonly used for databases with less data and when the search objective is known.

Using the search function:

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Click the **SEARCH** button. (Figure 1) or (Figure 2)
3. Enter the search keyword (which can be the **Template Name** or **Template Description**). Click the **SEARCH** button and select the required template. (Figure 3)
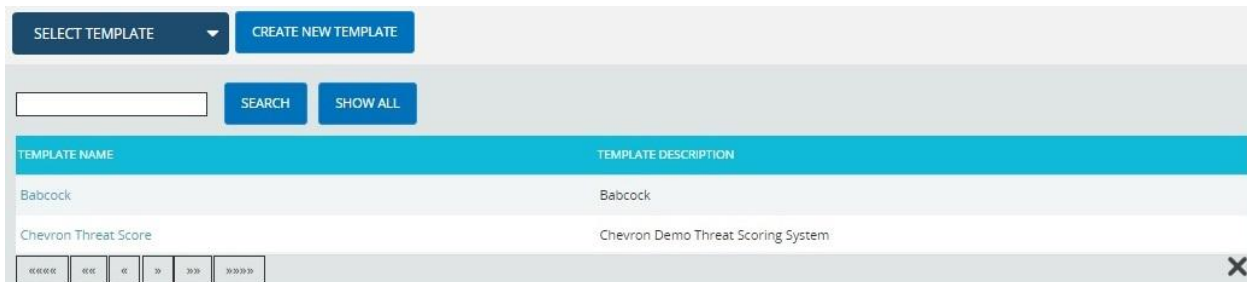
Figure 3

The **SHOW ALL** button in the search area lists all the templates available (By default).

Using the Select Function (dropdown list):

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Click the **Select Template** dropdown. (Figure 1) or (Figure 2)
3. Select the required template from the list shown.

Creating a new template:

Creating a new template is quick and easy. The **Template Name** is a required field to save the template.

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Click the **CREATE NEW TEMPLATE** button. (Figure 1) or (Figure 2)

3. After entering template details, click the **SAVE** button.

Creating default template:

This functionality is used to create a master template. Only once the default template can be created and is done by **super** user.

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Click the **CREATE DEFAULT TEMPLATE** button. (Figure 1) or (Figure 2)
3. After entering template details, click the **SAVE** button.

View Default Template:

To view the Master Template, click the **VIEW DEFAULT TEMPLATE** button. (Figure 1) or (Figure 2)

View Level Definitions:

To view probability and tolerance levels, click the **VIEW LEVEL DEFINITIONS** button shown in the **Probability & Tolerance Scales** section. (Figure 1) or (Figure 2) A pop up shown in Figure 4 appears. If the Level Definitions have been modified, click the **SAVE** button to save the changes.

Figure 4

To view impact levels, click the **VIEW LEVEL DEFINITIONS** button shown in the **Impacts** section. (Figure 1) or (Figure 2) A pop up appears (Figure 5). Click the **SAVE** button to save any modifications to the Level Definitions.

Figure 5

Edit Template Information:

While editing the details of a template, the fields **Template Name** and **Template Description** will be unlocked.

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Select the required template.
3. Click the **EDIT** button. (Figure1) or (Figure 2)
4. After the data is modified, click the **SAVE** button.

Edit Probability & Tolerance:

While editing **Probability and Tolerance** fields such as Number of Groups, Lower Threshold, and Upper Threshold, the color is unlocked.

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Select the required template.
3. Click the **EDIT** button under Probability / Tolerance section. (Figure1) or (Figure 2)
4. After the data is modified, click the **SAVE** button.

The color is set by clicking on the corresponding color shown beside each field. An example of the color picker is displayed in Figure 6.

Figure 6

Edit Impacts:

While editing impacts fields, such as Number of Groups, Lower Threshold, Upper Threshold, Duration Type, Name and Description of Additional Impact are unlocked.

Cost Type:

The **Cost Type** has values **Percentage** and **Currency**, where **Cost** is the default value. If the value percentage is selected for duration type the cost values will be expressed in the corresponding percentage of total cost of project. For currency, the cost values remain unchanged. These changes are visible only when the corresponding template is assigned to the project.

Duration Type for Schedule:

The **Duration Type** field for schedule has values: Days, Weeks, Months, Year and Percentage. The default value is **Days**. If **Percentage** is selected, the **Schedule** value will be converted to the percentage of the Number of days between starting and ending date of a project. These changes are visible only when the corresponding template is assigned to the project.

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Select the required template.
3. Click the **EDIT** button. (Figure1) or (Figure 2)
4. After the data is modified, click the **SAVE** button.

Add New Impact:

This functionality is used to add new additional impact.

Steps:

PRC SOFTWARE

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Select the required template.
3. Click the **ADD** button to add new impact. (Figure1) or (Figure 2)
4. After entering the details, Click the **SAVE** button.

Delete Impacts:

This functionality is used to delete additional impacts. Additional impacts can be deleted only by those users who have Read/Write access for delete.

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Select the required template.
3. Click the **Close** icon to delete additional Impacts.

Edit Risk Matrix:

This section allows you to define the scores based on the Probability and Impact position.

Steps:

1. *Portfolio Management --->Scoring System (Threats/Opportunities).*
2. Select the required template.
3. Click the **EDIT** button under Risk Matrix. (Figure 1) or (Figure 2)
4. After the data is modified, click the **SAVE** button.

Manager's Dashboard (Portfolio)

The **Manager's Dashboard (Portfolio)** page shows up to 6 charts that are chosen by the user. The charts shown in this page must be created on the **Standard Reports** page. The **Manager's Dashboard** gives the user, the ability to quickly view the critical project information and export them to **MS Word** and **MS PowerPoint**. The user can also share these dashboards with other users.
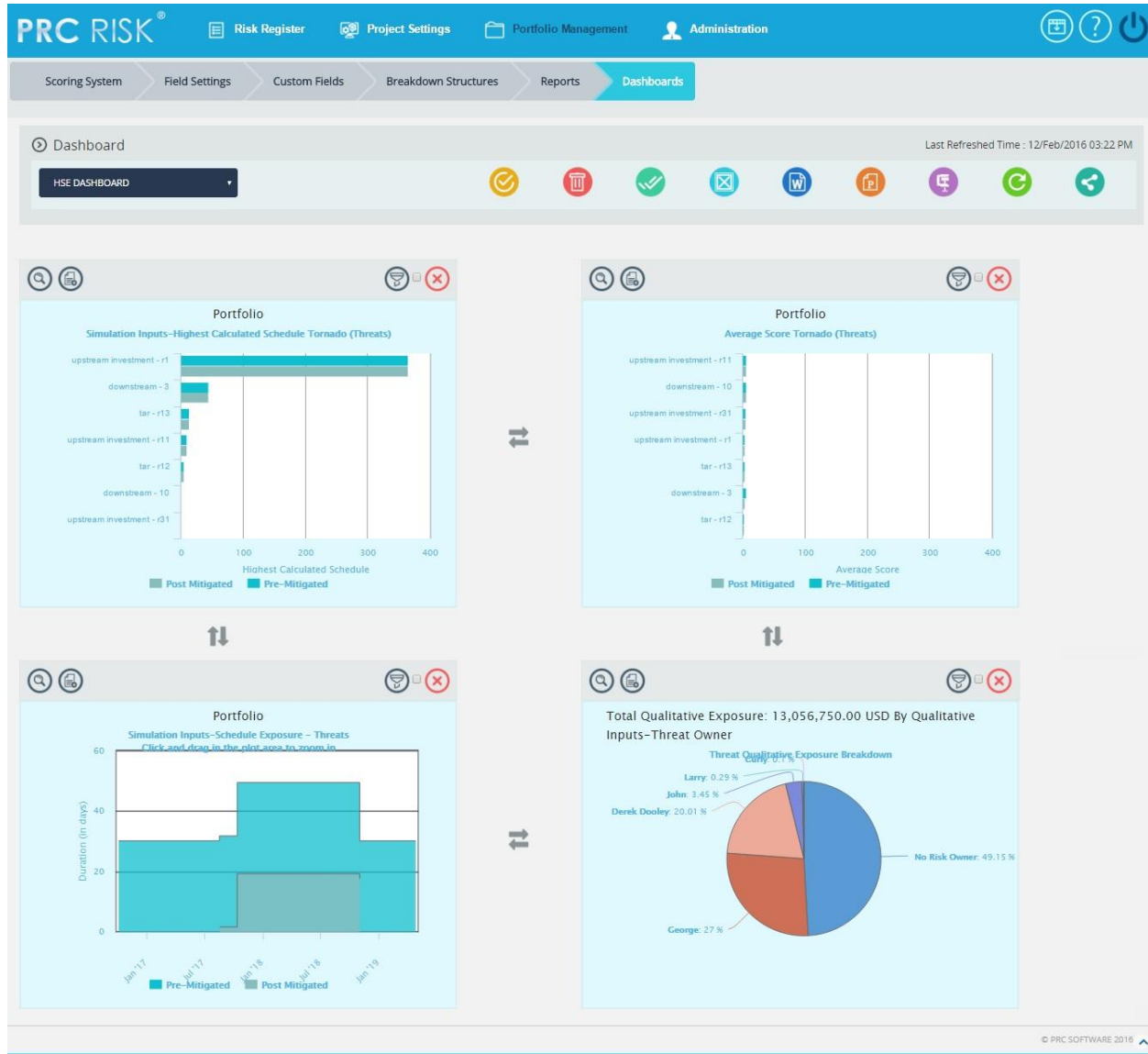
Figure 1

Select Dashboard Dropdown:

This functionality is used to show the corresponding dashboard selected. The dropdown shown in Figure 1 contains dashboard names. Each dashboard name generates the dashboard associated with it.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard*
2. Select the dashboard name from the dropdown. (Figure 1)

To navigate to **Portfolio Dashboard:**

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard*
2. Select the **Portfolio Dashboard** from the dropdown. (Figure 1)

Delete Dashboard:

This functionality is used to delete the corresponding dashboard selected.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard*
2. Select the dashboard name from the **Portfolio Dashboard** dropdown. (Figure 1)
3. Click the **Delete** icon to delete the selected dashboard. (Figure 1)

Export to Word:

This functionality is used to export the selected chart to **MS Word**.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Open in Word** icon to export the chart to **MS Word**. (Figure 1)

Export to PowerPoint:

This functionality is used to export the selected chart to **MS PowerPoint**.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)

3. Click the **PowerPoint** icon to export the chart to **MS PowerPoint**. (Figure 1)

Compress Files:

This functionality is used to compress the selected images to a **Zip** file.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Compress Files** icon. (Figure 1)

Check All:

This functionality is used to select all the charts. Click the **Check All** icon to select all the charts. (Figure 1)

Uncheck All:

This functionality is used to uncheck the selected charts. Click the **Uncheck All** icon to uncheck the charts selected. (Figure 1)

Reposition Arrows:

This functionality allows the user to move the selected chart to another position on the page. To reposition a selected chart, click the **Reposition** arrows nearby. (Figure 1)

Set as default:

This functionality is used to make the selected dashboard as the default dashboard. (Figure 1)

Refresh:

This functionality is used to refresh the chart with the most recent data from the project database. To refresh the chart, click the **Refresh** icon. (Figure 1)

Filter:

To view the filter applied to the chart, click the **Show Filter** icon. (Figure 1) An example of the screen which appears after the icon is clicked is shown in Figure 2.

Figure 2

If the user changes the business unit on Manage Projects page for the projects in a particular chart which is already added on dashboard in which filter is applied, then on clicking the **Refresh** icon, those filters will be removed from the chart.

Delete From Dashboard:

This functionality allows you to delete a chart from **Manager's Dashboard (Portfolio)**. To delete a chart click the **Delete** icon above each chart. (Figure 1)

Drill Down:

This functionality allows you to redirect to the particular report page in **Standard reports (Portfolio)** from where the chart is added. To redirect a chart click **Drill Down** icon. (Figure 1)

Copy to Dashboard:

This functionality allows you to copy the particular chart to another dashboard. Click the **Copy to Dashboard** icon.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard.*
2. Click the **Copy to Dashboard** icon. (Figure 1)
3. A pop up appears (Figure 3). Select the name of the dashboard from the name drop down, to which the chart has to be copied.
4. Click **SAVE** button. (Figure 3)

Figure 3

Share Dashboard:

This functionality allows you to share one dashboard charts to a new dashboard. Click **Share Dashboard** icon.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard.*
2. Click the **Share Dashboard** icon. (Figure 1)
3. A pop up appears (Figure 4). Give the name and description of the new dashboard to which the chart has to be shared. The **Global access** option allows the user to share the dashboard globally.
4. Click **SAVE** button. (Figure 4)

Figure 4

Dashboard (Portfolio)

The **Portfolio Dashboard** page shows 4 fixed charts, **Risk Score Tornado (Threats)**, **Risk Score Tornado (Opportunities)**, **Mitigation Past Due**, and **Portfolio Risk Exposure (Qualitative)**. The data shown is from projects across multiple Business Units based on the user's access level. The **Portfolio Dashboard** is useful because the user can quickly view the charts most commonly used at the portfolio level. The **Portfolio Dashboard** page is visible to only those users with **Read/Write** or **View** access.
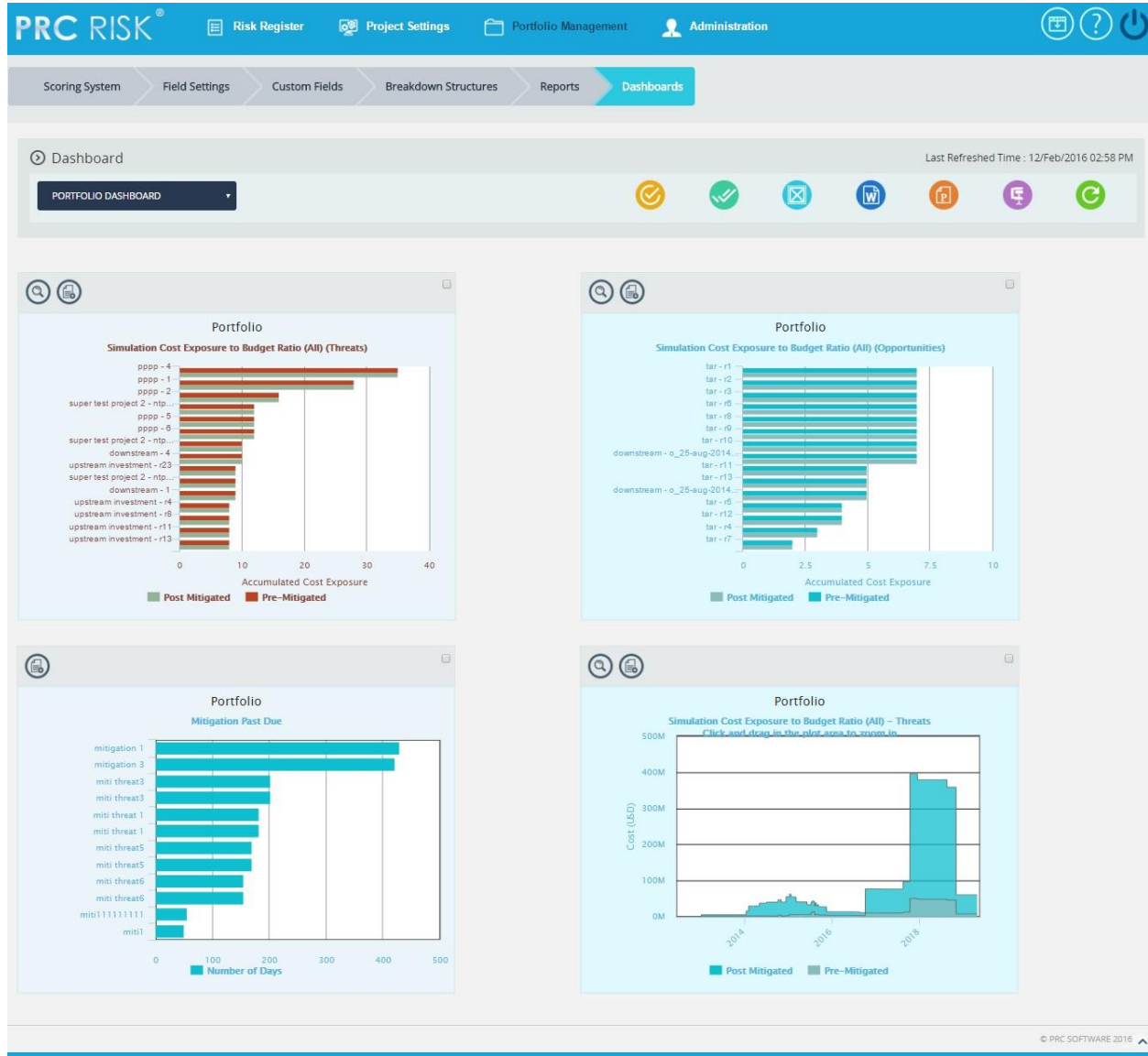
Figure 1

Select Dashboard Dropdown:

This functionality is used to navigate to the **Manager's Dashboard (Portfolio)** page**.** The dropdown shown in Figure 1 contains dashboard names. Each dashboard name generates the dashboard associated in the **Manager's Dashboard (Portfolio)** page.

Steps:

1. *Portfolio Management ---> Portfolio Dashboards*
2. Select the dashboard name from the dropdown. (Figure 1)

Export to Word:

This functionality is used to export the selected chart to **MS Word**.

Steps:

1. *Portfolio Management ---> Portfolio Dashboards*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Open in Word** icon to export the chart to **MS Word**. (Figure 1)

Export to PowerPoint:

This functionality is used to export the selected chart to **MS Power Point**.

Steps:

1. *Portfolio Management ---> Portfolio Dashboards*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Power point** icon to export the chart to **MS Power Point**. (Figure 1)

Compress Files:

This functionality is used to compress the selected images to a **Zip** file.

Steps:

1. *Portfolio Management ---> Portfolio Dashboards*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Compress Files** icon. (Figure 1)

Check All:

This functionality is used to select all the charts in **Portfolio Dashboard** page. Click the **Check All** icon to select all the charts. (Figure 1)

Uncheck All:

This functionality is used to uncheck the selected charts. Click the **Uncheck All** icon to uncheck the charts selected. (Figure 1)

Refresh:

This functionality is used to refresh the chart with the most recent data from the project database. To refresh the chart, click the **Refresh** icon. (Figure 1)

Set as default:

This functionality is used to make the selected dashboard as the default dashboard. (Figure 1)

Drill Down:

This functionality allows you to redirect to the particular report page in **Standard reports (Portfolio)** from where the chart is added. To redirect a chart click **Drill Down** icon. (Figure 1)

Copy to Dashboard:

This functionality allows you to copy the particular chart to another dashboard. Click the **Copy to Dashboard** icon.

Steps:

1. *Portfolio Management --->Dashboards --->Manager's Dashboard.*
2. Click the **Copy to Dashboard** icon. (Figure 1)
3. A pop up appears (Figure 2). Select the name of the dashboard from the name drop down, to which the chart has to be copied.
4. Click **SAVE** button. (Figure 2)

Figure 2

Standard Reports (Portfolio)

The **Standard Reports (Portfolio)** page allows the user to create various reports such as: **Threat Reports, Opportunity Reports**, **Mitigation Reports, Overall Risk Reports and Exports**. The process to create a report is broken down into steps to make it easier for users to follow. Reports from this page can be added to the **Manager's Dashboard** for further analysis and reporting. This page can be viewed by only those users who have either **Read/Write** or **View** access.
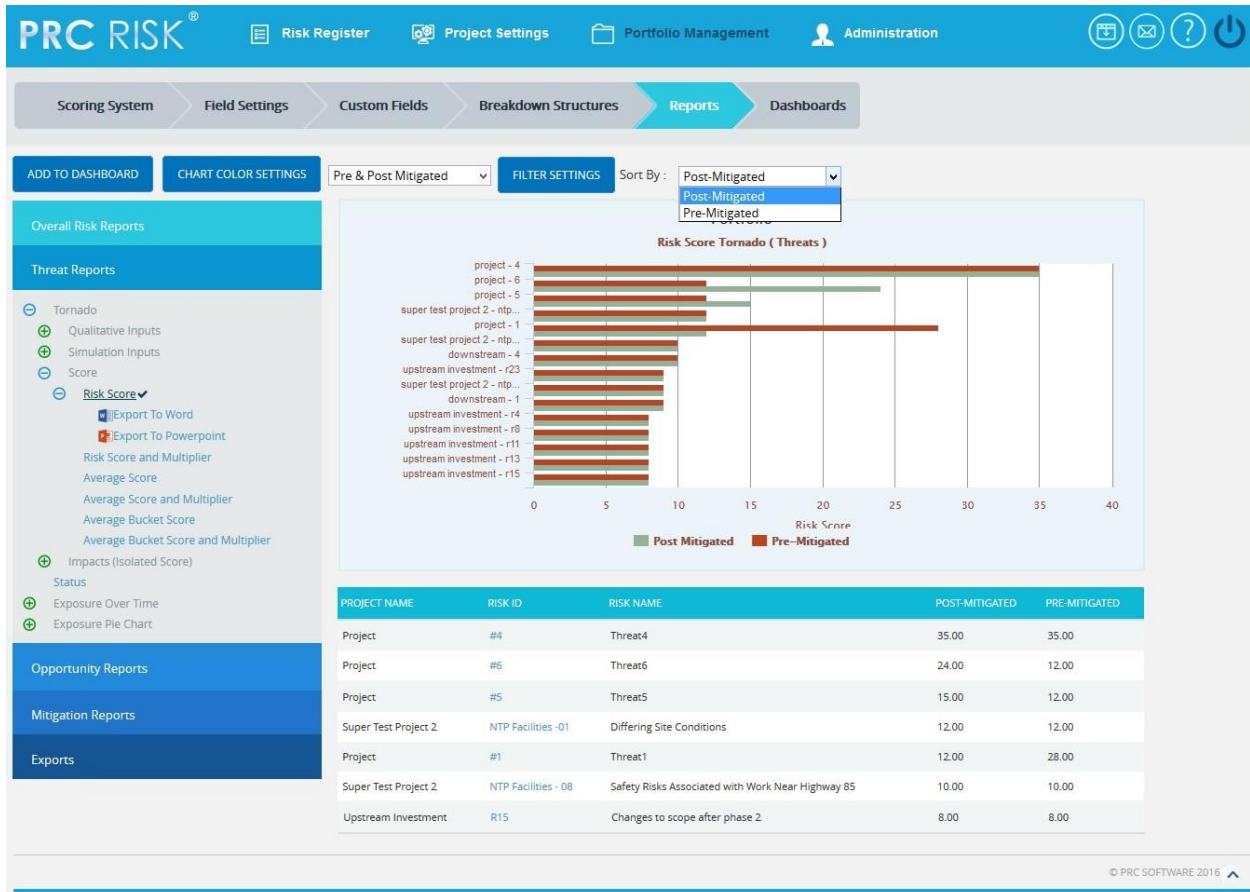
Figure 1

Reports:

There are several types of reports in the **Standard Report (Portfolio)** page. In order to generate a chart, the primary option that should be selected is **Report**. The **Report** selected by default (while the page is loaded) is **Threat Reports**. Figure 2 shows the various types of available reports.
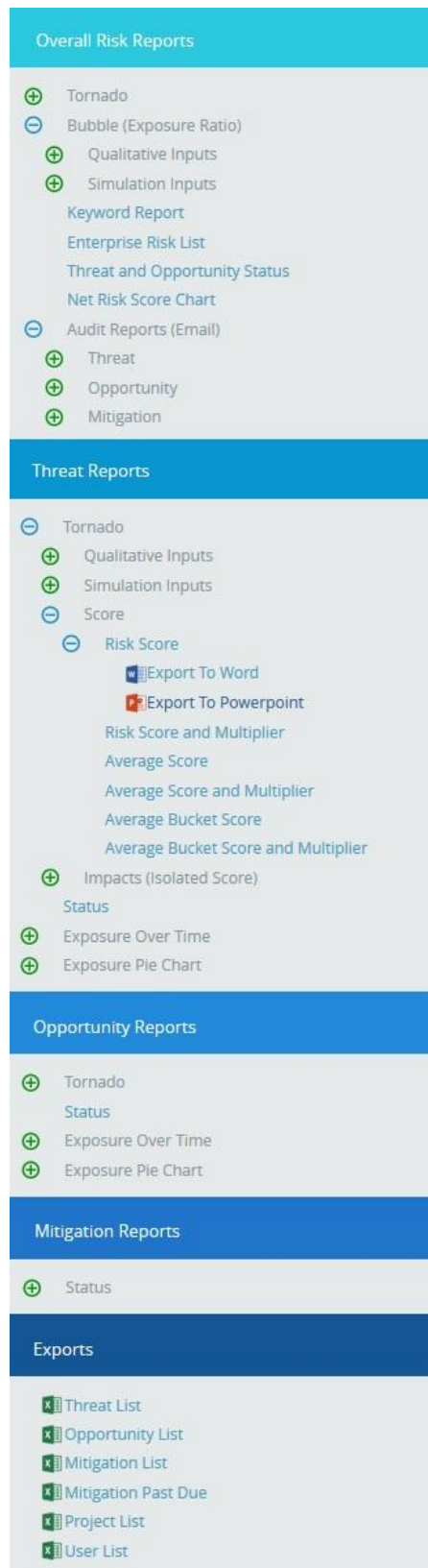
Figure 2

Report Option:

The **Report option** decides for which risk type the chart should be generated. The risk type listed will vary for the Status Reports. For all other reports it remains the same. The report option for all reports is shown in Figure 3, Figure 4, Figure 5 and 6.

The report option for threat and opportunity are **Threat Tornado, Opportunity Tornado**, **Threat Exposure Over Time, Opportunity Exposure Over Time, Threat Qualitative Exposure Pie Chart, Opportunity Qualitative Exposure Pie Chart, Threat Simulation Exposure Pie Chart and Opportunity Simulation Exposure Pie Chart**.

Risk Tornado Charts:
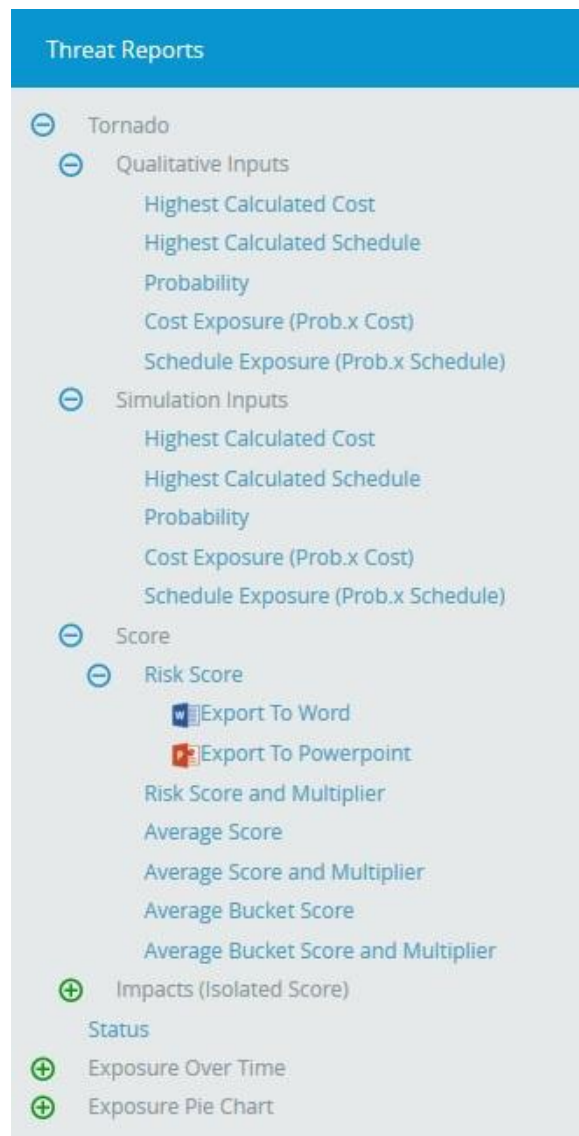
Figure 3

Risk Exposure Charts:

Figure 4

Risk Exposure Pie Charts:
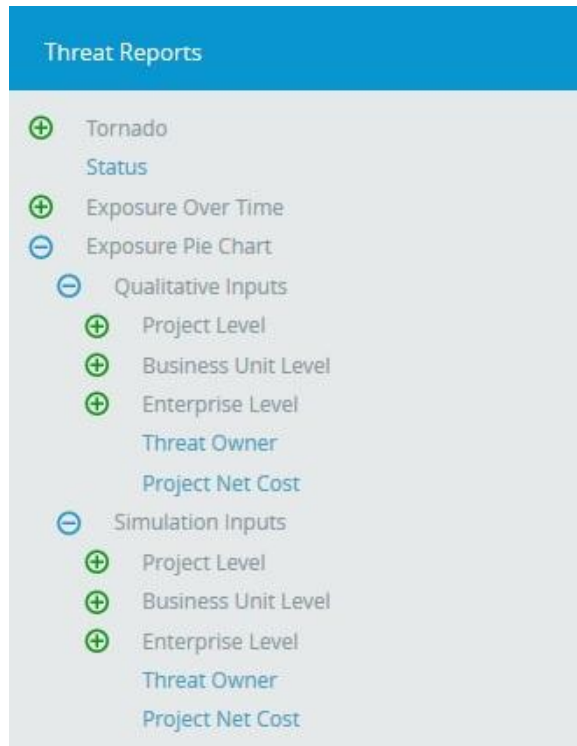
Figure 5

Status Charts:

Figure 6

Data Option:

Data option includes additional impacts if any.

The various data options available are:

1. Risk Score
2. Qualitative Cost
3. Qualitative Schedule
4. Other Qualitative impacts
5. Qualitative Probability
6. Simulation Cost
7. Simulation Schedule
8. Simulation Probability
9. Simulation Cost Exposure
10. Qualitative Cost Exposure
11. Simulation Schedule Exposure

Figure 7

Risk Score:

The **Risk score** for Threat/Opportunity is the pre-mitigated score. The **Risk score** for mitigation is the post-mitigated score.

Qualitative Cost:

The formulas for **Qualitative Cost** are:

1. [(Qualitative Cost Upper Limit + Qualitative Cost Lower Limit) / 2] . (Pre-Value)

2. [(Qualitative Mitigation Cost Upper Limit + Qualitative Mitigation Cost Lower Limit) / 2] (Post-Value)

If there is no upper limit: Qualitative Cost = lower limit * 1.5

If there is no lower limit: Qualitative Cost = upper limit / 2

Qualitative Schedule:

The formulas for **Qualitative schedule** are:

1. [(Qualitative Schedule Upper Limit + Qualitative Schedule Lower Limit) / 2] (Pre-Value)

2. [(Qualitative Mitigation Schedule Upper Limit + Qualitative Mitigation Schedule Lower Limit) / 2] (Post-Value)

If there is no upper limit: Qualitative Schedule = lower limit * 1.5

If there is no lower limit: Qualitative Schedule = upper limit / 2

Other Qualitative Impacts:

The formulas for **Additional Impacts** are:

1. [(Qualitative Additional Impact Upper Limit + Qualitative Additional Impact Lower Limit) / 2] (Pre-Value)

2. [(Qualitative Mitigation Additional Impact Upper Limit + Qualitative Mitigation Additional Impact Lower Limit) / 2] (Post Value)

If there is no upper limit Average value = lower limit * 1.5

If there is no lower limit Average value = upper limit / 2

Qualitative Probability:

The formulas for **Qualitative Probability** are:

1. [[(Qualitative Probability Upper Limit + Qualitative Probability Lower Limit) / 2]] (Pre-Value)

2. [[(Qualitative Mitigation Probability Upper Limit + Qualitative Probability Lower Limit) / 2]] (Post-Value)

If there is no upper limit: Qualitative Probability = [(lower-limit + 100) / 2]

If there is no lower limit: Qualitative Probability = [(0 + upper-limit) / 2]

Simulation Cost:

The formulas for **Simulation Cost** are:

1. [(Cost min + Cost max + 4 * (Cost Most likely)) / 6] (Pre Value)

2. [(Mitigation Cost min + Mitigation Cost max + 4 * (Mitigation Cost Most likely)) / 6] (Post Value)

If there is no max then max = min * 2

If there is no min then min = max / 2

If there is no most likely then Avg = [(Min + Max) / 2]

Simulation Schedule:

The formulas for **Simulation Schedule** are:

1. [(Schedule min + Schedule max + 4 * (Schedule Most likely)) / 6] (Pre-Value)

2. [(Mitigation Schedule min + Mitigation Schedule max + 4 * (Mitigation Schedule Most likely)) / 6] (Post-Value)

If there is no max then max = min * 2

If there is no min then min = max / 2

If there is no most likely then Avg = [(Min + Max) / 2]

Simulation Probability:

The formulas for **Simulation Probability** are:

1. [[Simulation Probability Percentage]] (Pre-Value)

2. [[Mitigation Simulation Probability]] (Post-Value)

Simulation Cost Exposure:

The formulas for **Simulation Cost Exposure** are:

1. [(Simulation Cost * Simulation Probability) / 100] (Pre-Value)

2. [(Mitigation Simulation Cost * Mitigation Simulation Probability) / 100] (Post-Value)

Simulation Schedule Exposure:

The formulas for **Simulation Schedule Exposure** are:

1. [(Simulation Schedule * Simulation Probability) / 100] (Pre-Value)

2. [(Mitigation Simulation Schedule * Mitigation Simulation Probability) / 100] (Post-Value)

The various data options for **Threat Qualitative Exposure Pie Chart, Opportunity Qualitative Exposure Pie Chart, Threat Simulation Exposure Pie Chart and Opportunity Simulation Exposure Pie Chart** are

1. Project-OBS
2. Project-WBS
3. Project-RBS
4. Business Unit-OBS
5. Business Unit-WBS
6. Business Unit-RBS
7. Enterprise-OBS
8. Enterprise-WBS
9. Enterprise-RBS
10. Risk Owner

Project OBS, **Project WBS** and **Project RBS** details are added from the page *Project Breakdown Structure (Project Settings ---> Project Breakdown Structure)*

Business OBS, Business RBS, **Business WBS**, **Enterprise OBS**, **Enterprise RBS, and Enterprise WBS** are added from the page *Manage Breakdown Structure* (*Portfolio Management ---> Manage Breakdown Structure)*

From the Select box (Figure 8) there is an option to select (Pre-Mitigated/Post-Mitigated or Pre-Mitigated & Post-Mitigated). This option is hidden for status charts. For **Risk Threat Tornado, Opportunity Tornado, Threat Exposure Over Time, Opportunity Exposure Over Time** it is shown in Figure 8(a), and for **Threat Qualitative Exposure Pie Chart, Opportunity Qualitative Exposure Pie Chart, Threat Simulation Exposure Pie Chart** and **Opportunity Simulation Exposure Pie Chart** it is shown in Figure 8(b).

Figure 8(a)
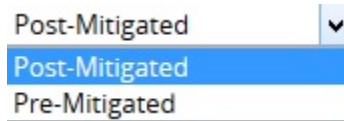
Figure 8(b)

Filter:

This functionality is used to apply the **Filter** to the chart.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Add Filter** button. (Figure 9) A pop up shown in Figure 10 appears.
3. Select the field from the **Select Field** dropdown. (Figure 10)
4. Select the Operator from the **Select Operator** dropdown. (Figure 10) The various fields and the operators applicable are shown in Table 1.
5. The user can select values or enter values from the **Select Value** dropdown. (Figure 10)
6. Click the **Add Filter option** button , to add another filter (Figure 10)
7. Click the **Apply Filter** button to view the filtered report. Or give the name, description, and global access option and then click the **Save and Apply Filter** button to view the saved filter report. (Figure 10)
8. Select the filter name from the Name dropdown and click the **Delete** button that appears, to delete that particular saved filter. (Figure 10)

Figure 9

Figure 10

Field Type	Operator	Notes
Text	Equal to	User types text—This chart contains all the values that match the text exactly.
	Contains	User types text—This chart contains all the values that contain the text anywhere in the string.
	Not equal to	User types text—This chart contains all the values that do not match exactly.
	Does not contain	User types text—This chart contains all values where the text is not contained anywhere in the string.
Date	Equal to	Date popup box—This chart contains all values where the date matches exactly.
	Before	Date popup box—This chart contains all values where the date is before the selected date.
	After	Date popup box—This chart contains all values where the date is after the selected date.
	Not equal to	Date popup box—This chart contains all values where the

		date does not match exactly.
Number	Equal to	User enters number—This chart contains all values which match exactly with the number entered.
	Greater than	User enters number—This chart contains all values greater than the number entered.
	Greater than or Equal to	User enters number—This chart contains all values greater than or equal to the number entered.
	Less than	User entered number—This chart contains all values less than or equal to the number entered.
	Less than or equal to	User enters number—This chart contains all values less than the number entered
	Not equal to	User enters number—This chart contains all values which are not the exact match for the number entered.
WBS/OBS/RBS	Under	User selects WBS/OBS/RBS element via a check mark in a popup—All children under the node (and sub-nodes) are shown. If a user check marks Multiple Items, then an OR is applied to all check-marked items.
	Not Under	User selects WBS/OBS/RBS element via a check mark in a popup—All items are shown except children under the node (and sub-nodes).
List Items (such as status)	Equal to	User selects list element from a dropdown box—This chart will contain all the values which match the selected value exactly.
	Equal to (select multiple)	User selects list element via a check mark in a popup—If a user check marks multiple

		items, then an OR is applied to all checked items. This chart will contain all values which match the selected values exactly.
	Not equal to	User selects list element from a dropdown box—This chart contains all values not equal to the selected value
	Contains	User selects list element from a dropdown box—This chart contains all values which contain the selected value
	Not equal to (select multiple)	User selects list element via a check mark in a popup—If the user checks multiple items an OR is applied to all checked items, and the results will not be equal to any checked items. This chart contains all values not equal to the selected values

Table 1

Risk Tornado Chart:

Tornado Diagrams, also called **Tornado Plots** or **Tornado Charts,** are special types of **Bar Charts** where the data categories are listed vertically. These charts are generated by default when the **Standard Reports** (**Portfolio**) page is initially loaded. The Post-Mitigated score is the Mitigation score and Pre-Mitigated score is the risk score.

Threat Tornado:

The Threat Tornado chart corresponds to all the threats of the projects to which the logged in user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Threat Reports** link to select **Threat Tornado Chart**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both,** and to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 9)

4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 9)
5. Click the **Risk Score** link or any other data option to generate the report. (Figure 11) The chart generated and the data table is shown below in Figure 12.

Figure 11

PROJECT NAME	RISK ID	RISK NAME	POST-MITIGATED	PRE-MITIGATED
Project	#4	Threat4	35.00	35.00
Project	#6	Threat6	24.00	12.00
Project	#5	Threat5	15.00	12.00
Upstream Investment	R23	There is a chance to remove scope (onshore)	9.00	9.00
Super Test Project 2	NTP Facilities - 13	Labor Market Fluctuation	9.00	9.00
Upstream Investment	R13	Not able to achieve drilling performance	8.00	8.00
Upstream Investment	R15	Changes to scope after phase 2	8.00	8.00

Figure 12

Opportunity Tornado:

The Opportunity Tornado chart corresponds to all the opportunities of the projects to which the logged in user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Opportunity Reports** link to select **Opportunity Tornado** Chart. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both,** and to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 9)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 9)
5. Click the **Risk Score** link or any other data option to generate the report. (Figure 13) The chart generated and the data table is shown is in Figure 14.

Figure 13

Figure 14

Clicking on the **Risk ID** shown in the data table in figure 14 navigates to the page:

Risk Register ---> Risk Details (Opportunity)

Status:

The **Status** chart is represented by a pie chart and corresponds to the status assigned to the risk.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in the filter section above). (Figure 9)
3. Click the *Status ---> Threat Status* link under Threat reports to know the status of threats in the selected project. Click the *Status ---> Opportunity Status* link under Opportunity reports to know the status of opportunity in the selected project. To know the status of mitigations in the selected project, click *Status ---> Mitigation Status* link. Click the

Threat and Opportunity Status link under Other Risk Reports to know the status of threats and opportunities in the selected project. (Figure 15) The chart generated and the data table is shown is in Figure 16.

Figure 15

Portfolio

Portfolio Status (Threats)

New Status: 14% (1)

Impacting: 29% (2)

Open-unmitigated: 29% (2)

Open-mitigation planned: 14% (1)

Open-mitigation working: 14% (1)

STATUS	NUMBER
Impacting	2
New Status	1
Open-mitigation planned	1
Open-mitigation working	1
Open-unmitigated	2

PROJECT NAME	RISK ID	RISK NAME	STATUS
Project	#1	Threat1	Open-mitigation working
Project	#2	Threat2	Open-unmitigated
Project	#4	Threat4	Open-mitigation planned
Project	#5	Threat5	Impacting
Project	#6	Threat6	New Status
TAR	#7	Threat7	Impacting
TAR	T_16-Feb-2016_12:57:16		Open-unmitigated

Figure 16

The count under the **Number** column shown in Figure 16 has a link to the **Threat Tornado** chart. (Figure 12)

Threat Exposure Over Time:

The **Threat Exposure Over Time** chart is generated based on the qualitative cost exposure, simulation cost exposure, qualitative schedule exposure and simulation schedule exposure for all the threats of the projects to which the logged in user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Exposure Over Time** link under **Threat Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both,** and to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 9)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 9)
5. Click the **Cost Exposure Under Simulation** to or any other data option to generate the report. (Figure 17) The chart generated and the data table is shown is in Figure 18.
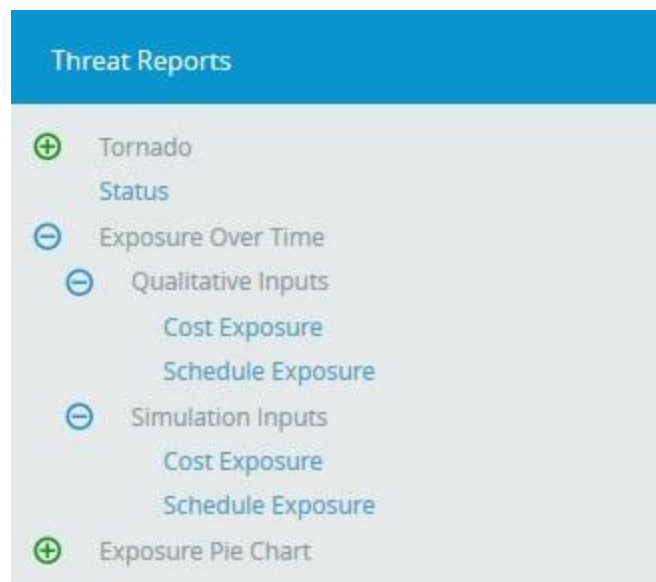
Figure 17
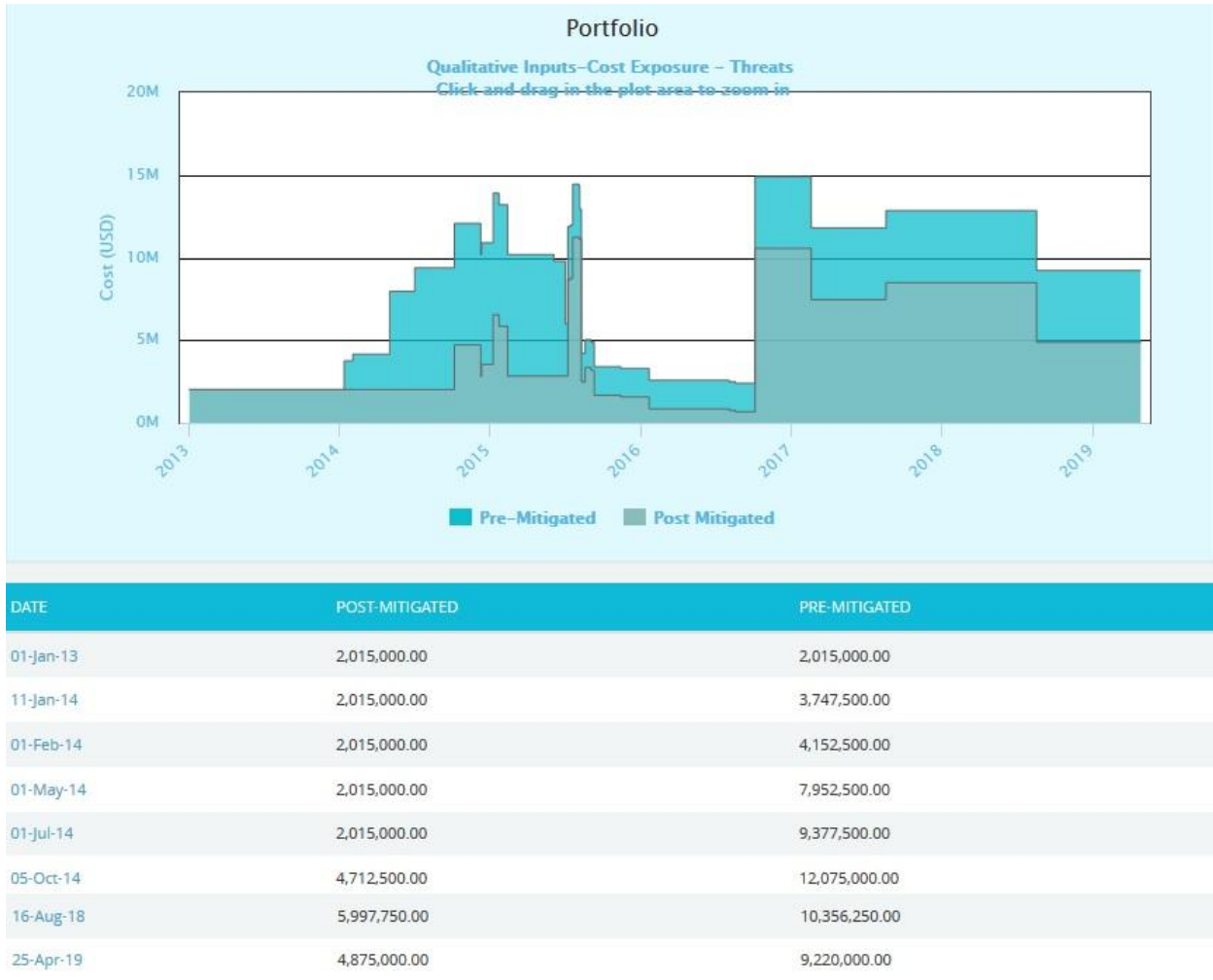
Figure 18

The Column **Date** of the data table (Figure 18) contains a link that navigates the user to the following charts:

1. **Simulation Cost Exposure Tornado (Threat)** if the option "**Cost Under Simulation For Threat Reports**" link is selected.
2. **Qualitative Cost Exposure Tornado (Threat)** if the option "**Cost Under Qualitative For Threat Reports**" link is selected.
3. **Simulation Schedule Exposure Tornado (Threat)** if the option "**Schedule Under Simulation For Threat Reports**" link is selected.
4. **Qualitative Schedule Exposure Tornado (Threat)** if the option "**Schedule Under Qualitative For Threat Reports**" link is selected.

Opportunity Exposure Over Time:

The **Opportunity Exposure Over Time** chart is generated based on the qualitative cost exposure, simulation cost exposure, qualitative schedule exposure and simulation schedule exposure for all opportunities on all projects to which the user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Exposure Over Time** link under **Opportunity Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both**, and to view **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 9)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 9)
5. Click the **Cost Exposure Under Simulation** or any other data option to generate the report. (Figure 19) The chart generated and the data table is shown in Figure 20.

Figure 19
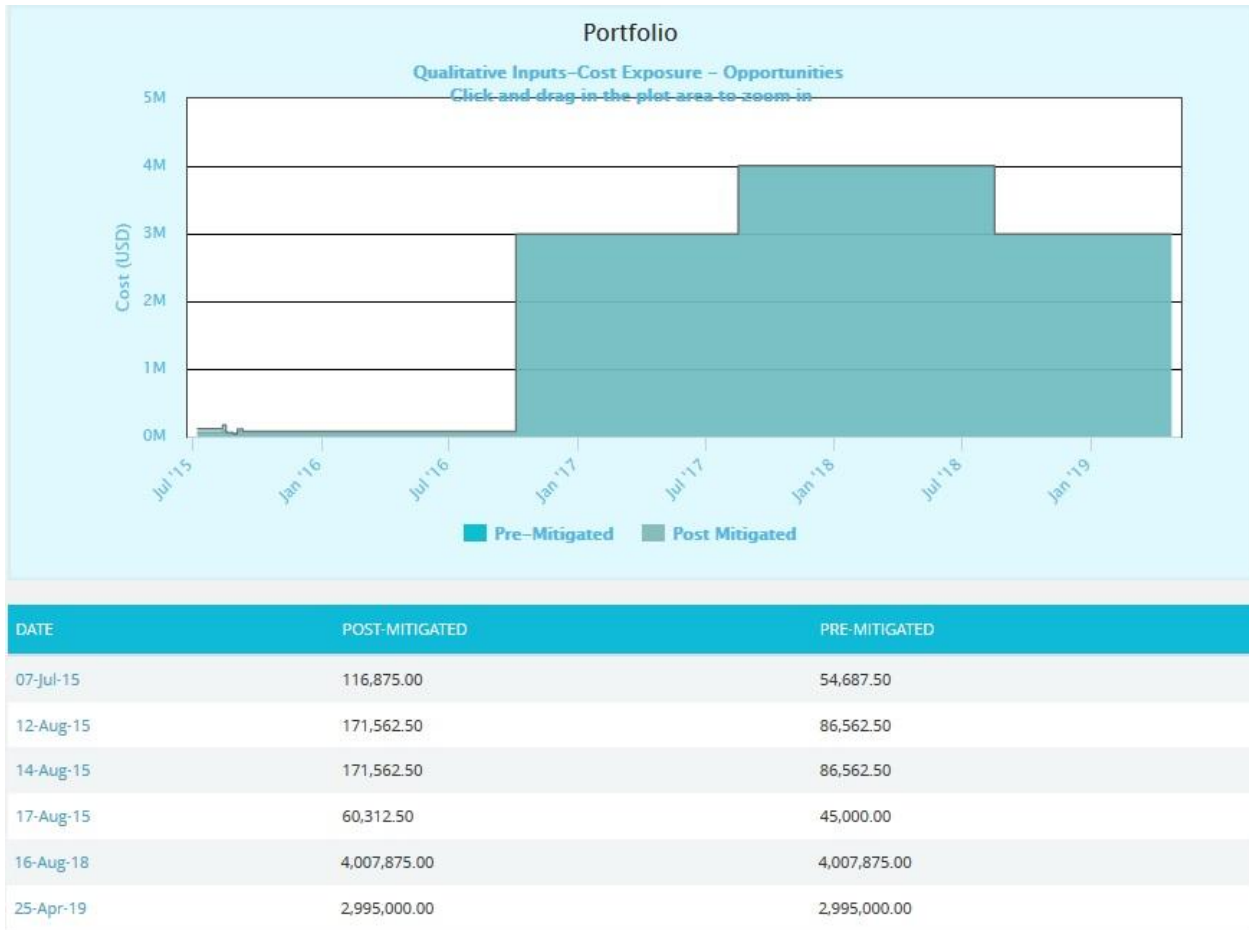
Figure 20

The Column **Date** of the data table (Figure 20) contains a link that navigates the user to the following charts:

1. **Simulation Cost Exposure Tornado (Opportunities)** if the option "**Cost Under Simulation For Opportunity Reports"** is selected.
2. **Qualitative Cost Exposure Tornado (Opportunities)** if the option "**Cost Under Qualitative For Opportunity Reports**" is selected.
3. **Simulation Schedule Exposure Tornado (Opportunities)** if the option "**Schedule Under Simulation For Opportunity Reports**" is selected.
4. **Qualitative Schedule Exposure Tornado (Opportunities)** if the option "**Schedule Under Qualitative For Opportunity Reports**" is selected.

Threat Simulation Exposure Pie Chart:

Threat Simulation Exposure Pie Chart depends on the simulation cost exposure of the threats mapped to the break down structure of all the projects the logged in user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Exposure Pie Chart** link under **Threat Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated)**, **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 9)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in the filter section above). (Figure 9)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 21) The chart generated and the data table is shown in Figure 22.

Figure 21

Figure 22

The **Name** column contains a link to **WBS Tornado (Threats)**. (Figure 22)

Opportunity Simulation Exposure Pie Chart:

The **Opportunity Simulation Exposure Pie Chart** depends on the simulation cost exposure of the opportunities mapped to the break down structure for all the projects to which the user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Exposure Pie Chart** link under **Opportunity Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 9)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 9)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 23) The chart generated and the data table is shown in Figure 24.

PRC SOFTWARE
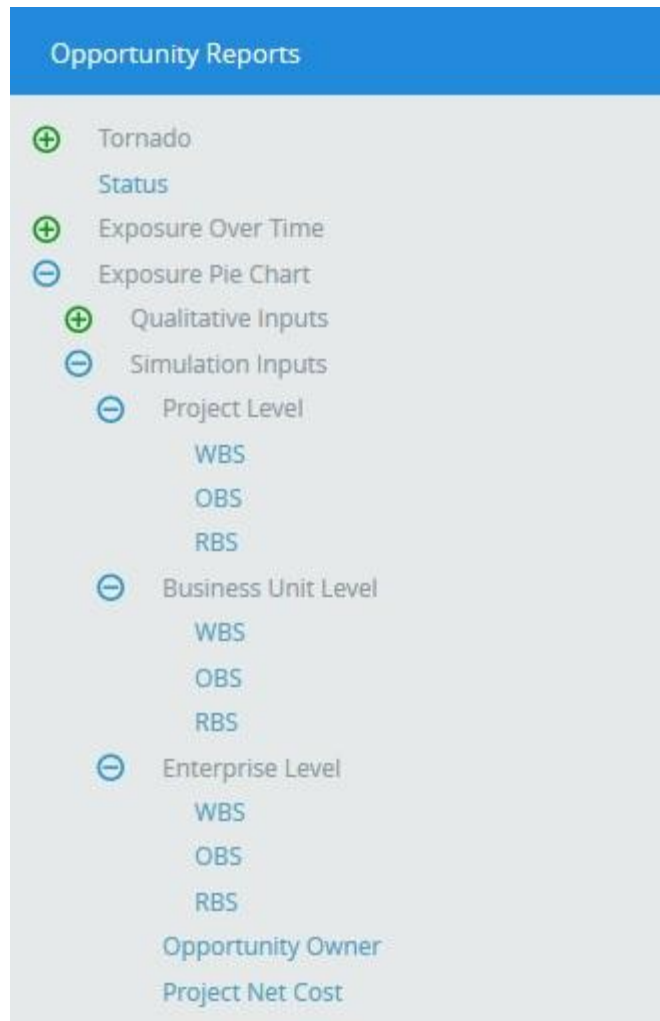
Figure 23

Figure 24

The **Name** column contains a link to the **WBS Tornado (Opportunities)**. (Figure 24)

Threat Qualitative Exposure Pie Chart:

Threat Qualitative Exposure Pie Chart depends on the qualitative cost exposure of the threats mapped to the break down structure for all the projects the logged in user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Exposure Pie Chart** link under **Threat Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated)**, and **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 9)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above) (Figure 9)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 25) The chart generated and the data table is shown in Figure 26.

Figure 25

Figure 26

The **Name** column contains a link to the **WBS Tornado (Threats)**. (Figure 26)

Opportunity Qualitative Exposure Pie Chart:

The **Opportunity Qualitative Exposure Pie Chart** is generated based on the qualitative cost exposure, simulation cost exposure, qualitative schedule exposure and simulation schedule exposure for all the opportunities for all the projects the user has access.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Exposure Pie Chart** link under **Opportunity Reports** (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated)**, and **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 9)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 9)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 27) The chart generated and the data table is shown in Figure 28.
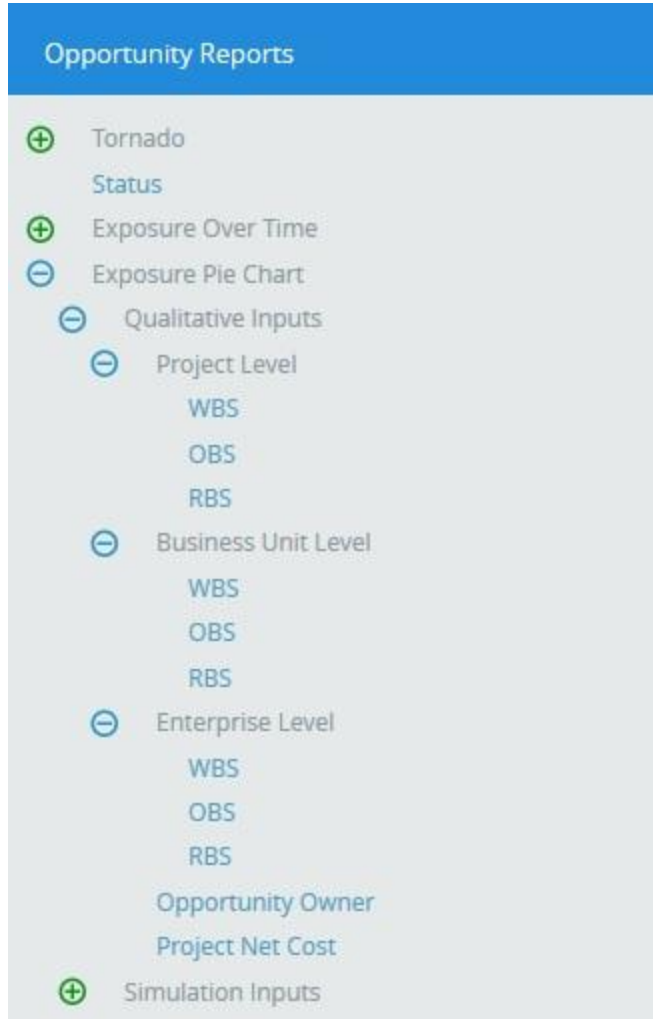
Figure 27

Figure 28

The **Name** column contains a link to **WBS Tornado (Threats)**. (Figure 28)

Email Settings:

This functionality is used to export the entire page to word and send mail to the person selected. The functionality consists of two lists, **Available Users** and **Selected Users**. **Available Users** (Figure 29) contains all the portfolio level users. **Selected Users** (Figure 29) displays the users who have been selected. A user can be added to the **Selected Users** list using the **Add** button. All users under the **Available Users** list can be moved to the **Selected Users** list using the **Add All** button. (Figure 29) A single user from the **Selected Users** list can be moved back to the **Available Users** list using the **Remove** button. The **Remove All** button moves all users from the **Selected Users** list to the **Available Users** list. The **Subject** by default has the value **Chart Title**, which can be changed if needed.

Steps:

1. *Portfolio Management ---> Reports*
2. Generate the desired report by clicking on the type of reports provided to the left.
3. Click the **Email** icon to send email.
4. Select at least one user to whom mail should be sent.

5. Enter the message in the Message text area.
6. Click the **Send Message** button to finish. (Figure 29) To cancel, click the **Cancel** button. (Figure 29)
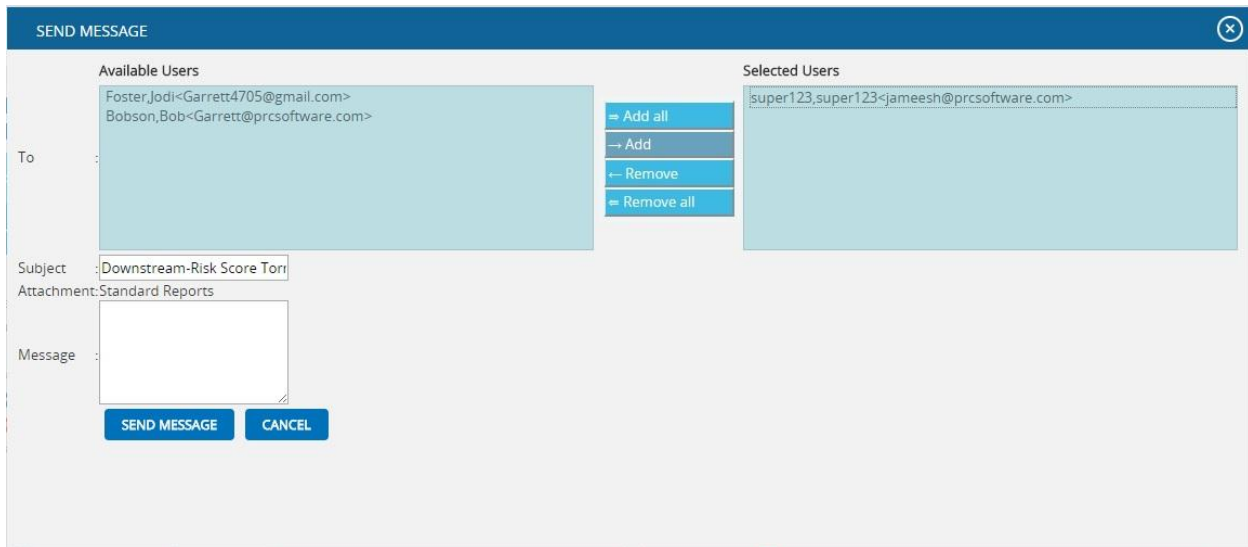
Figure 29

Chart Settings:

This functionality is used to modify the color of the charts generated, and also to create and save the editable chart settings and report script. The accessibility of these chart settings is different for different users.

1. Users with global access **Read/Write** option – The editable dropdown has all the global shared chart settings as well as those saved at the personal level. Global access saved name cannot be edited at the global level.
2. Users with global access **Read only (view only)** option – The editable dropdown has all the global shared chart settings as well as those saved at the personal level. The saved name stores only to the personal level, no other users can view that name.
3. Users with global access **No access** option – The editable dropdown has only the chart settings saved at the personal level. The saved name stores only to the personal level, no other users can view that name.

Each chart has its own chart setting.
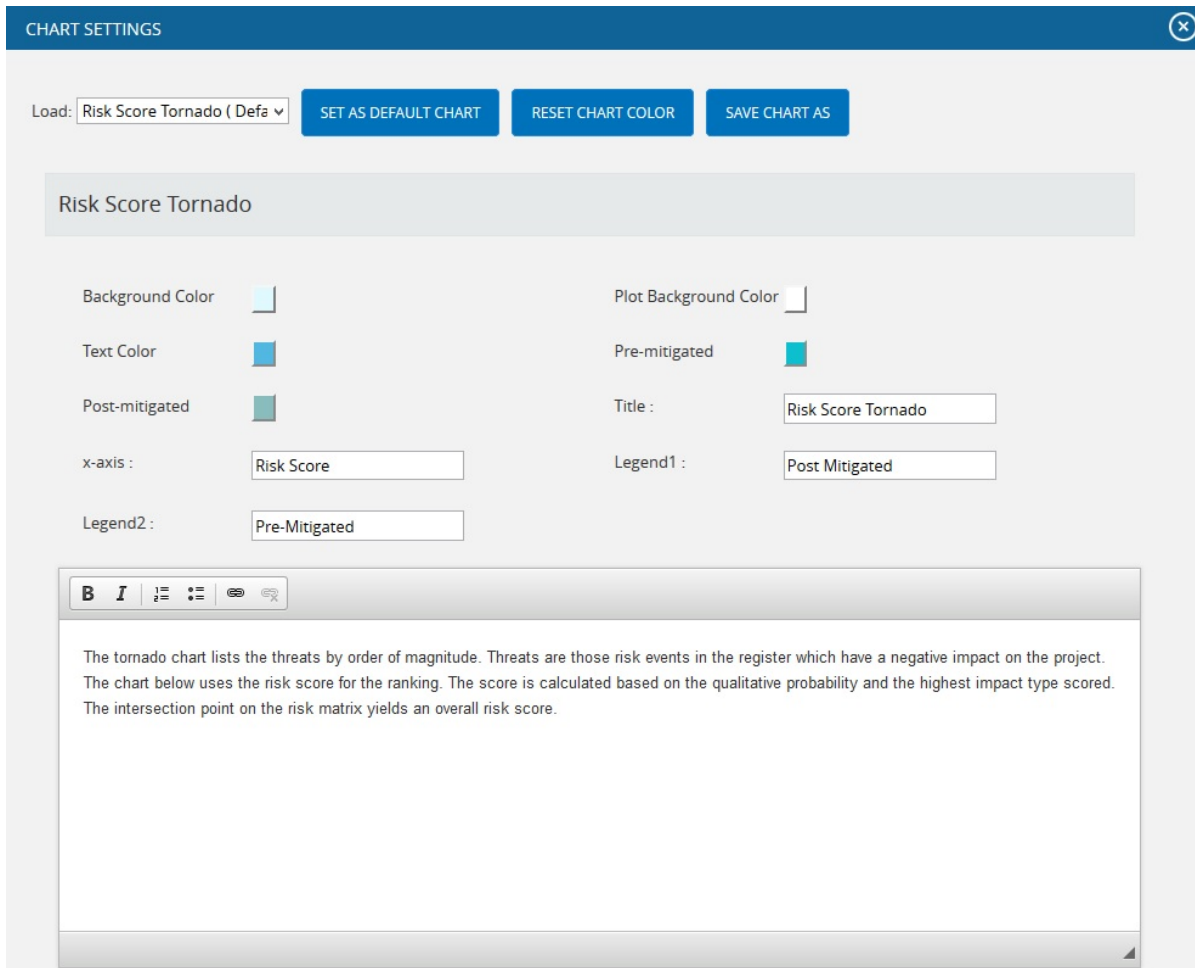
Figure 30

The color is set by clicking on the corresponding color shown beside each field. An example of the color picker for various fields is shown in Figure 31
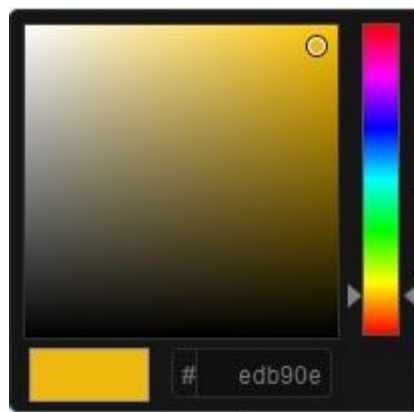
Figure 31

Edit Color:

Steps:
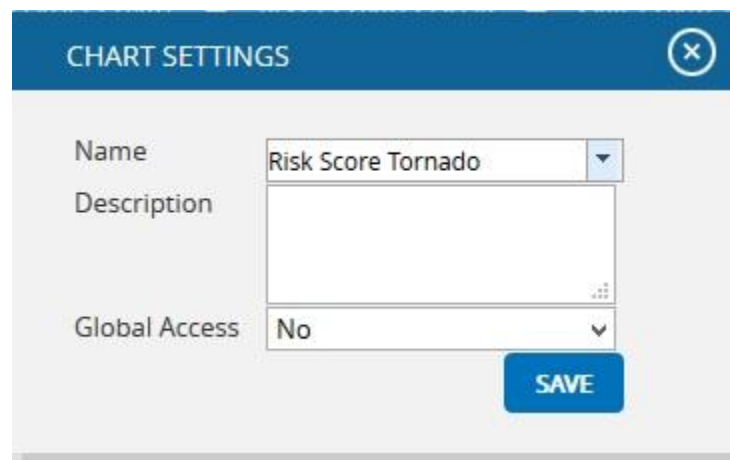
1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to chart settings page. (Figure 1)
3. Modify the colors needed.
4. Click the **Apply** button to apply the corresponding color or click **Cancel** to close the color picker. (Figure 31)

Save As:

This functionality is used to save the user editable chart settings globally or locally with a name and description.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Edit the report script and chart settings and click **SAVE AS** button. (Figure 30)
4. Give the name and description to save and also give the global access option in the pop up appears. (Figure 32)
5. Click the **SAVE** button. (Figure 32)

Figure 32

Set As Default Chart:

This functionality is to set the selected chat settings name, as the default chart.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Select a name from the **Load** dropdown. (Figure 30)
4. Click the **SET AS DEFAULT CHART** button to set the selected chart as default. (Figure 30)

Delete:

This functionality is to delete the selected chart settings name from the **Load** dropdown. This button appears only for the created users. The default chart settings name cannot be deleted by any user.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Select a name from the **Load** dropdown. (Figure 30)
4. Click the **DELETE** button to delete.

Reset:

This functionality is used to reset all the values and report script of the chart to predefined values and script.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Click the **RESET** button to reset the values and report script. (Figure 30)

Add To Managers Dashboard:

This functionality is used to add the chart generated to the portfolio **Manager's Dashboard**. A user with **View** access cannot add a chart to the **Manager's Dashboard**.

Steps:

1. *Portfolio Management ---> Reports*
2. Generate the desired report by clicking on the type of reports provided to the left.
3. Click the **SAVE AS NEW CHART** button. (Figure 1) A pop up shown in figure 33 appears.
4. Enter or select the name. Enter description.
5. Click the **SAVE** button to finish. (Figure 33)

Figure 33

Export to Word:

This functionality is used to export the chart and data table generated to Word.

Steps:

1. *Portfolio Management ---> Reports*
2. Generate the desired report by clicking on the type of reports provided to the left.
3. Click the **Export to Word** link.   (Figure 2)

Export to PowerPoint:

This functionality is used to export the chart generated to PowerPoint.

Steps:

1. *Portfolio Management ---> Reports*
2. Generate the desired report by clicking on the type of reports provided to the left.
3. Click the **Export to PowerPoint** link. (Figure 2)

Overall Risk Reports:

Figure 34

Riskiest Project Report

The **Riskiest Project Report** page ranks all the projects in the database based on cost. Users can then view the projects by **qualitative/simulation** in separate charts and can be sorted by **pre/post mitigated**. When a link in the data table is clicked, a cost tornado chart for the selected project will be created.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Overall Risk Reports** link to select **Overall Risk Tornado** Chart (Figure 2).
3. Select the **Qualitative Inputs** or **Simulation Inputs** data options to view the charts based on qualitative or simulative inputs.

4. Click the **Riskiest Project Report** (Figure 35).

Figure 35

Export to Word:

This functionality is used to export the entire page to word, and to perform this function, click the **Export To Word** link. (Figure 35)

Sort Data:

To Sort the data according to **Project ID**, **Project Name, Pre-Mitigated Cost, Post-Mitigated Cost,** consider the following steps;

Steps:

1. **Select** the required column. (Figure 35)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 35)
3. Click the **SORT** button to **sort** the data. (Figure 35)

Links:

The column **Pre-Mitigated Qualitative Cost** has a link to the Qualitative Cost Tornado Chart (for Pre-Mitigated data) in the page:

Risk Register ---> Reports ---> *Qualitative Cost Exposure Tornado (Pre-Mitigated)*

The column **Post-Mitigated Qualitative Cost** has a link to the Qualitative Cost Tornado Chart (for Post-Mitigated data) in the page:

Risk Register ---> Reports ---> Qualitative Cost Exposure Tornado (Post-Mitigated)

The column **Pre-Mitigated Simulation Cost** has a link to the Simulation Cost Tornado Chart (for Pre-Mitigated data) in the page:

Risk Register ---> Reports ---> Simulation Cost Exposure Tornado (Pre-Mitigated)

The column **Post-Mitigated Simulation Cost** has a link to the Simulation Cost Tornado Chart (for Post-Mitigated data) in the page:

Risk Register ---> Reports ---> Simulation Cost Exposure Tornado (Post-Mitigated)

Cost Exposure to Budget Ratio

The **Cost Exposure to Budget Ratio** Tornado Chart shows the projects in the database based on cost exposure budget ratio that is the ratio which divides the cost exposure by the project budget from the project setup screen. There are **Cost Exposure to Budget Ratio (Highs)** chart for greatest percentage and **Cost Exposure to Budget Ratio (Lows)** for the lowest percentage. Users can view the projects by **qualitative/simulation** in separate charts. The projects listed are based on ascending order of Pre-Mitigated and Post-mitigated Qualitative Cost for **Cost Exposure to Budget Ratio (Highs)** and descending order of Pre-Mitigated and Post-mitigated Qualitative Cost for **Cost Exposure to Budget Ratio (Lows)**.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Overall Risk Reports** link to select **Overall Risk Tornado** Chart (Figure 2).
3. Select the **Qualitative Inputs** or **Simulation Inputs** data options to view the charts based on qualitative or simulative inputs.
4. Click the **Cost Exposure to Budget Ratio (Highs)**/**Cost Exposure to Budget Ratio (Lows).**The chart will be displayed as shown in Figure 36.
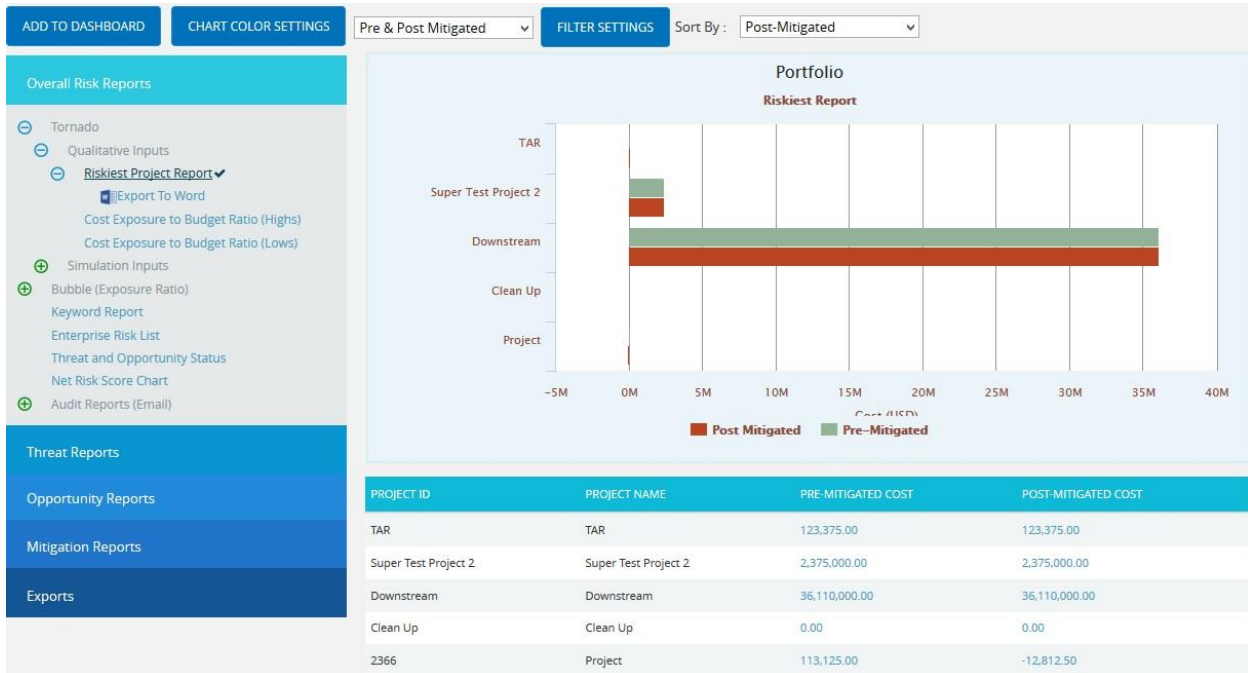
Figure 36

Export to Word:

This functionality is used to export the entire page to word, and to perform this function, click the **Export To Word** link. (Figure 36)

Sort Data:

To Sort the data according to **Project ID**, **Project Name, Pre-Mitigated Cost, Post-Mitigated Cost,** consider the following steps;

Steps:

1. **Select** the required column. (Figure 36)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 36)
3. Click the **Sort** button to **sort** the data. (Figure 36)

Links:

The column **Pre-Mitigated Qualitative Cost** has a link to the Qualitative Cost Tornado Chart (for Pre-Mitigated data) in the page:

Risk Register ---> Reports ---> *Qualitative Cost Exposure Tornado (Pre-Mitigated)*

The column **Post-Mitigated Qualitative Cost** has a link to the Qualitative Cost Tornado Chart (for Post-Mitigated data) in the page:

PRC SOFTWARE

Risk Register ---> Reports ---> Qualitative Cost Exposure Tornado (Post-Mitigated)

The column **Pre-Mitigated Simulation Cost** has a link to the Simulation Cost Tornado Chart (for Pre-Mitigated data) in the page:

Risk Register ---> Reports ---> Simulation Cost Exposure Tornado (Pre-Mitigated)

The column **Post-Mitigated Simulation Cost** has a link to the Simulation Cost Tornado Chart (for Post-Mitigated data) in the page:

Risk Register ---> Reports ---> Simulation Cost Exposure Tornado (Post-Mitigated)

Bubble chart

The **Bubble Chart** shows the exposure budget ratio of all the projects in the database. The size of the Bubble depends upon the Ratio of the Risk Exposure to the Total cost (Risk Exposure / Total Cost). Users can view the projects by **qualitative/simulation** in separate charts. The pre-mitigated and post-mitigated cost are seen in the chart .The Projects listed are based on descending order of Project ID.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Overall Risk Reports** link to select **Bubble** Chart (Figure 2).
3. Select the **Qualitative Inputs** or **Simulation Inputs** data options to view the charts based on qualitative or simulative inputs.
4. Click the **Cost Exposure to Budget Ratio (All)**.The chart will be displayed as shown in Figure 37.
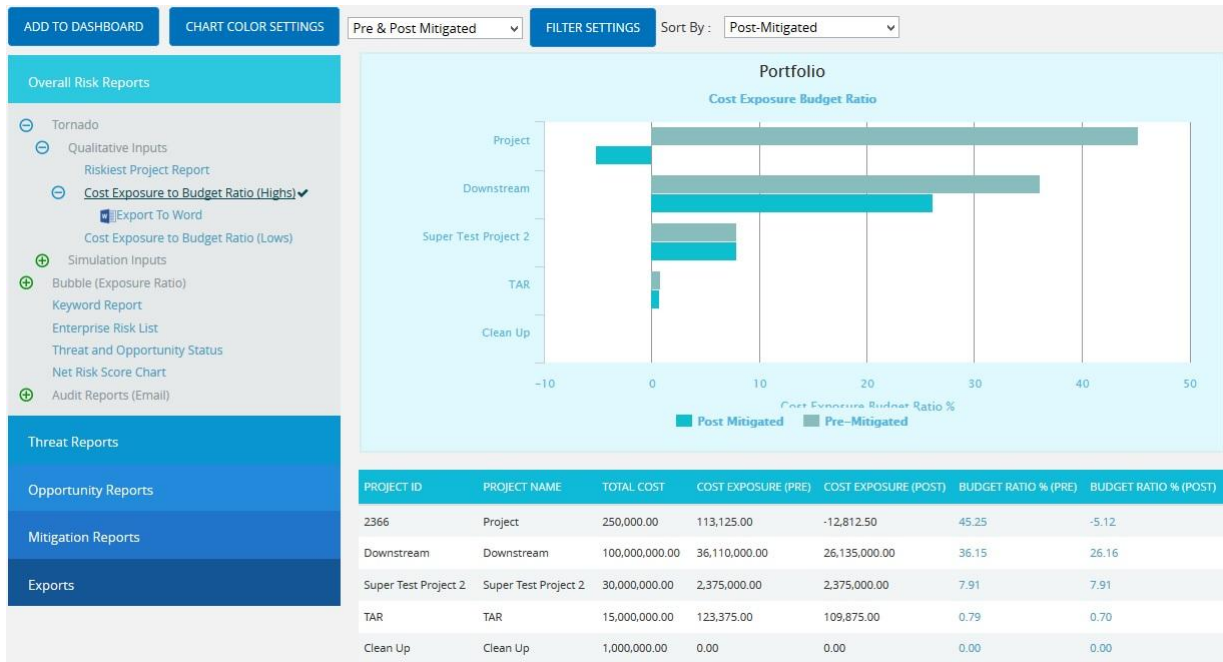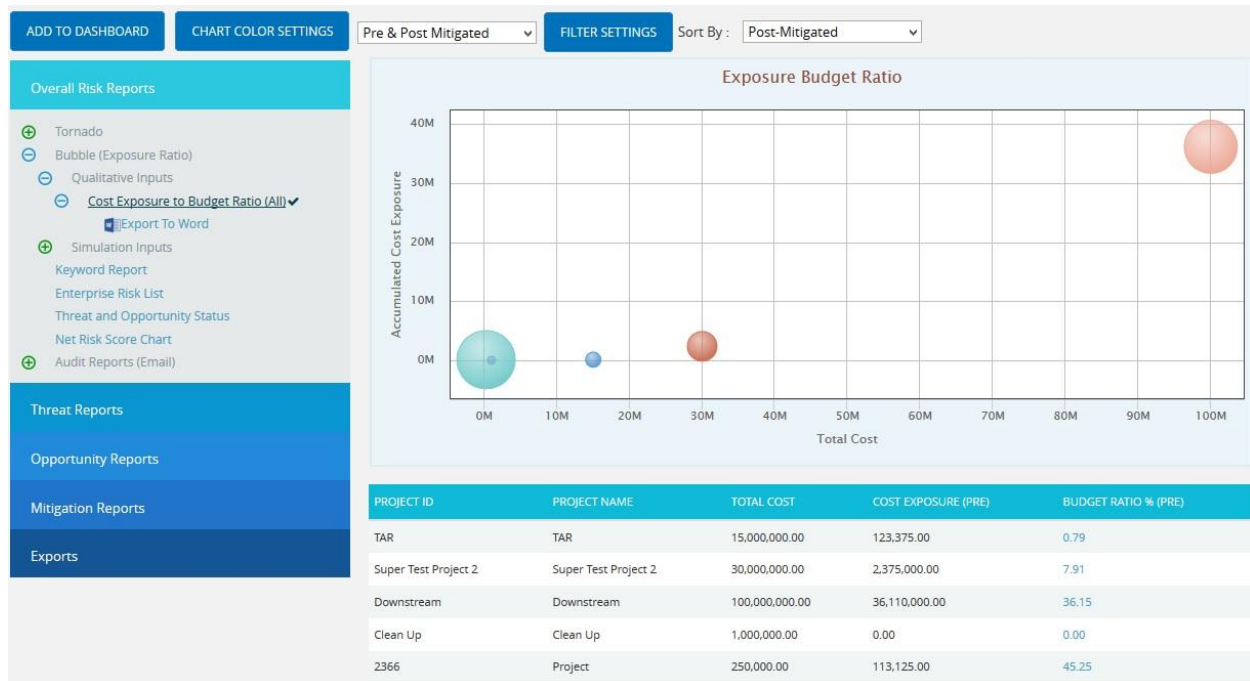
Figure 37

Export to Word:

This functionality is used to export the entire page to word, and to perform this function, click the **Export to Word** link. (Figure 37)

Sort Data:

To Sort the data according to **Project ID**, **Project Name, Pre-Mitigated Cost, Post-Mitigated Cost,** consider the following steps;

Steps:

1. **Select** the required column. (Figure 37)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 37)
3. Click the **Sort** button to **sort** the data. (Figure 37)

Links:

The column **Pre-Mitigated Qualitative Cost** has a link to the Qualitative Cost Tornado Chart (for Pre-Mitigated data) in the page:

Risk Register ---> Reports ---> Qualitative Cost Exposure Tornado (Pre-Mitigated)

The column **Post-Mitigated Qualitative Cost** has a link to the Qualitative Cost Tornado Chart (for Post-Mitigated data) in the page:

Risk Register ---> Reports ---> Qualitative Cost Exposure Tornado (Post-Mitigated)

The column **Pre-Mitigated Simulation Cost** has a link to the Simulation Cost Tornado Chart (for Pre-Mitigated data) in the page:

Risk Register ---> Reports ---> Simulation Cost Exposure Tornado (Pre-Mitigated)

The column **Post-Mitigated Simulation Cost** has a link to the Simulation Cost Tornado Chart (for Post-Mitigated data) in the page:

Risk Register ---> Reports ---> Simulation Cost Exposure Tornado (Post-Mitigated)

Keyword Report

The **Keyword Report** searches all the projects in the database and shows the most frequently used word in the Threat/Opportunity **Name** and Threat/Opportunity **Descriptive** fields. When the user clicks on the keyword count, the report displays the projects and **Threats/Opportunities** with which it is associated.
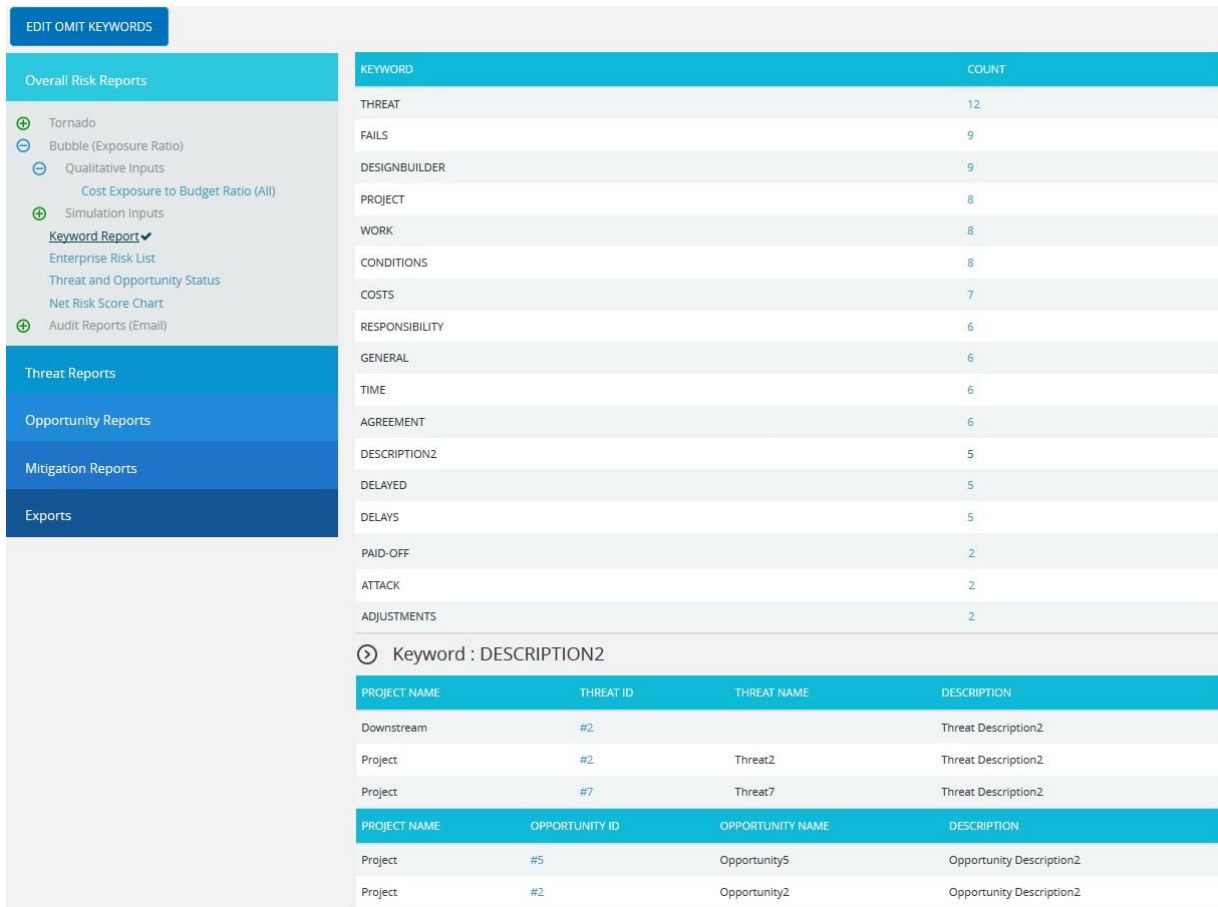

Figure 38

PRC SOFTWARE

Count link:

The **Count** link shows the project and **Threat/Opportunity** information for the selected keyword.

Threat ID link:

The link under **Threat ID** column navigates the user to the page:

Risk Register ---> Risk Details --->Threats

Opportunity ID link:

The link under the **Opportunity ID** column navigates the user to the page:

Risk Register ---> Risk Details ---> Opportunity

Edit Omit Keywords:

This functionality is used to omit all keywords which the user does not want to be included in the **Keyword Report** page. To view the omitted keywords list, click the **Edit Omit Keywords** button. (Figure 38)

Add new word to Omitted List:

This functionality is used to add a new word to omitted word list.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Keyword Report** link under **Overall Risk Reports**.
3. Click the **EDIT OMIT KEYWORDS** button. (Figure 38) A pop up appears. (Figure 39)
4. Click the **ADD NEW** button. (Figure 39)
5. Enter the required word and click the **SAVE** button. (Figure 39)

Figure 39

Edit Omitted Words List:

The words shown in the omitted word list can be edited using this functionality.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Keyword Report** link under **Overall Risk Reports.**
3. Click the **EDIT OMIT KEYWORDS** button. (Figure 38) A pop up appears. (Figure 39)
4. Click the **Edit** button. (Figure 39)
5. Modify the required words and click the **Save** button to finish. (Figure 39)
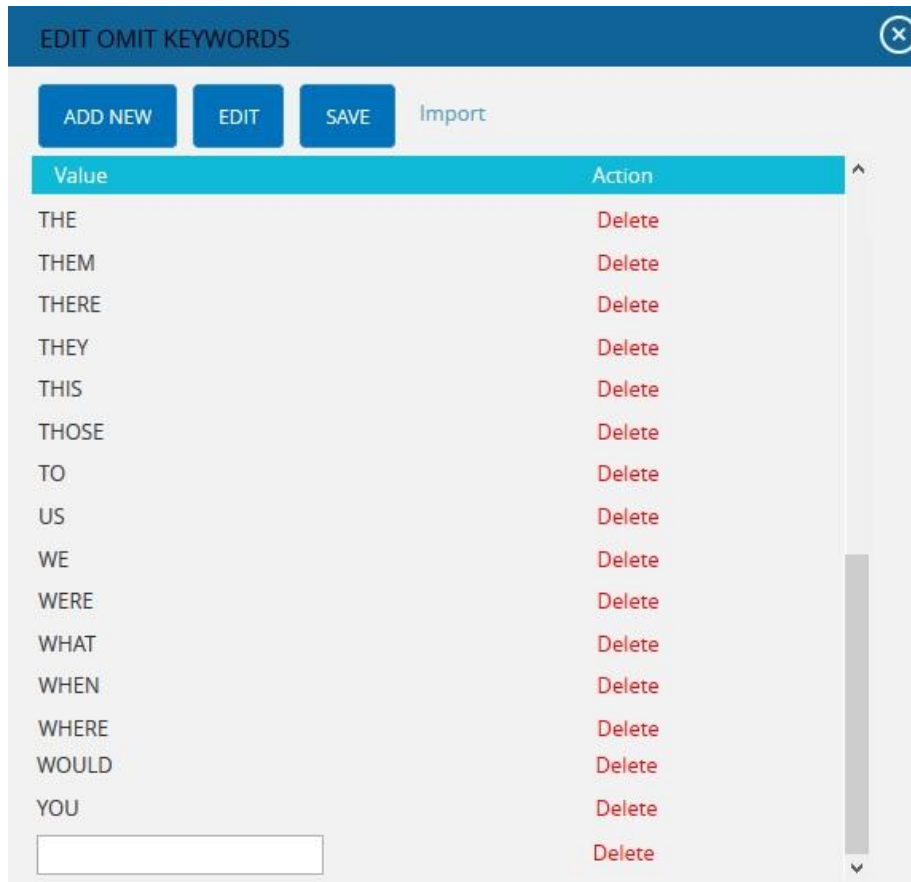
Delete Omitted Words:

This functionality is used to delete words from the omitted word list.

Steps:

1. Click the **Keyword Report** link under **Overall Risk Reports.**

2. Click the **EDIT OMIT KEYWORDS** button. (Figure 38) A pop up appears. (Figure 39)
3. Click the corresponding **Delete** link to delete. (Figure 39)

Enterprise Risk List

The **Enterprise Risk List** page allows the users to track specific risks at a higher level. This risk list would usually be considered as a company's top 5 or 10 risks. Users can add risks to the list at any time. The **Enterprise Risk List** keeps count of the number of times a particular risk has been mapped to the list. To map a risk to the list, a user must do this in the **Risk Details** of the Risk Register section. The list also shows each project level Risk Name and Risk Description.

Figure 40

Count link:

The **Count** link shows detailed information for the selected risk.

Threat ID link:

The link under **Threat ID** column navigates the user to the page.

Risk Register ---> Risk Details ---> Threats (If the ID is **Threat ID**)

OR

Risk Register ---> Risk Details ---> Opportunities (If the ID is **Opportunity ID**)

Edit Enterprise Risk List:

This functionality is used to edit the Enterprise Risk List.

Steps:

1. *Portfolio Management ---> Reports*

2. Click the **Enterprise Risk List** link under **Overall Risk Reports.**
3. Click the **EDIT RISK LIST** button. (Figure 40)
4. Modify the details required and click the **SAVE** button. (Figure 41)

Figure 41

Add New Risk:

This functionality is used to add a new risk.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Enterprise Risk List** link under **Overall Risk Reports.**
3. Click the **ADD NEW RISK** button. (Figure 41)
4. Enter the **Risk Name** and **Risk Description**.
5. Click the **SAVE** button to finish. (Figure 41)

Delete:

This functionality is used to delete the values from the **Enterprise Risk List**.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Enterprise Risk List** link under **Overall Risk Reports.**
3. Click the corresponding **Delete** link. (Figure 41)
4. After you receive the confirmation message, click the **OK** button to delete the risk. To Cancel, Click the **Cancel** button. (Figure 42)
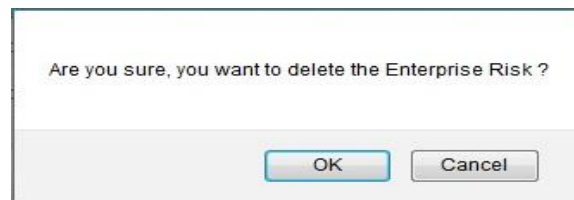

Figure 42
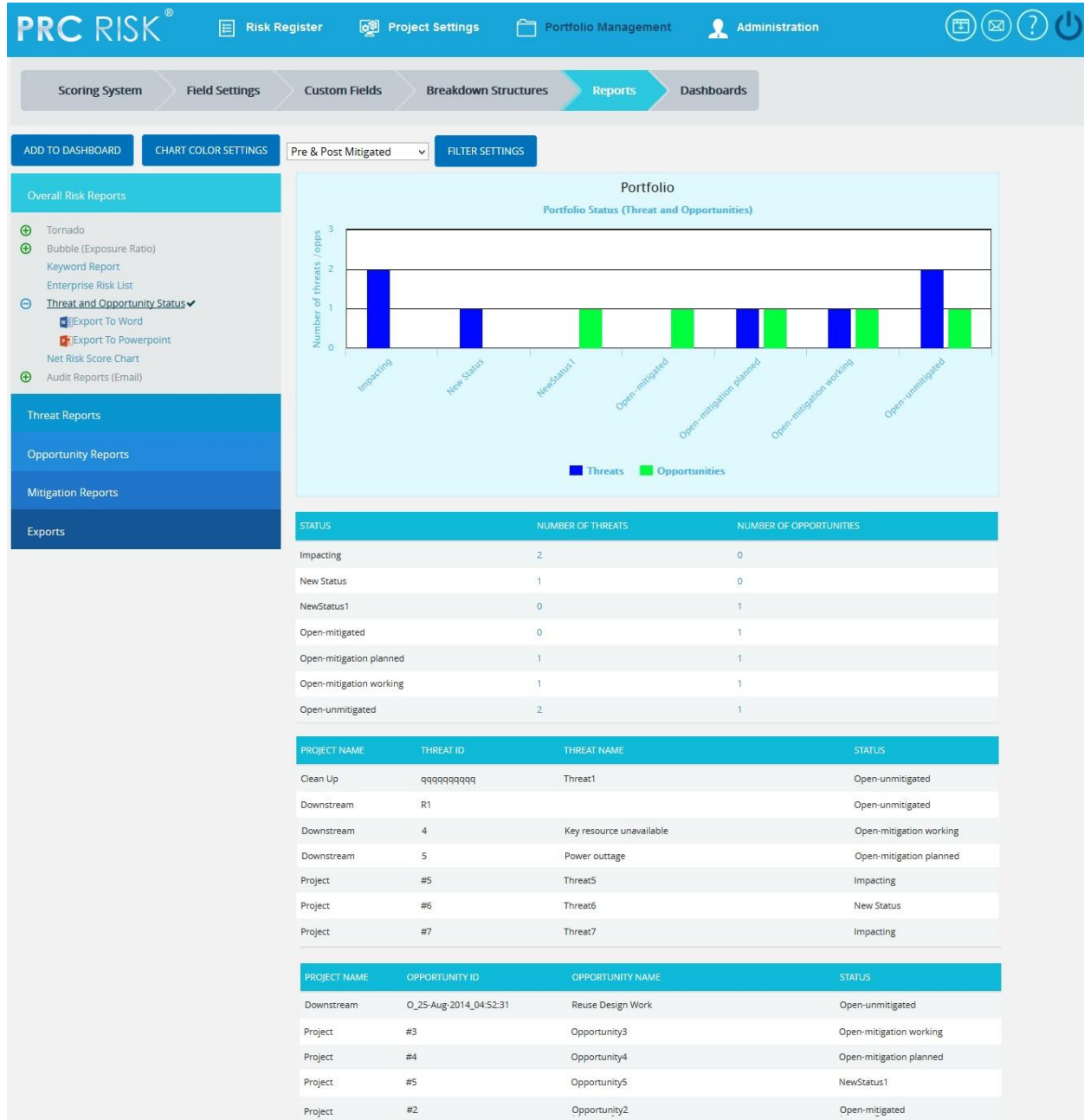
Threat and Opportunity Status

Figure 43

Net risk score Chart

The Net Risk Score Chart shows the net risk score of all the impacts (cost, schedule, probability, etc) in the projects in the database. For each impact type, the scores will be sum of the values obtained from the corresponding Scoring Matrix of the Project.

Steps:

1. *Portfolio Management ---> Reports*
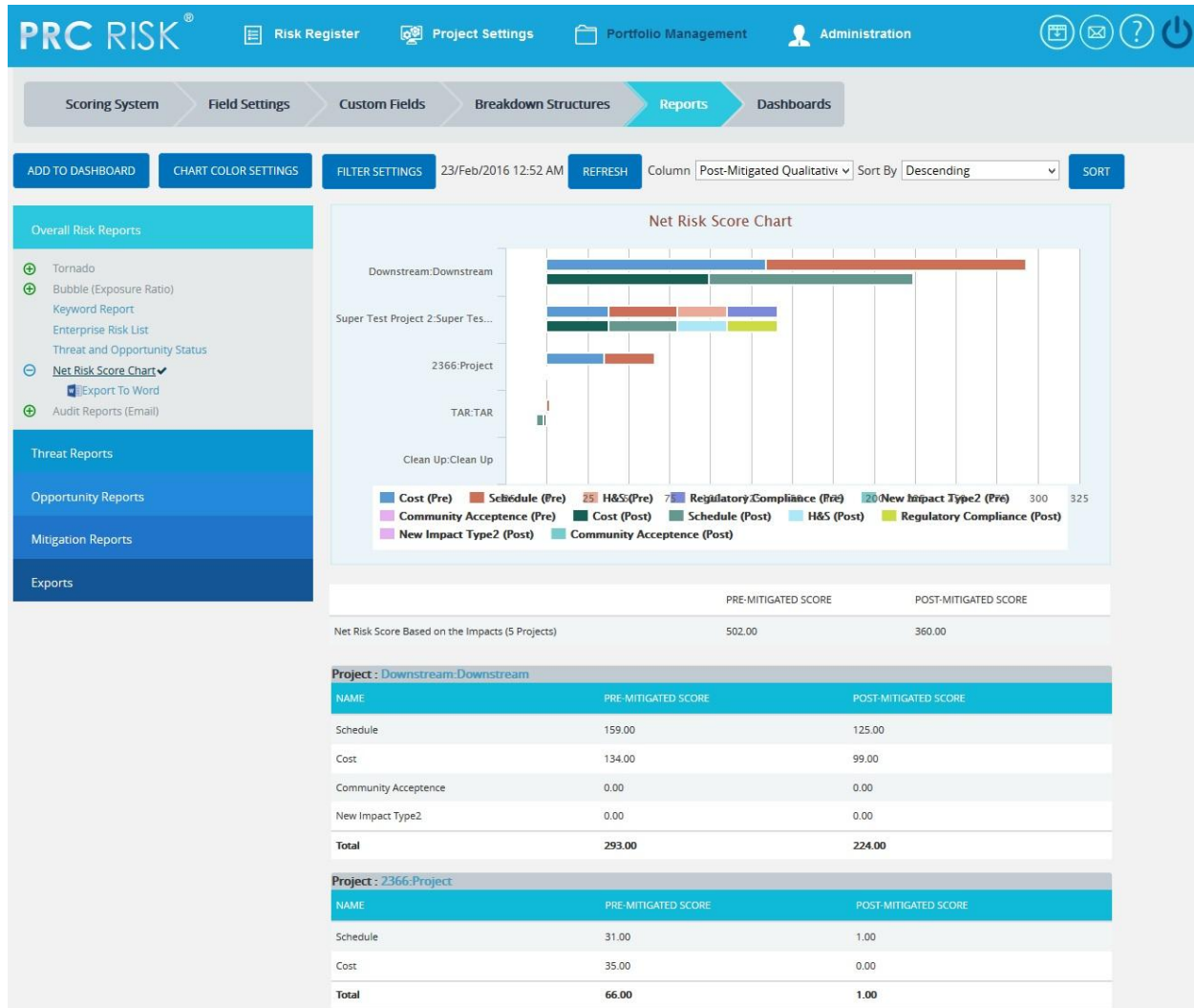2. Click the **Overall Risk Reports** link to select **Net risk score Chart** (Figure 44).

Figure 44

Export to Word:

This functionality is used to export the entire page to word, and to perform this function, click the **Export To Word** link. (Figure 44)

Sort Data:

To Sort the data according to **Pre-Mitigated Qualitative Cost, Post-Mitigated Qualitative Cost,** consider the following steps;

Steps:

1. **Select** the required column. (Figure 44)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 44)
3. Click the **SORT** button to sort the data. (Figure 44)

Filter:

This functionality is used to apply a **Filter** to the chart.

Steps:

1. Click the **Add Filter** icon. (Figure44) The pop up appears. (Figure 45)
2. Select the impacts to be filtered by clicking the check boxes. (Figure 45)
3. Click the **LOAD IMPACT SCORES** button to load the scores of filtered impacts. (Figure 45)
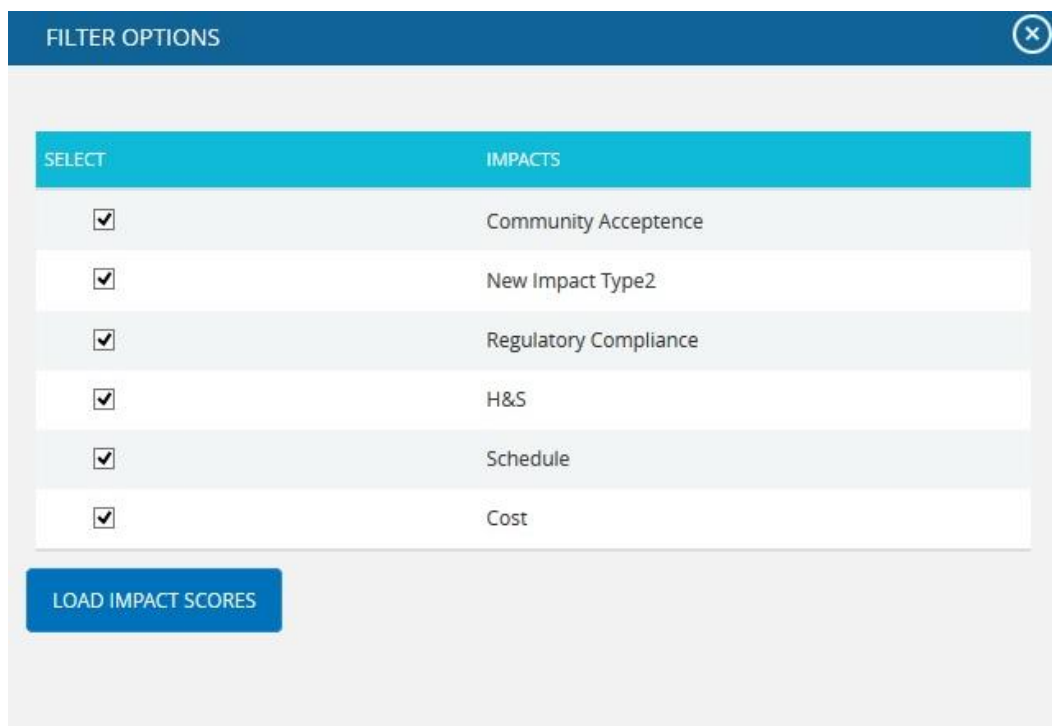

Figure 45

Links:

The **impact links** under the column **Name** of each project navigates the user to the page:

Risk Register➔ Risk Spreadsheet➔Risk score (Pre-Mitigated) and (Post-Mitigated)

Refresh:

This functionality is to refresh the page, click **REFRESH** button. (Figure 44)

Exports

The **Export** functionality allows you to easily export project level data to **MS Excel**.
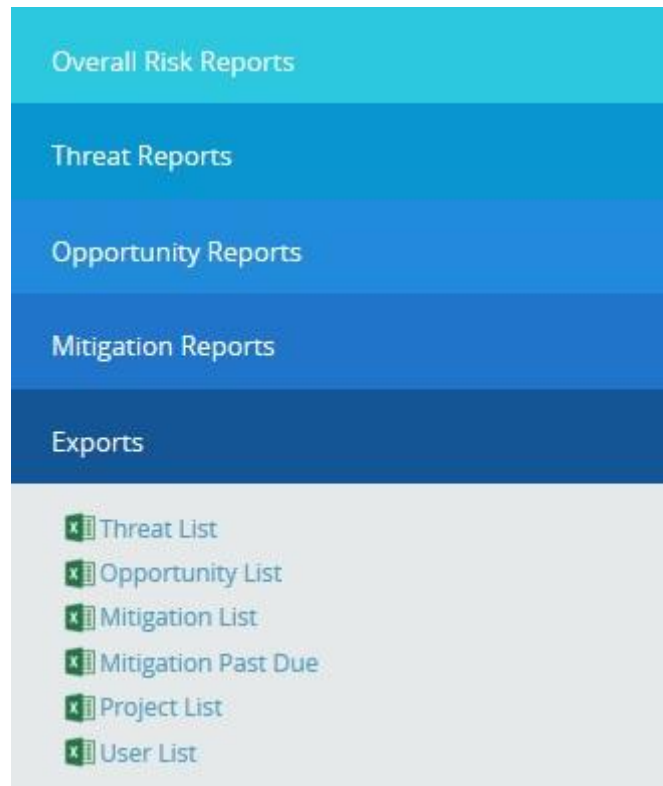

Figure 46

Export threat details:

This functionality is used to export the threat list of all projects assigned to the logged in user into **MS Excel.** A sample Excel sheet after export (only a few fields are shown) is illustrated in Figure 47.

Steps:

1. *Portfolio Management ---> Reports ---> Exports*
2. Click the **Threat List** link to export.   (Figure 46)

	A	B	C	D
1	Project	ID	Name	Description
2	BTC_module_internship	thrt_1	threat_one established	threats will be furnished to the following
3	BTC_module_internship	thrt_2	threat_two established	incorporate dfrnt threats
4	INtegration_mapping_1	thrt_1	threat_123	module integration
5	business_map_1	threat_tobe_provide	threat in the server	server crashes

Figure 47

Export opportunity details:

This functionality is used to export the opportunity list of all the projects assigned to the logged in user to **MS Excel.** A sample Excel sheet after export (only a few fields are shown) is illustrated in Figure 48.

Steps:

1. *Portfolio Management ---> Reports ---> Exports*
2. Click the **Opportunity List** link to export. (Figure 46)

	A	B	C	D
1	Project	ID	Name	Description
2	BTC_module_internship	opp_1	scope category	For a given project there is only one Scope category and only one Scope
3	BTC_module_internship	opp_2	scope doc	For a given project there is only one Scope document and only one Scope
4	INtegration_mapping_1	opp_1	mitigated opp to threat one	This risk list would usually be consi
5	business_map_1	opp_new_test	unmittigated opp to threat two	This risk list would usually be consi

Figure 48

Export mitigation details:

This functionality is used to export the mitigation list of all the projects assigned to the logged in user to **MS Excel.** A sample Excel sheet after export (only few fields are shown) including the mitigation details (for both threat and opportunity) is illustrated in Figure 49.

Steps:

1. *Portfolio Management ---> Reports ---> Exports*
2. Click the **Mitigation List** link to export.   (Figure 46)

Figure 49

Export Mitigation Past Due details:

This functionality is used to export the mitigation past due list for all projects assigned to the logged in user to **MS Excel.** A sample sheet is shown (only a few fields are used) in Figure 49. The **Number of Days** column in the mitigation past due list is calculated as follows:

Number of Days = **Current Date** - **Proposed Mitigation Finish**

For Example consider the first row in Figure 50. The **Proposed Mitigation Finish** is 05/08/2011 and if the current date is 04/18/2012,

Number of days=346

Steps:

1. *Portfolio Management ---> Reports ---> Exports*
2. Click the **Mitigation Past Due** link to export. (Figure 46)

Figure 50

Export User Details:

This functionality is used to export the entire list of users assigned to the logged in user's projects to **MS Excel**. The sample sheet shown in Figure 51 lists all the user details.

PRC SOFTWARE

Steps:

1. ***Portfolio Management ---> Reports ---> Exports***
2. Click the **User List** link to export. (Figure 46)

First Name	Last Name	User Name	Email	Address1	Address2	City	State	Country	Phone
super123	super123	super	user@prcsoftware.com	test address 2	Suite 150 434443	Houston	TX	United States	9961996
Williams	Jonathen	williams	williams@prcsoftware.com					United States	
sincy	nkddsshgjh	sincy	sincy@onteq.com	abcd steer	bcde street	houston	california	United States	3243243
nancy	mary	nancy	nancy@onteq.com	dsds	sfdf	fdfd	dfdf	United States	4343434

Figure 51

Export Project Details:

This functionality is used to export the entire list of projects assigned to the logged in user to **MS Excel.** The sample sheet shown in Figure 52 lists all the project details.

Steps:

1. ***Portfolio Management ---> Reports ---> Exports***
2. Click the **Project List** link to export. (Figure 46)

Project Name	Project ID	Description	Currency	Start Date	End Date	Classified	Project Manager	Business Unit
UBS_MPS_Intership	CST_135	description	USD	11/01/2012	12/26/2013	false	BTC	business_unit_1
BTC_module_internship	PJ_ID-1	Description	USD	10/18/2012	10/31/2012	false	MANAGER	business_unit_2
INtegration_mapping_1	INT_123	integration	USD	11/01/2011	01/11/2013	false	MANAGER	business_unit_3
business_map_1	bs1	business ma	USD	11/07/2012	11/12/2014	false	BTC	business_unit_1

Figure 52

Portfolio Breakdown Structures

The **Portfolio Breakdown Structure** page allows the user to setup an **Enterprise** and **Business Unit Level Breakdown Structure**. The user can view, import, or manually create a breakdown structure by using the action links in each section. By using the dropdowns in the **Portfolio Breakdown Structure** page, the user can view the **Breakdown Structures** for different **Business Units/Enterprise level**. This page is visible only to those users who have **Read/Write** access or **View** access for **Portfolio Breakdown Structures**. Users with **Read/Write** access can create, edit, import and delete **the Organizational Breakdown Structure, Work Breakdown Structure** and **Risk Breakdown Structure** for enterprise level and business unit level. Users designated with **View** access can only view the **Breakdown Structures** for business unit and enterprise levels.
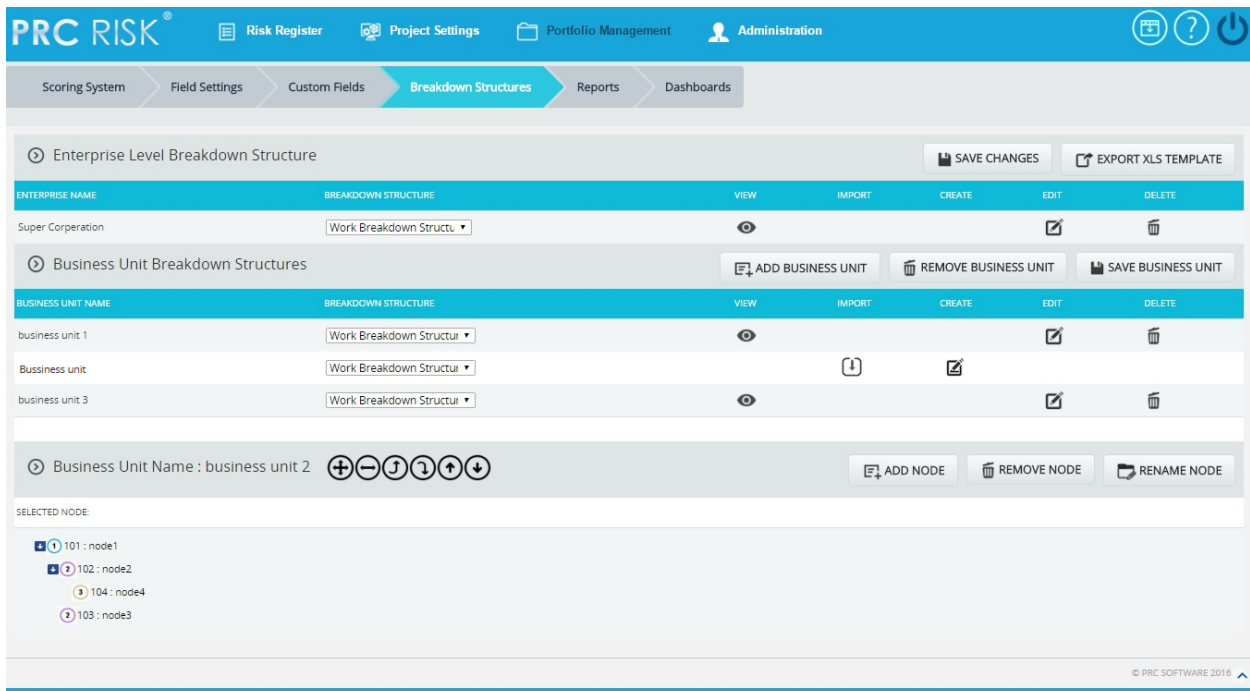

Figure 1

Breakdown Structure:

There are three main breakdown structures: **Organizational Breakdown Structure**, **Work Breakdown Structure** and **Risk Breakdown Structure**. These breakdown structures can be viewed, created, imported, edited and deleted. Each of these functions is explained below in detail.

View:

This functionality is used to view a breakdown structure. The steps described below apply to both enterprise and business unit:

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Select the corresponding breakdown structure from the **Breakdown Structure** dropdown. (Figure 1)
3. Click the corresponding **View** icon. (Figure 1)

Import:

This functionality is used to **Import WBS/OBS/RBS**. The steps described below apply to both enterprise and business unit. This functionality is visible only if no node has been added to the breakdown structure.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. **Select** the corresponding breakdown structure from the **Breakdown Structure** dropdown. (Figure 1)
3. Click the **IMPORT** icon. (Figure 1)   A pop up appears. (Figure 2)
4. Click the **Choose File** button. Select the required file (csv, xer, mpp, xls). (Figure 2)
5. Click the **UPLOAD FILE** button to finish. (Figure 2)

Sample sheet used for import:

WBS code	Description	Outline Level
A	ABC123	1
B	ABC124	2
C	ABC125	2

Figure 2

Export XLs template:

This functionality is used to get a sample xls file for importing to the breakdown structures.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EXPORT XLS TEMPLATE** button. User will get a sample template on excel. (Figure 3)

Sample excel template:

Outline Level	BS code	Description
1	Code 1	Description 1
1.1	Code 11	Description 2
2	Code2	Description 3
2.1	Code21	Description 4
2.2	Code22	Description 5
2.2.1	Code 23	Description 6

Figure 3

Create:

This functionality helps to create a breakdown structure manually using the tree structure. This is applicable to both enterprise and business unit. This functionality is visible only if no node has been added to the breakdown structure. To create a breakdown structure, click the **Create** icon. (Figure 1) To add nodes, click the **ADD NODE** button (Steps are described in detail in **Add Node** section). (Figure 1)

Edit:

This functionality is used to edit the tree structure. The User can perform operations such as add, remove, rename, expand, collapse, promote, demote, and change the orders of the nodes.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT** icon to edit the tree structure. (Figure 1)

Add Node:

This functionality is used to add a new node.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT** icon to edit the tree structure. (Figure 1)
3. Click the **ADD NODE** button. (Figure 1) A pop-up appears.   (Figure 4)
4. Enter the node name and code.
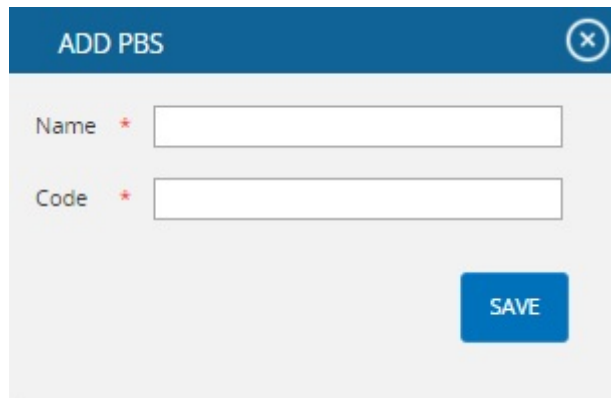5. Click the **SAVE** button to save the details. (Figure 4)

Figure 4

Remove node:

This functionality removes a node from the tree structure.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT** icon to edit the tree structure. (Figure 1)
3. Select a node.
4. Click the **REMOVE NODE** button. The node is removed from the system. (Figure 1)

Rename node:

This functionality is used to rename an already existing node.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT** icon to edit the tree structure. (Figure 1)
3. Select a node.
4. Click the **RENAME NODE** button. (Figure 1) A pop-up appears. (Figure 4)
5. Rename the fields needed.
6. Click the **SAVE** button to save the details. (Figure 4)

Expand nodes:

This functionality is used to expand all the nodes under the tree structure.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Select a node.
3. Click the **Expand All** icon to expand all the nodes. (Figure 6) Upon Expansion, the tree structure will be displayed as shown in Figure 5.

Collapse Nodes:

This functionality is used to collapse the expanded nodes shown in Figure 6.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Select a node.
3. Click the **Collapse All** icon shown in Figure 5. The Nodes are collapsed and the tree structure will be displayed as shown in Figure 6.
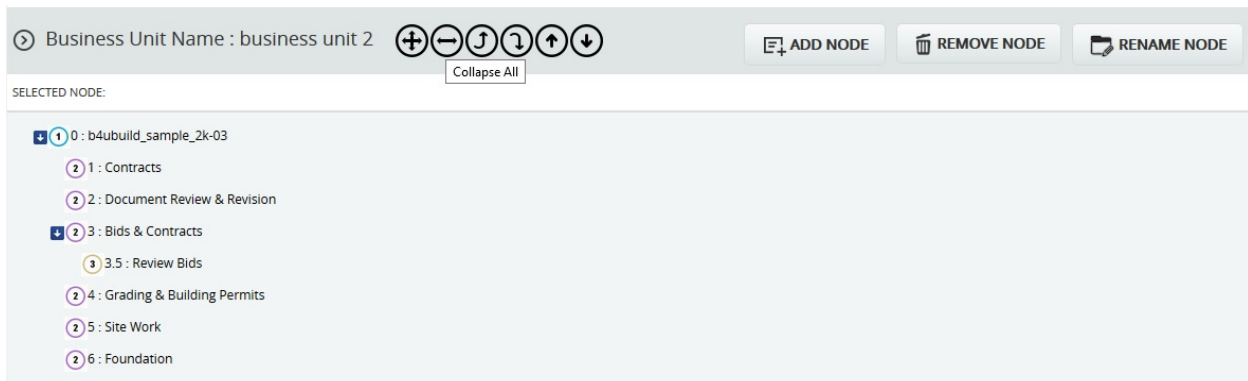
Figure 5

Figure 6

PRC SOFTWARE

Promote nodes:

This functionality makes the level of the child node the same as that of the immediate parent. For example, consider the node **6: Foundation** (Figure 7) which is a child of the node **5: Site Work**.   When promoted, **6: Foundation** is on the same level as **5: Site Work** (Figure 8). A node cannot be promoted if it does not have a parent.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT ICON** to edit the tree structure. (Figure 1)
3. Select a node.
4. Click the **Promote** icon to promote the node.
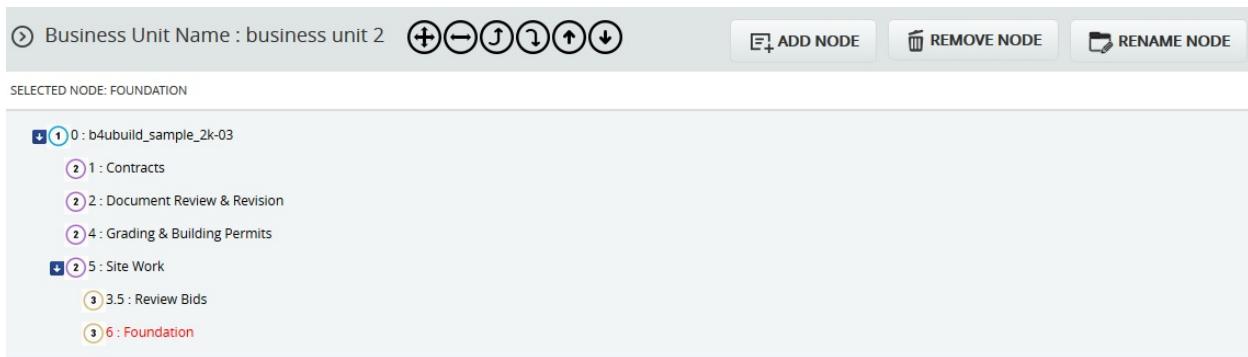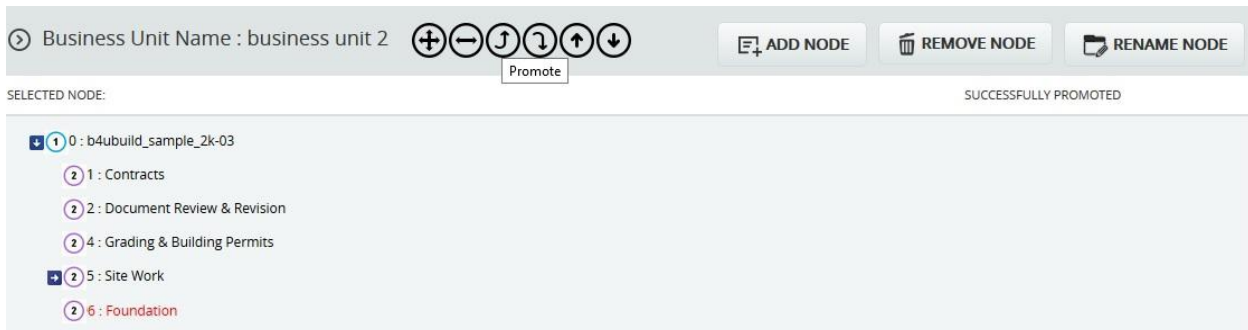
Figure 7

Figure 8

Demote nodes:

When a node is demoted it becomes the child of the node which is of same level and which lies just below it. For Example, Consider the node **4: Grading & Building Permits** (Figure 8), which is of the same level as the node **2: Document Review & Revision**. When **4: Grading & Building Permits** is demoted, it becomes a child node of the node **2: Document Review & Revision**. (Figure 9) A node cannot be demoted if there is no other node of same level as the node selected.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT ICON** to edit the tree structure. (Figure 1)
3. Select node.
4. Click the **Demote** icon to demote a node.
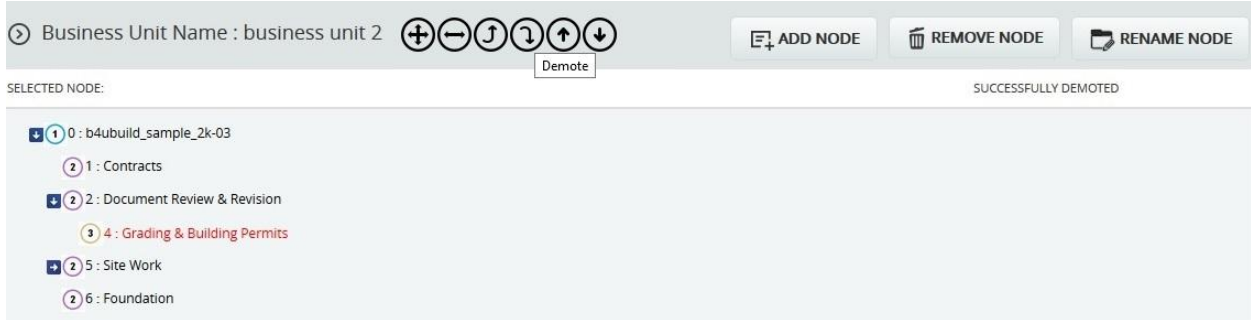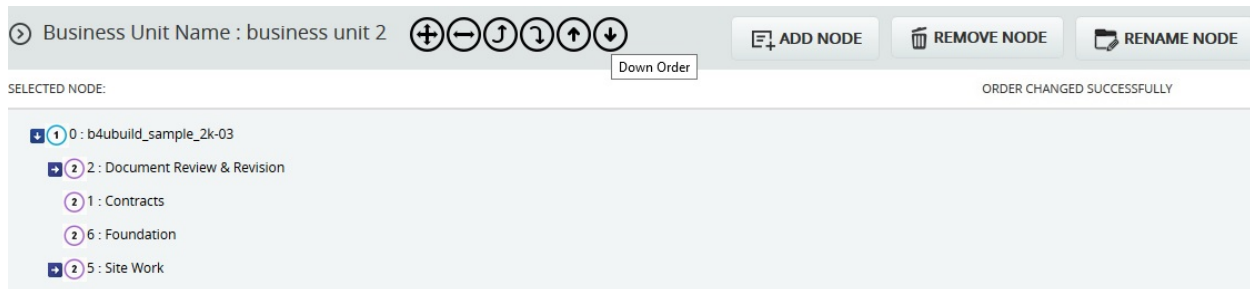

Figure 9

Up Order:

This operation is used to move a node up a level. It can be applied only to nodes of the same level and this operation is not applicable for the first node. For example, consider the nodes **6: Foundation** and **5: Site Work** in Figure 9. The node **6: Foundation** is located below the node **5: Site Work**. When an up order operation is applied to the node **6: Foundation**, it moves above the node **5: Site Work**. Figure 9 shows the tree structure after the up order operation is applied.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT** icon to edit the tree structure. (Figure 1)
3. Select node.
4. Click the **Up Order** icon to move up the node up the tree structure.
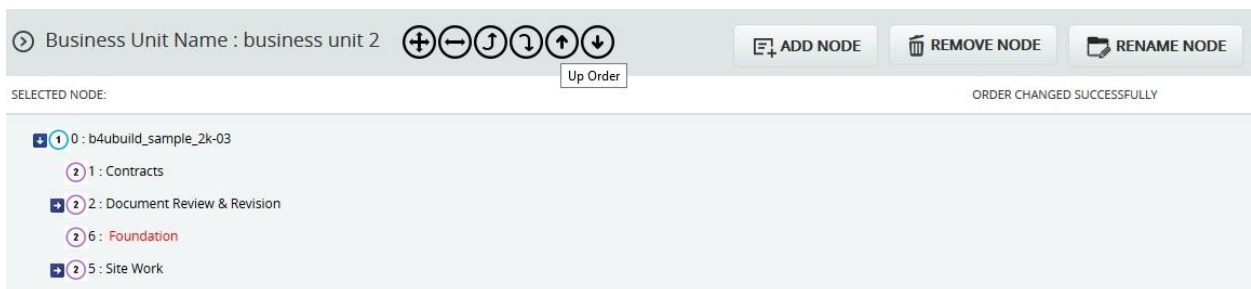
Figure 10

Down Order:

This operation is used to move a node down the tree structure. This can be applied only to nodes of the same level and this operation is not applicable for the last node. For example, consider nodes **1: Contracts** and **2: Document Review & Revision** in Figure 10. **1: Contracts** is located above **2: Document Review & Revision** in Figure 10. When a down order operation is applied to the node **1: Contracts**, it comes below the node **2: Document Review & Revision**. Refer to Figure 11, which shows the tree structure after a down order operation is applied.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **EDIT ICON** to edit the tree structure. (Figure 1)
3. Select the node.
4. Click the **Down Order** icon to change the order of a node down.

Figure 11

Delete:

This functionality is used to delete the selected breakdown structure from business unit and enterprise level. The steps described below apply to both enterprise breakdown structure and business unit breakdown structure.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the corresponding **DELETE** icon. (Figure 1)
3. After you receive the confirmation message, click the **OK** button to delete the breakdown structure. To cancel, click the **Cancel** button.

Save Changes:

This functionality is used to save the **Enterprise Name** when it is first added. To save the **Enterprise Name**, click the **SAVE CHANGES** button. (Figure 1)

Add business Unit:

This functionality is used to add a business unit.

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Enter the business unit name.
3. Click the **SAVE BUSINESS UNIT** button to save the Business Unit Name. (Figure 1)

Remove Business Unit:

This functionality is used to remove the business unit. Only those business units which are not assigned to any project can be removed.

There are two ways to remove a business unit. The first method is to delete multiple business units and the second is to delete them individually.

Delete Multiple Business Units:

Steps:

1. *Portfolio Management ---> Breakdown Structures*
2. Click the **REMOVE BUSINESS UNIT** button. (Figure 1) A pop-up appears. (Figure 12)
3. Click the **DELETE MULTIPLE** button. (Figure 12)
4. Select the required business units by using the **checkboxes** provided. (Figure 13)
5. Click the **DELETE** button to delete the selected business units. (Figure 13)
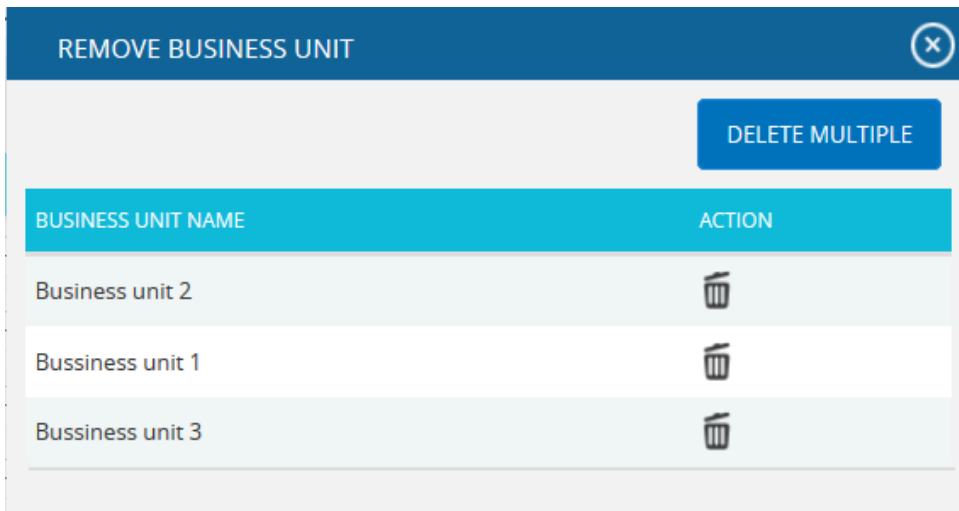
Figure 12
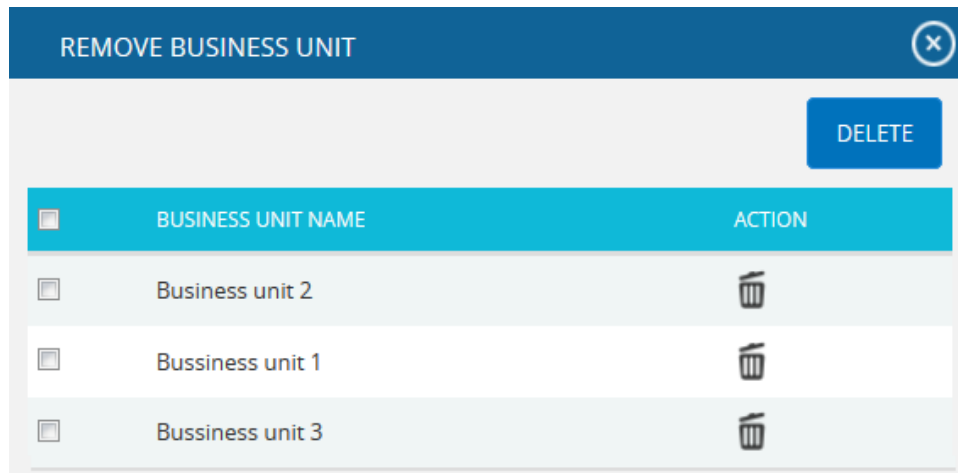
Figure 13

Delete Individually:

To delete the business units individually consider the following steps.

Steps:

1. ***Portfolio Management ---> Breakdown Structures***
2. Click the **REMOVE BUSINESS UNIT** button. (Figure 1) A pop-up appears. (Figure 12)
3. Click the corresponding **Delete** icon. (Figure 12)
4. After you receive the confirmation message, click the **OK** button. The business unit is now removed from the system. To cancel, click the **Cancel** button. (Figure 14)
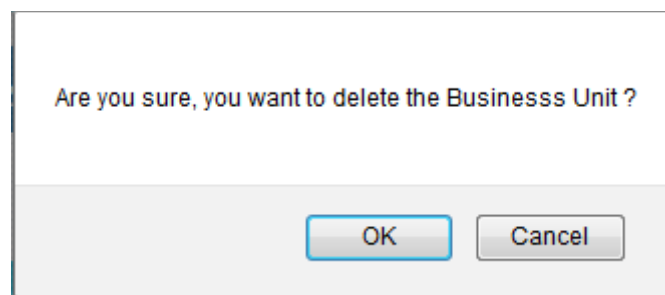
Figure 14

Custom Fields (Portfolio)

The **Custom Fields (Portfolio)** page allows you to create a custom field template that can be applied to your project. These templates are saved in the system and can be reused for future projects. When creating a custom field, the user will be given the options to choose the data type (text, date, number, currency, list) and location displayed (threat, opportunity, or mitigation sections).
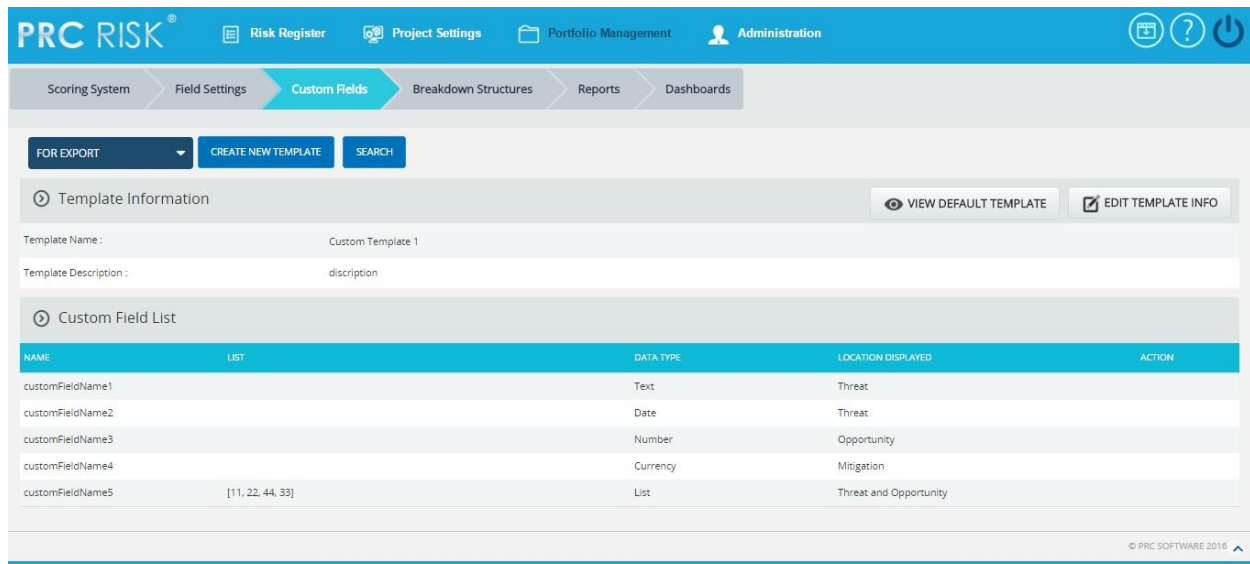
Figure 1

Searching For Templates:

Searching for templates in the **Custom Fields (Portfolio)** can be done in two ways. The **Search** function allows the user to search for a template based on a keyword. This method is faster when you are working with a large amount of data. The **Select Template** function is commonly used for databases with less data and when the search objective is known.

Using the search function:

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Click the **SEARCH** button. (Figure 1)
3. Enter the search keyword (which can be the **Template Name** or **Template Description**). Click the **SEARCH** button and select the required template. (Figure 2)

PRC SOFTWARE
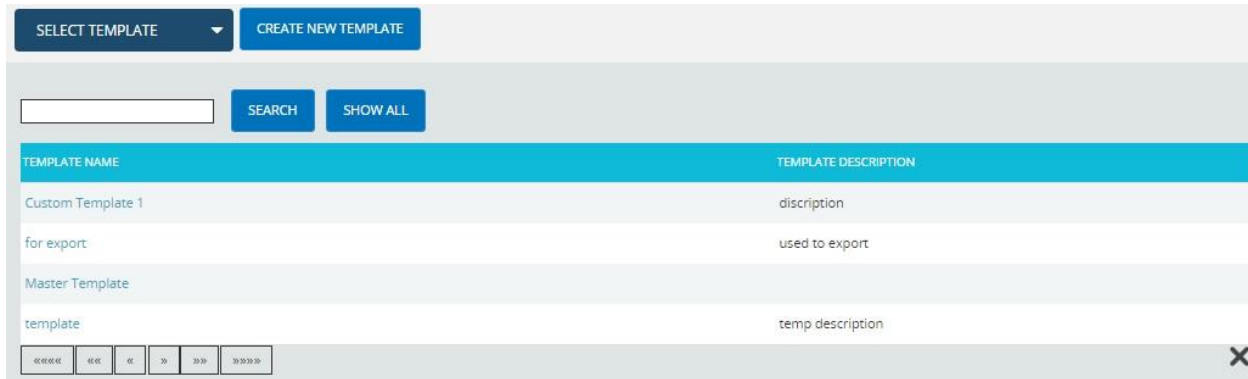
Figure 2

The **SHOW ALL** button in the search area lists all the templates available (By default).

Using the select function (dropdown list):

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Click the **Select Template** dropdown. (Figure 1)
3. Select the required template from the list shown.

Creating a new template:

Creating a new template is quick and easy. The **Template Name** is a required field to save the template.

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Click the **CREATE NEW TEMPLATE** button. (Figure 1)
3. After entering template details, click the **SAVE TEMPLATE** button.(Figure 3)

Edit Template Information:

While editing the details of a template, the fields **Template Name** and **Template Description** will be unlocked.

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Select the required template.
3. Click the **EDIT TEMPLATE INFO** button. (Figure 1)
4. After the data is modified, click the **SAVE TEMPLATE** button to finish. (Figure 4)

Creating default template:

This functionality is used to create a master template. Only once the default template can be created and is done by **super** user.

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Click the **CREATE DEFAULT TEMPLATE** button. (Figure 1)
3. After entering template details, click the **SAVE** button.

View Default Template:

To view the Master Template, click the **VIEW DEFAULT TEMPLATE** button. (Figure 1)

Add Custom Field:

This functionality is used to add a new custom field to the selected template.

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Select the required template.
3. Click the **EDIT TEMPLATE INFO** button. (Figure 1)
4. Click the **ADD CUSTOM FIELD** button. (Figure 3)
5. Enter the custom field name in the **textbox** provided. (Figure 3)
6. Select the data type from the **Select data type** dropdown. (Figure 3)
7. For the data type **List**, Enter the value in the **Editable Combo box** provided and click the **ADD** button. (Figure 3)
8. Select location displayed from the **Select Location Display** dropdown. (Figure 3)
9. Click the **SAVE TEMPLATE** button to finish. (Figure 3)
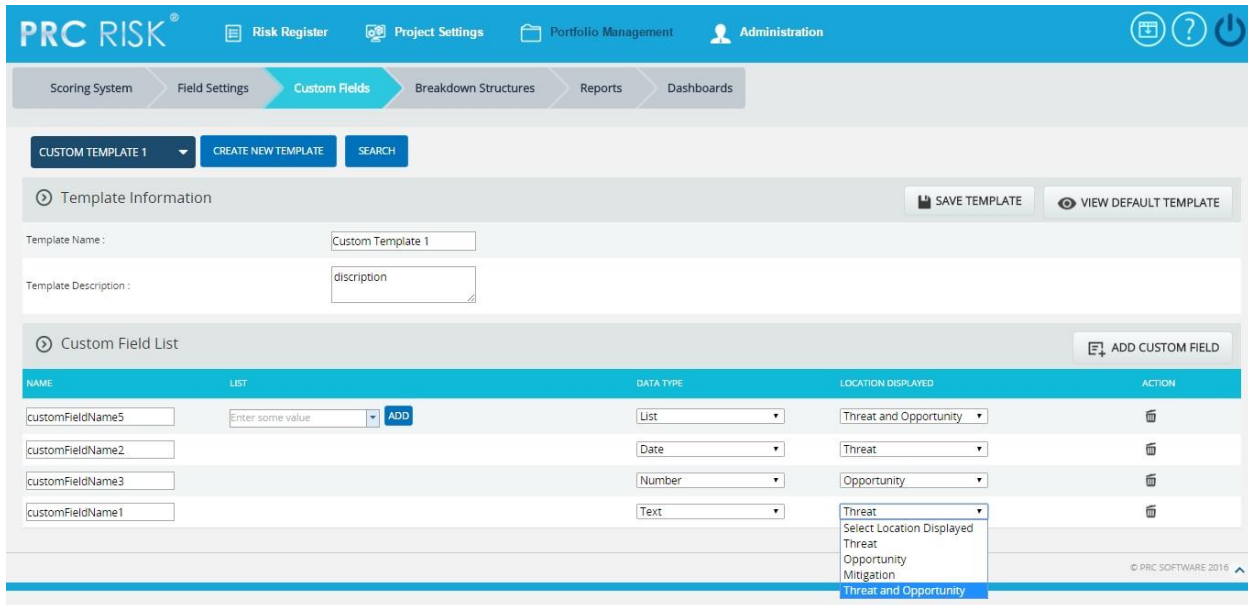
Figure 3

Edit Custom Fields:

This functionality is used to edit custom fields.

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Select the required template.
3. Click the **EDIT TEMPLATE INFO** button. (Figure 1)
4. Edit the necessary details. For custom fields with the data type List, enter the value in the **Editable Combo box** provided and click the **ADD** button to add list values. To rename the existing value, select any value from the drop down list and click the **RENAME** button after renaming it. Similarly select a list value from the drop down and click the **DELETE** button to delete the value from the list. (Figure 4)
5. Click the **SAVE TEMPLATE** button to finish. (Figure 4)
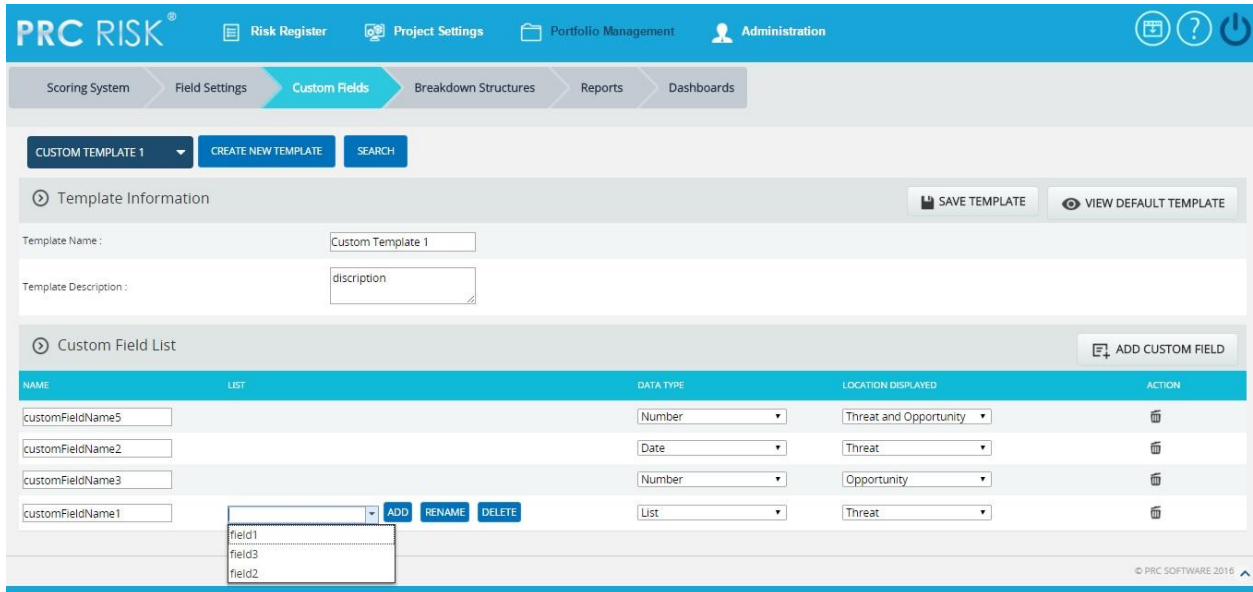
Figure 4

Delete Custom Fields:

This functionality is used to delete the custom fields.

Steps:

1. *Portfolio Management ---> Custom Fields*
2. Select the required template.
3. Click the **EDIT TEMPLATE INFO** button. (Figure 1)
4. Click the **Delete** icon to delete the required custom field. (Figure 3)

After you receive the confirmation message (Figure 5) click the **OK** button to delete the custom field. To cancel, click the **Cancel** button. (Figure 5)
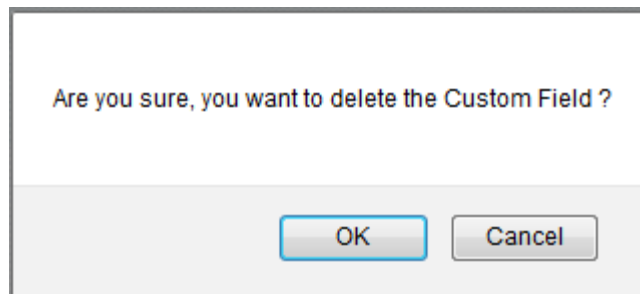
Figure 5

Field Settings (Portfolio)

The **Field Settings** page contains general template information. In the **Field Settings** page the user can customize the Threat Fields, Opportunity Fields, Mitigation Plan Fields, Mitigation Step Fields, Closure Section Fields, Qualitative score fields, Simulation Fields, Data Mapping Fields, Risk Notes Fields and Recovery Plan Fields. The **Field Settings** page in the PRC Enterprise Risk Register can be viewed only by those users who have either **Read/Write** or **View** access. Users with only **Read/Write** access can create a new template, edit template information and show/hide fields. Users designated with **View Access** may view the selected template.

PRC SOFTWARE

Figure 1

Searching For Templates:

Searching for templates in the **Field Settings** page can be done in two ways. The **Search** function allows the user to search for a template based on a keyword. This method is faster when you are working with a large amount of data. The **Select Template** function is commonly used for databases with less data and when the search objective is known.

Using the search function:

Steps:

PRC SOFTWARE

1. *Portfolio Management ---> Field Settings*
2. Click the **SEARCH** button. (Figure 1)
3. Enter the search keyword (which can be the **Template Name** or **Template Description**). Click the **SEARCH** button and select the required template. (Figure 2)

Figure 2

The **SHOW ALL** button in the search area lists all the templates available (By default).

Using the select function (dropdown list):

Steps:

1. *Portfolio Management ---> Field Settings*
2. Click the **Select Template** dropdown. (Figure 1)
3. Select the required template from the list shown.

Creating a new template:

Creating a new template is quick and easy. The **Template Name** is a required field to save the template.

Steps:

1. *Portfolio Management ---> Field Settings*
2. Click the **CREATE NEW TEMPLATE** button. (Figure 1)
3. After entering template details, click the **SAVE** button.

Creating default template:

This functionality is used to create a master template. Only once the default template can be created and is done by **super** user.

Steps:

1. *Portfolio Management ---> Field Settings*
2. Click the **CREATE DEFAULT TEMPLATE** button. (Figure 1) or (Figure 2)
3. After entering template details, click the **SAVE** button.

View Default Template:

To view the default template (Master Template) click the **VIEW DEFAULT TEMPLATE** button.

Edit Template Information:

While editing the template details, the fields **Template Name** and **Template Description** will be unlocked.

Steps:

1. *Portfolio Management ---> Field Settings*
2. Select the required template.
3. Click the **EDIT** button. (Figure1)
4. After the data is modified, click the **SAVE** button.

Edit Section Name:

The name of each section can be modified. Consider the threat detail section.   To modify the section name, enter the name in the **textbox** shown at the top of the section.   (Figure 1) After editing the changes, click the **SAVE ALL** button to save the changes.

Show/ Hide

Show/Hide applies to each section. As an example, Figure 3 shows the **Threat Fields** section with the **Hide Threat Fields** in the upper left corner. However, the steps described below apply to all sections.

Figure 3

In order to hide the entire section, click the **checkbox** shown near the section header. (Figure 1) and click the **SAVE ALL** button to save the changes. (Figure 1)

To show a field, click the **Radio button** under the **Show** column. (Figure 3) and click the **SAVE ALL** button to save the changes.

To hide a field, click the **Radio button** under the **Hide** column. (Figure 3) and click the **SAVE ALL** button to save the changes.

PROJECT SETTINGS

Project Breakdown Structure

The **Project Breakdown Structure** page allows the user to setup a Project Level Breakdown Structure. The user can view, import, or manually create a **Project Breakdown Structure** page by using the appropriate action links. By using the dropdowns in the **Project Breakdown Structure** page, the user can view the **Work Breakdown Structure**, **Organizational Breakdown Structure**, and **Risk Breakdown Structure** for the current project.

Figure 1

Figure 2

PRC SOFTWARE
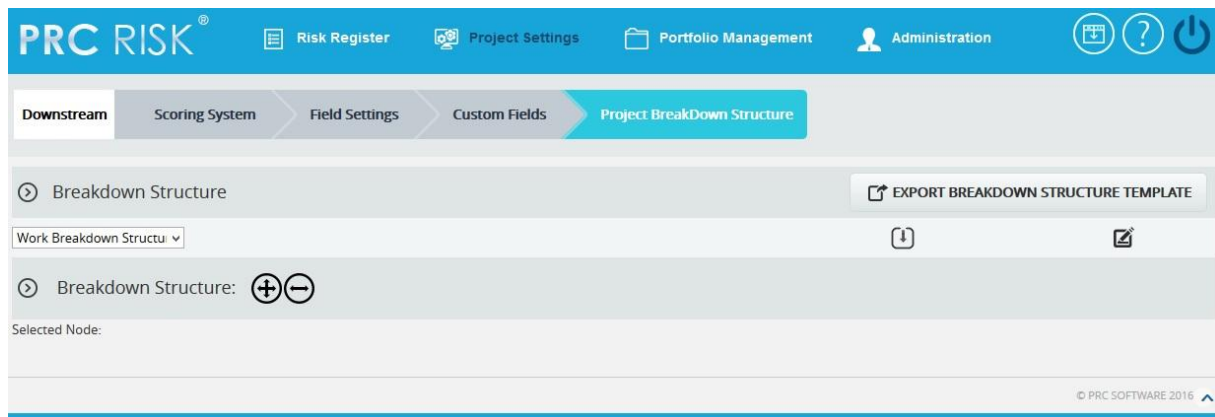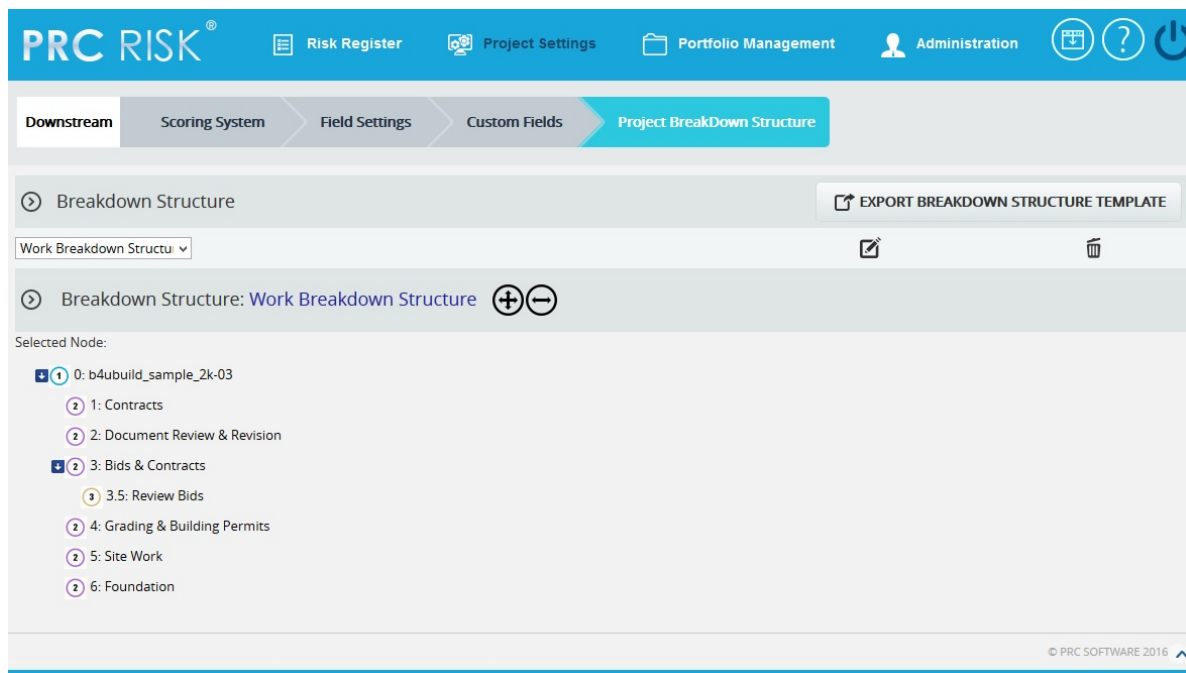
Breakdown Structure:

There are mainly three breakdown structures; such as **Organizational Breakdown Structure**, **Work Breakdown Structure** and **Risk Breakdown structure**. These breakdown structures can be viewed, created, imported, edited and deleted. Each of these methods is explained in detail below:

Import:

This functionality is used to **Import Breakdown Structures**. This functionality is visible only if no node has been added to the breakdown structure.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Select the corresponding breakdown structure from the **Breakdown Structure** dropdown.(Figure 1)
3. Click the **Import** link. (Figure 1)   A pop-up appears. (Figure 3)
4. Click the **Choose File** button. Select the required file (csv, xer, mpp, xls). (Figure 3)
5. Click the **UPLOAD FILE** button to finish. (Figure 3)

Sample sheet used for import:

WBS code	Description	Outline Level
A	ABC123	1
B	ABC124	2
C	ABC125	2

Figure 3

Create:

This functionality helps to create a breakdown structure manually using the tree structure. This functionality is visible only if no node has been added to the breakdown structure. To create a breakdown structure, click the **Create** link. (Figure 1) To add nodes, click the **ADD NODE** button (steps are described in detail in **Add Node** section). (Figure 2)

Add Node:

This functionality is used to add a new node.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)
3. Click the **ADD NODE** button. (Figure 2) A pop-up appears. (Figure 4)
4. Enter node name and code.
5. Click the **SAVE** button to **save** the details. (Figure 4)
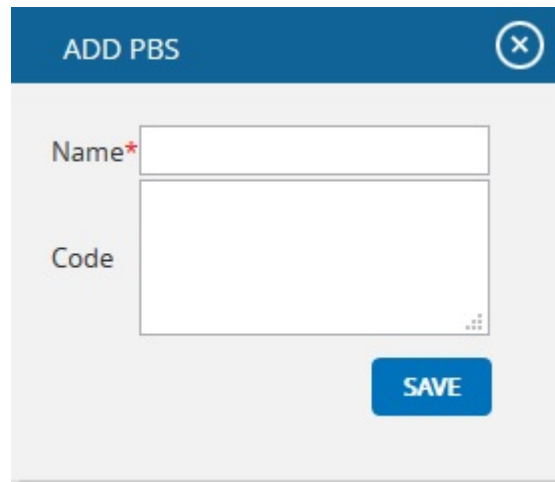
Figure 4

Remove node:

This functionality removes a node.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)
3. Select a node.
4. Click the **REMOVE NODE** button. The node is removed from the system. (Figure 2)

Rename node:

This functionality is used to rename an already existing node.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)
3. Select a node.
4. Click the **RENAME NODE** button. (Figure 2) A pop up appears. (Figure 5)
5. Rename the fields needed.
6. Click the **SAVE** button to save the details. (Figure 5)
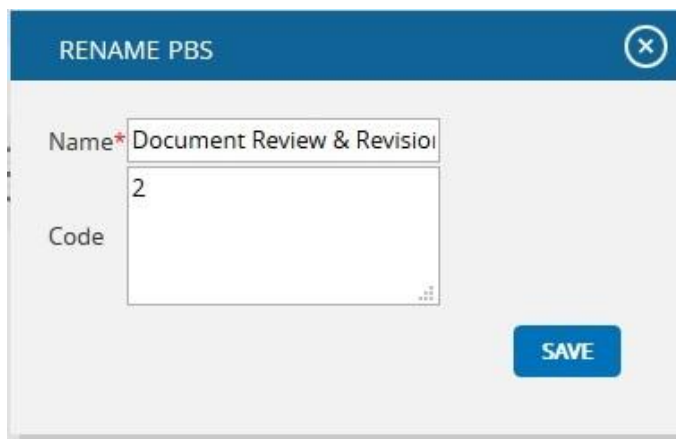
Figure 5

Expand nodes:

This functionality is used to expand all the nodes under the tree structure.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Select node.
3. Click the **Expand** icon to expand all the nodes. (Figure 7) On Expansion, the tree structure becomes like that shown in Figure 6.

Collapse Nodes:

This functionality is used to collapse the expanded nodes shown in Figure 7.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Select node.

3. Click the **Collapse** icon shown in Figure 6. The Nodes get collapsed and the tree structure becomes like that shown in Figure 7.
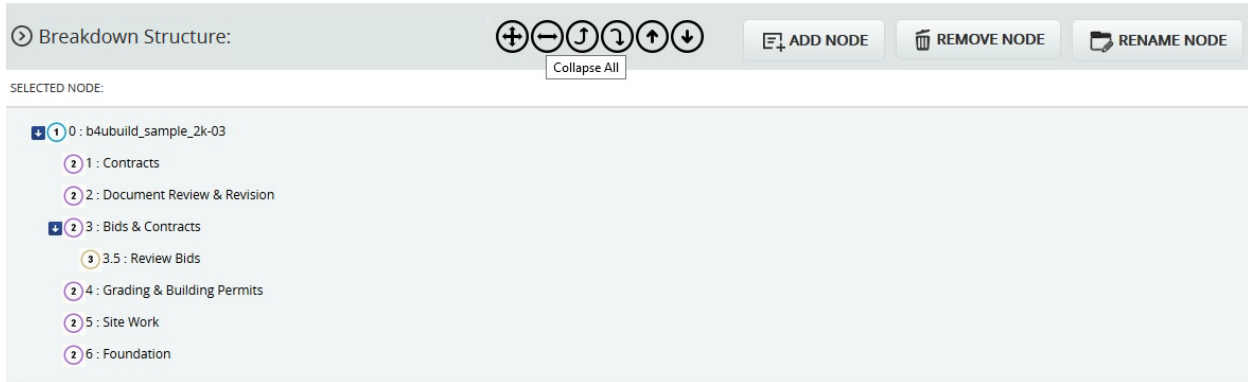
Figure 6

Figure 7

Promote Nodes:

This functionality makes the level of the child node the same as that of the immediate parent. For example, consider the node **6: Foundation** (Figure 8) which is a child of the node **5: Site Work**. When promoted, **6: Foundation** is on the same level as **5: Site Work** (Figure 9). A node cannot be promoted if it does not have a parent.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)
3. Select node.
4. Click the **Promote** icon to promote the node.

Figure 8
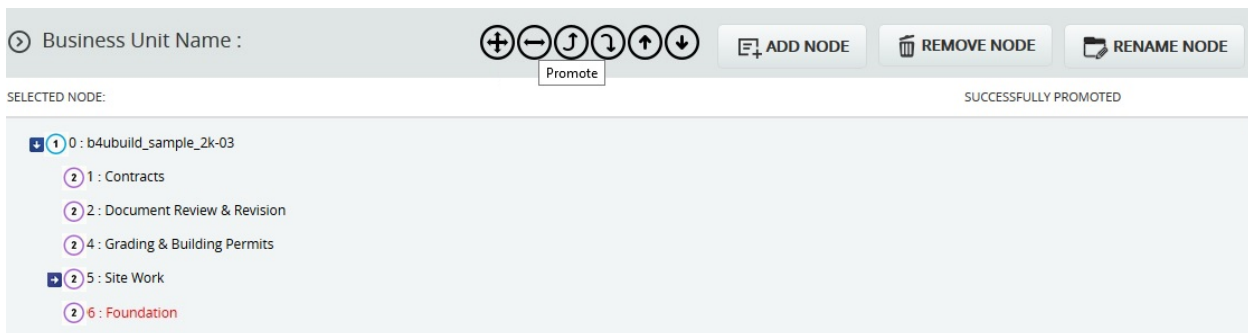
Figure 9

Demote Nodes:

When a node is demoted it becomes the child of the node which is of same level and which lies just below it. For Example, Consider the node **4: Grading & Building Permits** (Figure 9), which is of the same level as the node **2: Document Review & Revision**. When **4: Grading & Building Permits** is demoted, it becomes a child node of the node **2: Document Review & Revision**. (Figure 10) A node cannot be demoted if there is no other node of same level as the node selected.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)
3. Select the node.
4. Click the **Demote** icon to demote the node.
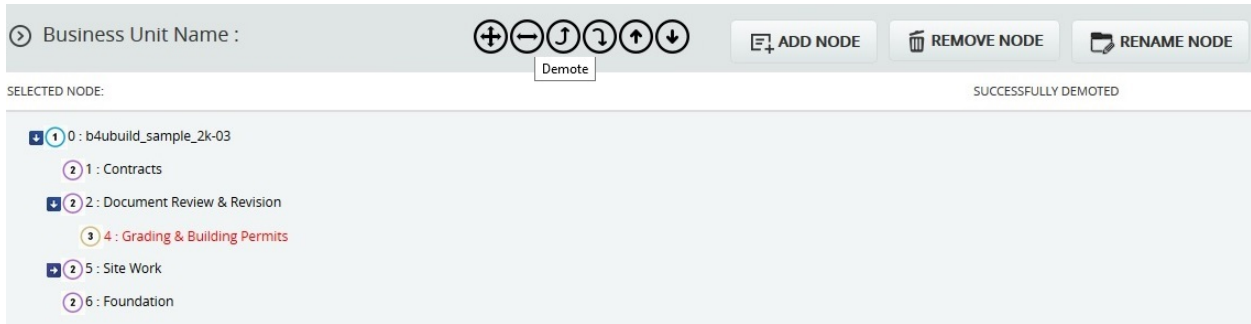
Figure 10

Up Order:

This operation is used to move a node up a level. It can be applied only to nodes of the same level and this operation is not applicable for the first node. For example, consider the nodes **6: Foundation** and **5: Site Work** in Figure 10. The node **6: Foundation** is located below the node **5: Site Work**. When an up order operation is applied to the node **6: Foundation**, it moves above the node **5: Site Work**. Figure 11 shows the tree structure after the up order operation is applied.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)
3. Select the node.
4. Click the **Up Order** icon to change the order of a node up.
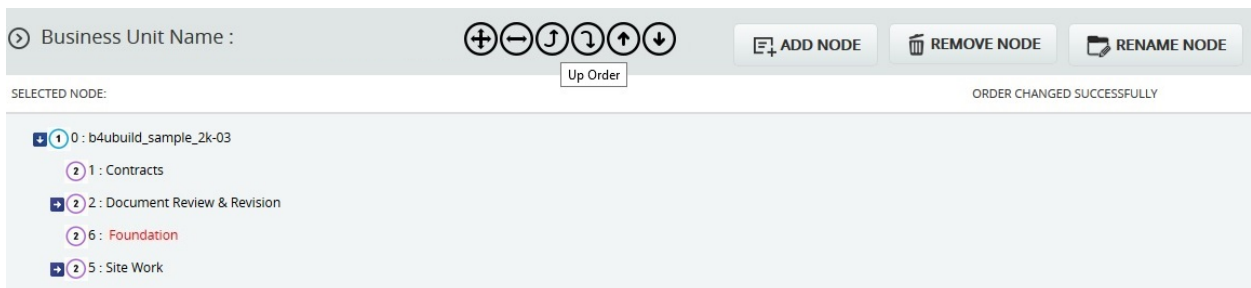
Figure 11

Down Order:

This operation is used to move a node down the tree structure. This can be applied only to nodes of the same level and this operation is not applicable for the last node. For example, consider nodes **1: Contracts** and **2: Document Review & Revision** in Figure 11. **1: Contracts** is located above **2: Document Review & Revision** in Figure 11. When a down order operation is applied

to the node **1: Contracts**, it comes below the node **2: Document Review & Revision**. Refer to Figure 12, which shows the tree structure after a down order operation is applied.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)
3. Select the node.
4. Click the **Down Order** icon to change the order of a node down.
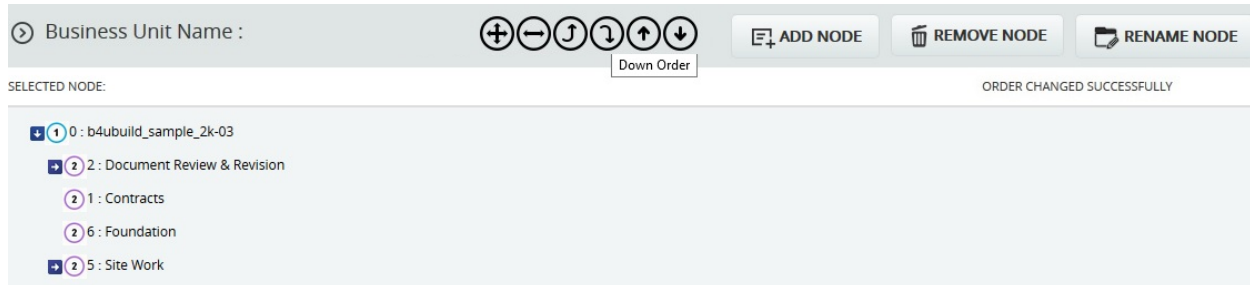
Figure 12

Delete:

This functionality is used to delete the selected breakdown structure.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the corresponding **Delete** link. (Figure 2)
3. After you receive the confirmation message, click the **OK** button to delete the breakdown structure. To cancel, click the **Cancel** button.

Save:

This functionality is used to **save** the changes made to the Project Level breakdown structure.

Edit:

This functionality is used to edit the tree structure. The User can perform operations such as add, remove, rename, expand, collapse, promote, demote nodes as well as change the orders of the nodes.

Steps:

1. *Project Settings --->Project Breakdown Structure*
2. Click the **Edit** link to edit the tree structure. (Figure 2)

Scoring System (Project)

The **Scoring System** page allows the user to view or update project settings based on Threats (Figure 1.1) or Opportunities (Figure 1.2). The data displayed on this page is the most current data being used on the project. When a project is first created the system applies a default setting. The default project settings can be changed by applying a portfolio template or manually adjusting it in the **Scoring System** page. The Scoring System will be locked once a threat or opportunity has been scored, and no changes can be made to the **Scoring System** page. The **Scoring System** page in the PRC Enterprise Risk Register can be viewed only by those users who have either **Read/Write** or **View access.** Users with only **Read/Write** access can edit probability and tolerance levels, edit impacts, edit the risk matrix, add new impacts and delete additional impacts. Users designated with **View Access** may view probability and tolerance levels, view impacts and also view the risk matrix.

PRC RISK®   Risk Register   Project Settings   Portfolio Management   Administration

| Upstream Investment | Scoring System | Field Settings | Custom Fields | Project BreakDown Structure |

IMPORT FROM TEMPLATES

◉ Threats   ○ Opportunities

⊙ Probability Scale   VIEW LEVEL DEFINITIONS   EDIT

Number of Groups : 5

SHORT NAME		LOWER THRESHOLD%		UPPER THRESHOLD%
VH	Above	41.00		
H	From	21.00	Upto	41.00
M	From	11.00	Upto	21.00
L	From	6.00	Upto	11.00
VL	Below	6.00		

⊙ Tolerance Scale   MULTIPLIER SETTINGS   VIEW LEVEL DEFINITIONS   EDIT

Number of Groups : 5

SHORT NAME		LOWER THRESHOLD		UPPER THRESHOLD	COLOR
VH	Above	8.00			🟥
H	From	6.00	Upto	8.00	🟧
M	From	4.00	Upto	6.00	🟨
L	From	2.00	Upto	4.00	🟩
VL	Below	2.00			🟩

⊙ Impacts   VIEW LEVEL DEFINITIONS   ADD   EDIT

Number of Groups : 5

Cost   Cost Type : Percentage

SHORT NAME		LOWER THRESHOLD		UPPER THRESHOLD
VH	Above	45,000,000.00		
H	From	35,000,000.00	Upto	45,000,000.00
M	From	20,000,000.00	Upto	35,000,000.00
L	From	10,000,000.00	Upto	20,000,000.00
VL	Below	10,000,000.00		

Schedule   Duration Type : Weeks

SHORT NAME		LOWER THRESHOLD		UPPER THRESHOLD
VH	Above	9.00		
H	From	7.00	Upto	9.00
M	From	4.00	Upto	7.00
L	From	2.00	Upto	4.00
VL	Below	2.00		

⊙ Risk Matrix   EDIT

|	Impacts				
	VL	L	M	H	VH
Very High %	5.00	7.00	9.00	9.00	10.00
High %	4.00	5.00	7.00	8.00	9.00
Medium %	3.00	4.00	5.00	7.00	9.00
Low %	2.00	3.00	4.00	5.00	7.00
Very Low %	1.00	2.00	3.00	4.00	6.00

© PRC SOFTWARE 2016

Figure 1.1
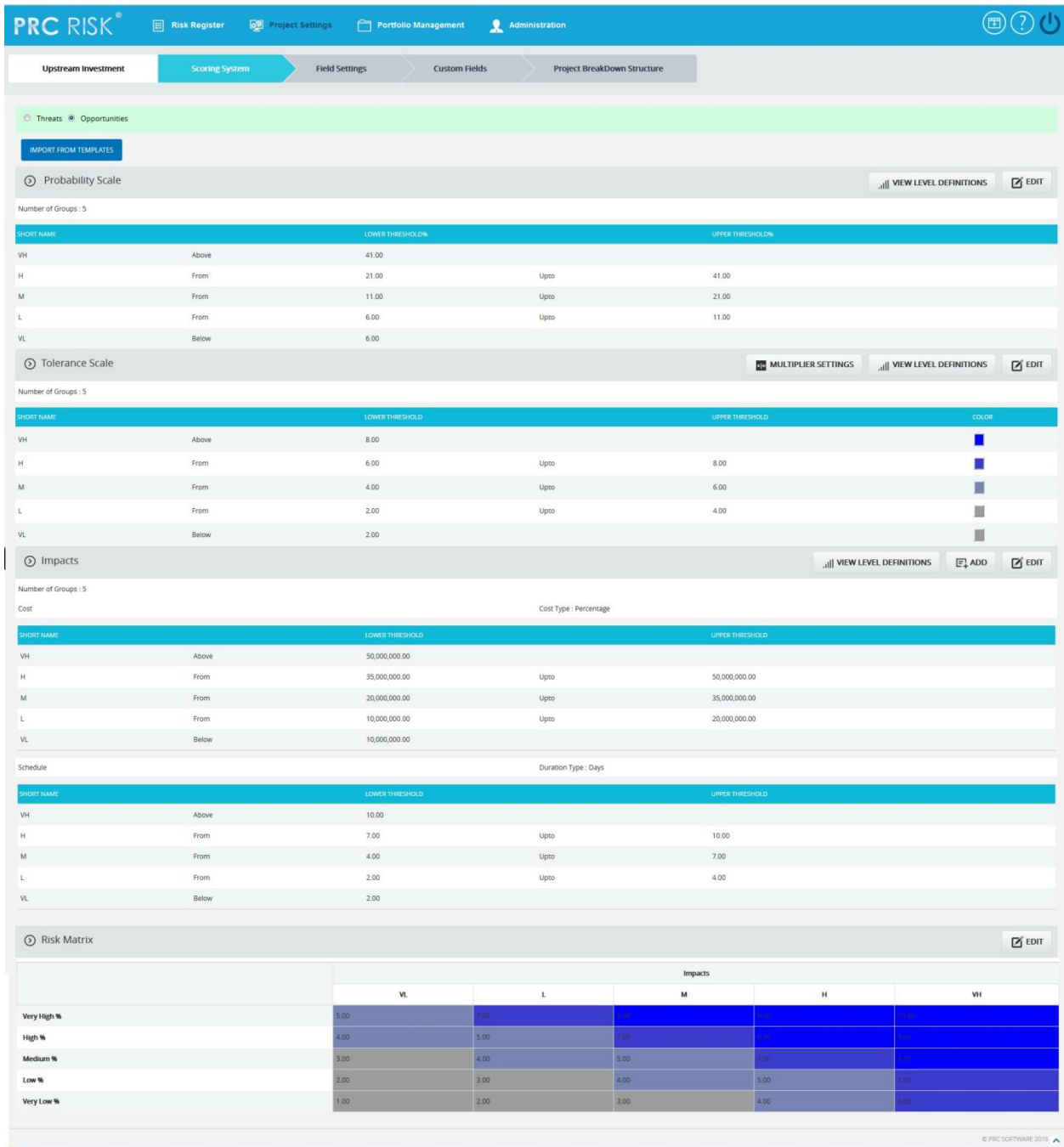
Figure 1.2

Import from Templates:

This functionality is used to assign the Threat/ Opportunity scoring templates created in the portfolio scoring system to the selected project. Once the threats or opportunities are added to the project, then this option will not be there.

Steps:

1. *Project Settings ---> Scoring System*
2. Click the **IMPORT FROM TEMPLATES** button. (Figure1)
3. Select a template and click **DONE** to assign the selected template or click **Cancel**.

View Level Definitions:

To view probability and tolerance levels, click the **VIEW LEVEL DEFINITIONS** button shown in the **Probability & Tolerance Scales** section. (Figure 1) A pop up shown in Figure 2 appears. If the Level Definitions have been modified, click the **SAVE** button to save the changes.

Figure 2

To view impact levels, click the **VIEW LEVEL DEFINITIONS** button shown in the **Impacts** section. (Figure 1) A pop up shown in Figure 3 appears. Click the **SAVE** button to save any modifications to the Level Definitions.

Figure 3

Edit Probability & Tolerance:

While editing **Probability & Tolerance** fields, such as **Number of Groups**, **Lower Threshold**, and **Upper Threshold**, the color is unlocked.

Steps:

4. *Project Settings ---> Scoring System*
5. Click the **EDIT** button under Probability and Tolerance scale sections. (Figure1)
6. After the data is modified, click the **SAVE** button.
7. The color is set by clicking on the corresponding color shown beside each field. An example of the color picker is displayed in Figure 4.

Figure 4

Reload button under **Tolerance Scale** section is to reload the default threshold values and colors for each number of groups. This button is shown only while clicking **EDIT** button under Tolerance. (Figure 5)

SHORT NAME		LOWER THRESHOLD		UPPER THRESHOLD	COLOR
VH	Above	60.00			
H	From	55.00	Upto	60.00	
M	From	35.00	Upto	55.00	
L	From	15.00	Upto	35.00	
VL	Below	15.00			

Figure 5

Multiplier Settings:

Multipliers are user input values. To give multiplier values, click **MULTIPLIER SETTINGS** button (Figure 1). When the link is clicked, Multiplier values dialog box appears where the user can add, save and delete values. (Figure 6)

PRC SOFTWARE

Figure 6

Edit Impacts:

When **editing** impacts, fields such as **Number of Groups**, **Lower Threshold**, **Upper Threshold**, **Duration Type**, **Name** and **Description of Additional Impact** are unlocked. The field Number of groups will be locked if a Threat/Opportunity has been assigned a score.

Duration Type for Cost:

The **Duration Type** has values **Percentage** and **Currency**, where **Cost** is the default value. If the assigned template for the project has value **Percentage** for the field **Duration Type** then the cost values will be expressed in corresponding percentage of total cost of project. If the assigned template for the project has value **Currency** for **Duration Type**, cost values remain unchanged.

Duration Type for Schedule:

The **Duration Type** field for schedule has values for **Days**, **Weeks**, **Months**, **Year** and a **Percentage** where the default value is **Days**. If the assigned template for the project has a value **Percentage** for **Duration Type** then the **Schedule** values will be converted to percentage of Number of days between start and end date of a project.

Steps:

1. *Project Settings ---> Scoring System*
2. Click the **EDIT** button under Impacts section. (Figure1)
3. After the data is modified, click the **SAVE** button.

Add New Impact:

This functionality is used to add a new additional impact.

Steps:

1. *Project Settings ---> Scoring System*
2. Click the **ADD** button to add a new impact. (Figure 1)
3. After entering the details, Click the **SAVE** button.

Delete Impacts:

This functionality is used to delete additional impacts. Additional impacts can be deleted only by those users who have **Read/Write** access for delete.

Steps:

1. *Project Settings ---> Scoring System*
2. Click the **Close** icon to delete additional Impacts. (Figure 1)
3. After you receive the confirmation message, click the **OK** button to delete the breakdown structure. To cancel, click the **Cancel** button.

Edit Risk Matrix:

This section allows you to define the scores based on the Probability and Impact position.

Steps:

1. *Project Settings ---> Scoring System*
2. Click the **EDIT** button under Risk Matrix. (Figure 1)
3. After the data is modified, click the **SAVE** button.

Custom Fields (Project)

The **Custom Fields** page allows the user to view or update the project settings. The data displayed on this page is what is currently being used on the project. When a project is first created, the system applies a default setting. The default project settings can be changed by applying a portfolio template or manually adjusting it in the **Custom Fields** page. When creating a custom field the user will be given the options to choose the data type (text, date, number, list, currency) and location displayed (threat, opportunity, threat and opportunity or mitigation sections). There are no system defaults for the **Custom Fields** page.
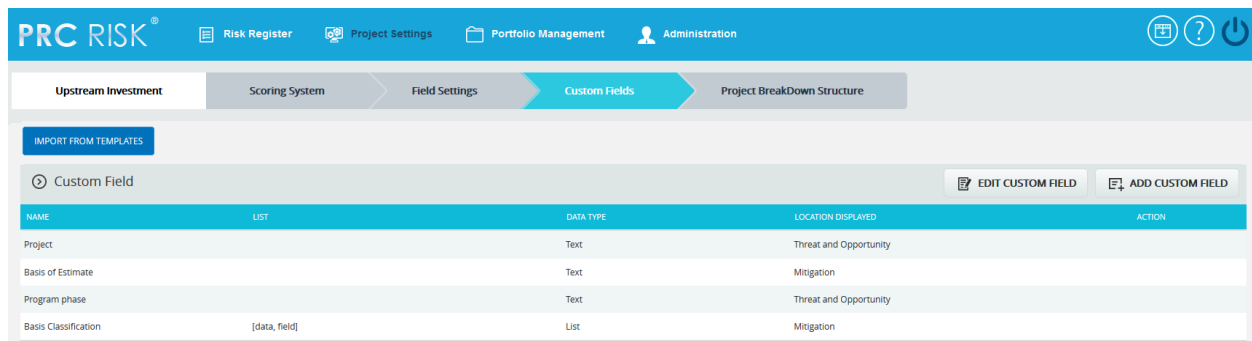
Figure 1
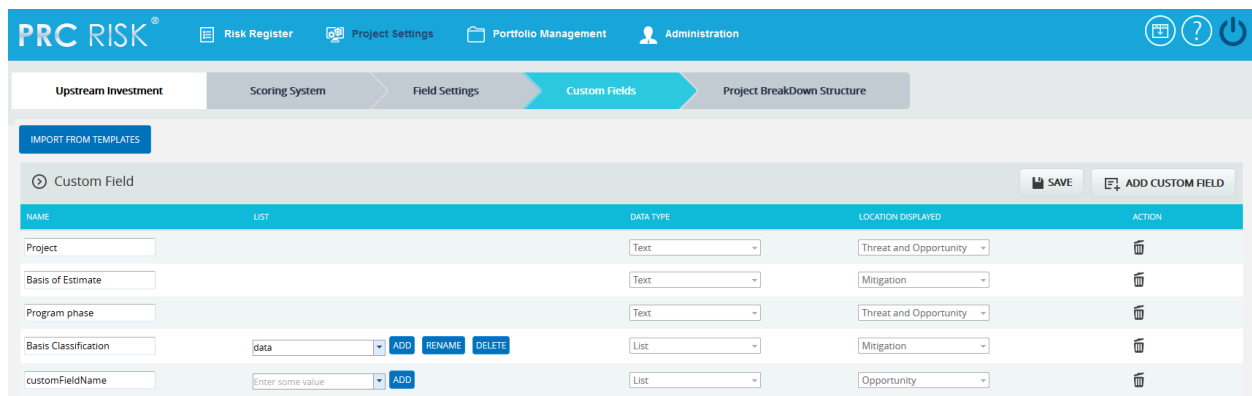
Figure 2

Import from Templates:

This functionality is used to assign the Threat/ Opportunity scoring templates created in the portfolio scoring system to the selected project. Once the threats or opportunities are added to the project, then this option will not be there.

Steps:

1. *Project Settings ---> Custom Fields*
2. Click the **IMPORT FROM TEMPLATES** button. (Figure1)

PRC SOFTWARE

3. Select a template and click **DONE** to assign the selected template or click **Cancel**.

Edit Custom Fields:

This functionality is used to edit custom fields.

Steps:

1. *Project Settings --->Custom Fields*
2. Click the **EDIT CUSTOM FIELDS** button. (Figure 1)
3. Edit the necessary details. For custom fields with the data type List, enter the value in the **Editable Combo box** provided and click the **ADD** button to add list values. To rename the existing value, select any value from the drop down list and click the **RENAME** button after renaming it. Similarly select a list value from the drop down and click the **DELETE** button to delete the value from the list.
4. Click the **SAVE** button to finish.   (Figure 2)

Add Custom Field:

This functionality is used to add new custom field to the selected project.

Steps:

1. *Project Settings --->Custom Fields*
2. Click the **ADD CUSTOM FIELD** button. (Figure 2)
3. Enter the custom field name in the textbox provided. (Figure 2)
4. Select data type from the **Select Data type** dropdown.   (Figure 2)
5. For the data type List, enter the value in the **Editable Combo box** provided and click the **ADD** button.
6. Select location displayed from the **Select Location Display** dropdown. (Figure 2)
7. Click **SAVE** button to finish. (Figure 2)

Delete Custom Fields:

This functionality is used to delete the custom fields.

Steps:

1. *Project Settings --->Custom Fields*
2. Click the **EDIT CUSTOM FIELDS** button. (Figure 1)
3. Click the **Delete** icon to delete the required custom field. (Figure 2)

After you receive the confirmation message (Figure 3) click the **OK** button to delete the custom field. To cancel, click the **Cancel** button. (Figure 3)
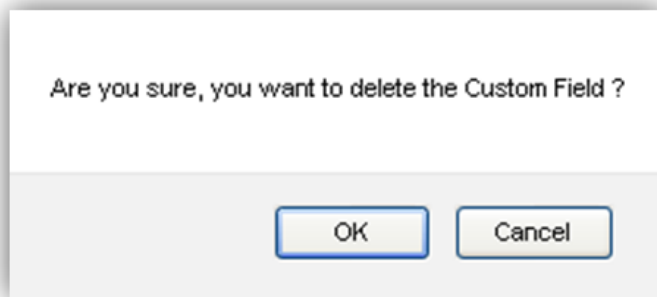
Figure 3

Field Settings (Project)

The **Field Settings** page is used to customize the Threat Fields, Opportunity Fields, Mitigation Plan Fields, Mitigation Step Fields, Closure Section Fields, Qualitative score fields, Simulation Fields, Data Mapping Fields, Risk Notes Fields and Recovery Plan Fields. The **Field Settings** page in the PRC Enterprise Risk Register can be viewed only by those users who have either **Read /Write** or **View** access. Users with only **Read/Write** access can edit session information and show/hide fields.

Users designated with **View Access** may view the various settings for the selected project.

Figure 1

Import from Templates:

This functionality is used to assign the Threat/ Opportunity scoring templates created in the portfolio scoring system to the selected project.

Steps:

1. *Project Settings ---> Field Settings*
2. Click the **IMPORT FROM TEMPLATES** button. (Figure1)
3. Select a template and click **DONE** to assign the selected template or click **Cancel**.

Edit Section Name:

The name of each section can be modified. Consider the threat detail section. To modify the section name, enter the name in the textbox provided, shown at the top of the section (the default name is **Threat Detail**). (Figure 1) After editing the changes, click the **SAVE ALL** button to save the changes.

Show/ Hide:

Show/Hide applies to each section. The example (Figure 2) shows the **Threat Fields** section. However, the steps described below apply to all sections.

FIELD NAME	SHOW / HIDE	RENAME TO
ID	⊙	ID
Name	⊙ ○	Name
Description	⊙ ○	Description
Cause	⊙ ○	Cause
Effect	⊙ ○	Effect
Status	⊙ ○	Status
Status [Options]	Edit	Open-unmitigated ▾
Start Date	⊙ ○	Start Date
End Date	⊙ ○	End Date
Risk Owner	⊙ ○	Risk Owner
Currency	⊙ ○	Currency

Hide Threat Fields Threat Detail   SAVE ALL

Figure 2

In order to hide the entire section, check the **checkbox** shown near the section header; click the **Save All** button to save the changes. (Figure 1)

To show a field, click the radio button under the **Show** column (Figure 2), and click the **SAVE ALL** button to save the changes.

To hide a field, click the radio button under the **Hide** column (Figure 2), and click the **SAVE ALL** button to save the changes.

Edit Status Options (Threat / Opportunity):

To add, edit or delete the user defined status options. These statuses are categorized into two, open and closed. The Threats/ Opportunities with the closed status are not shown in any of the reports in the report page accept in Risk History reports and Status reports.

Steps:

1. Click the **EDIT** button. (Figure 2)
2. A pop up appears where the user can add or edit the status options. (Figure 3)
3. Click the **ADD** button to add a new status option. (Figure 3)
4. Click the **EDIT** button to edit the saved status options. (Figure 3)
5. To delete the status click **DELETE** icon. (Figure 4)
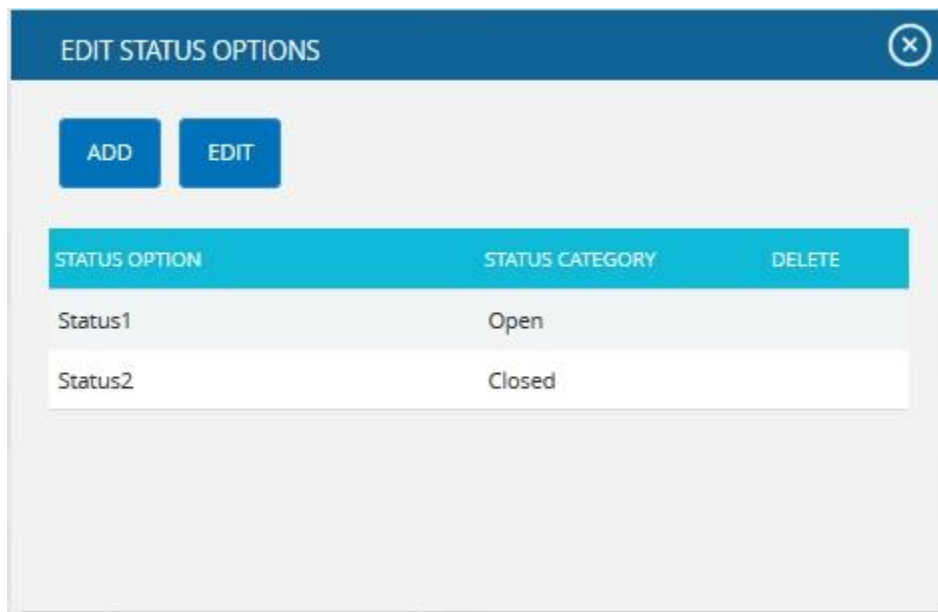6. Click the **SAVE** button to save the changes done. (Figure 4)
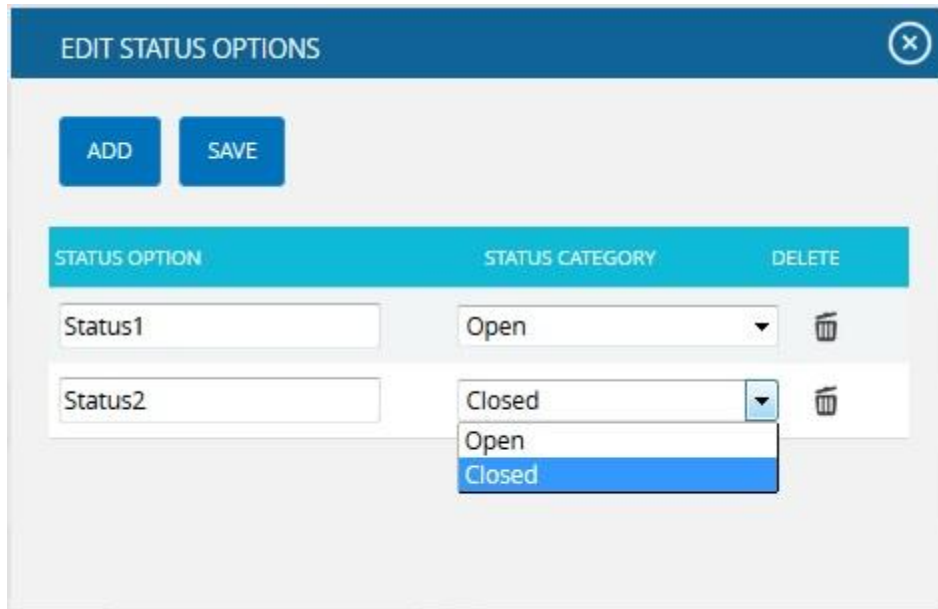

Figure 3

Figure 4

Edit Status Options (Mitigation):

To add, edit or delete the user defined mitigation status options. These statuses are categorized into Proposed, In Progress, Rejected, Complete, Risk Closed and Approved.

Steps:

1. Click the **EDIT** link. (Figure 5)
2. A pop up appears where the user can add or edit the mitigation status options. (Figure 6)
3. Click the **ADD** button to add a new mitigation status option. (Figure 6)
4. Click the **EDIT** button to edit the saved mitigation status options. (Figure 6)
5. To delete the mitigation status click **DELETE** link. (Figure 7)
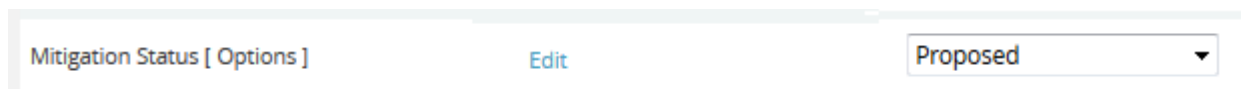6. Click the **SAVE** button to save the changes done. (Figure 7)
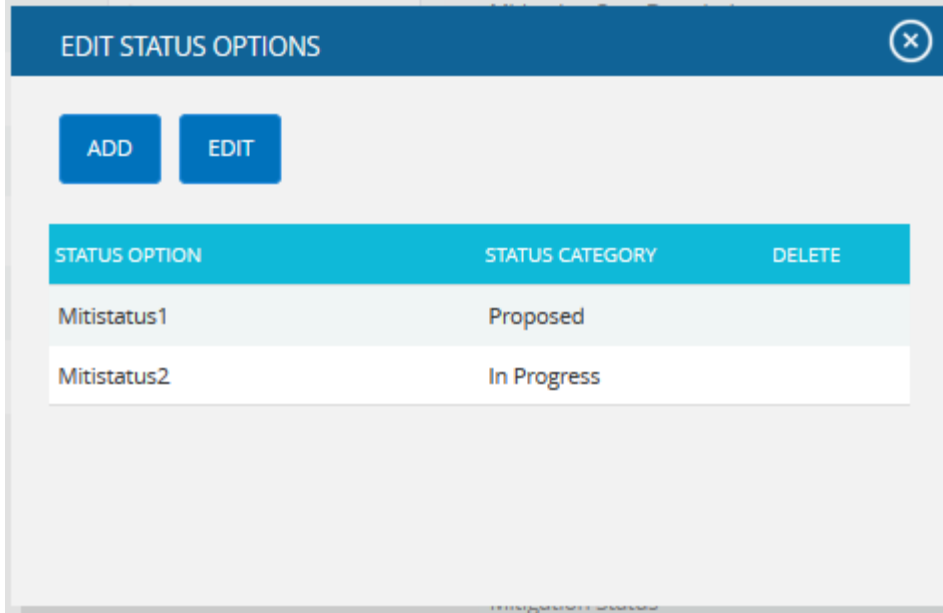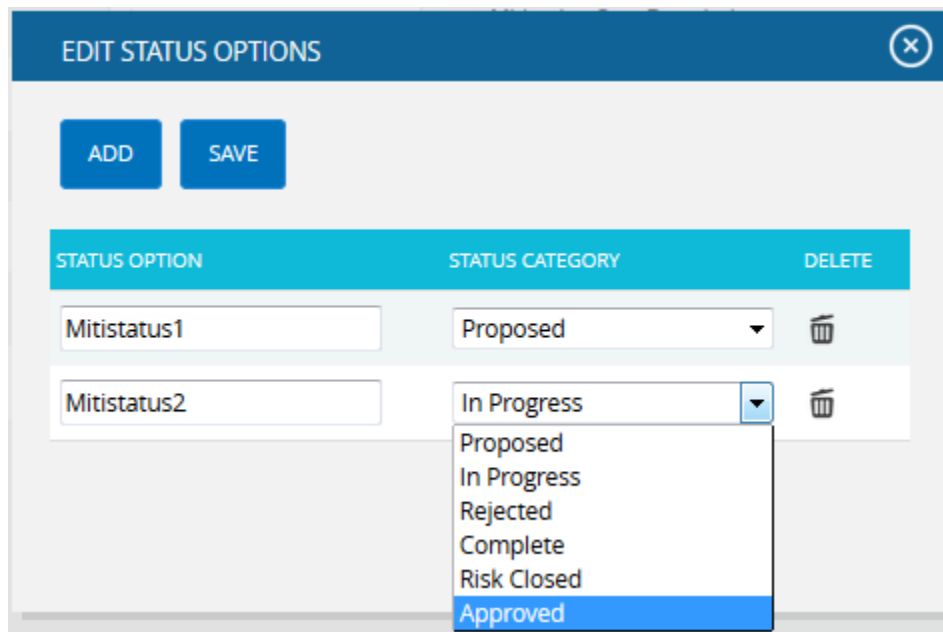

Figure 5

Figure 6

Figure 7

Edit Response Type (Threat / Opportunity):

To add user defined response type for Threats and Opportunities.

Figure 8

Steps:

1. Click the **EDIT** link for Threat/Opportunity. (Figure 8)
2. A pop up appears where the user can add or edit the response type. (Figure 9)
3. Click the **ADD** button to add a new response type. (Figure 9)
4. Click the **EDIT** button to edit the saved response types. (Figure 9)
5. To delete the response types click **DELETE** link. (Figure 10)
6. Click the **SAVE** button to save the changes done. (Figure 10)

Figure 9

Figure 10

RISK REGISTER

Standard Reports (Project)

The **Standard Reports** page allows you to create various reports, such as: **Overall Risk Reports, Threat Reports, Opportunity Reports**, **Mitigation Reports, Audit Reports and Exports.** The process to create a report is broken down into steps to make it easier for users to follow. Reports from this page can be added to the **Manager's Dashboard** for further analysis and reporting. This page can be viewed by only those users who have either **Read/Write** or **View** access.
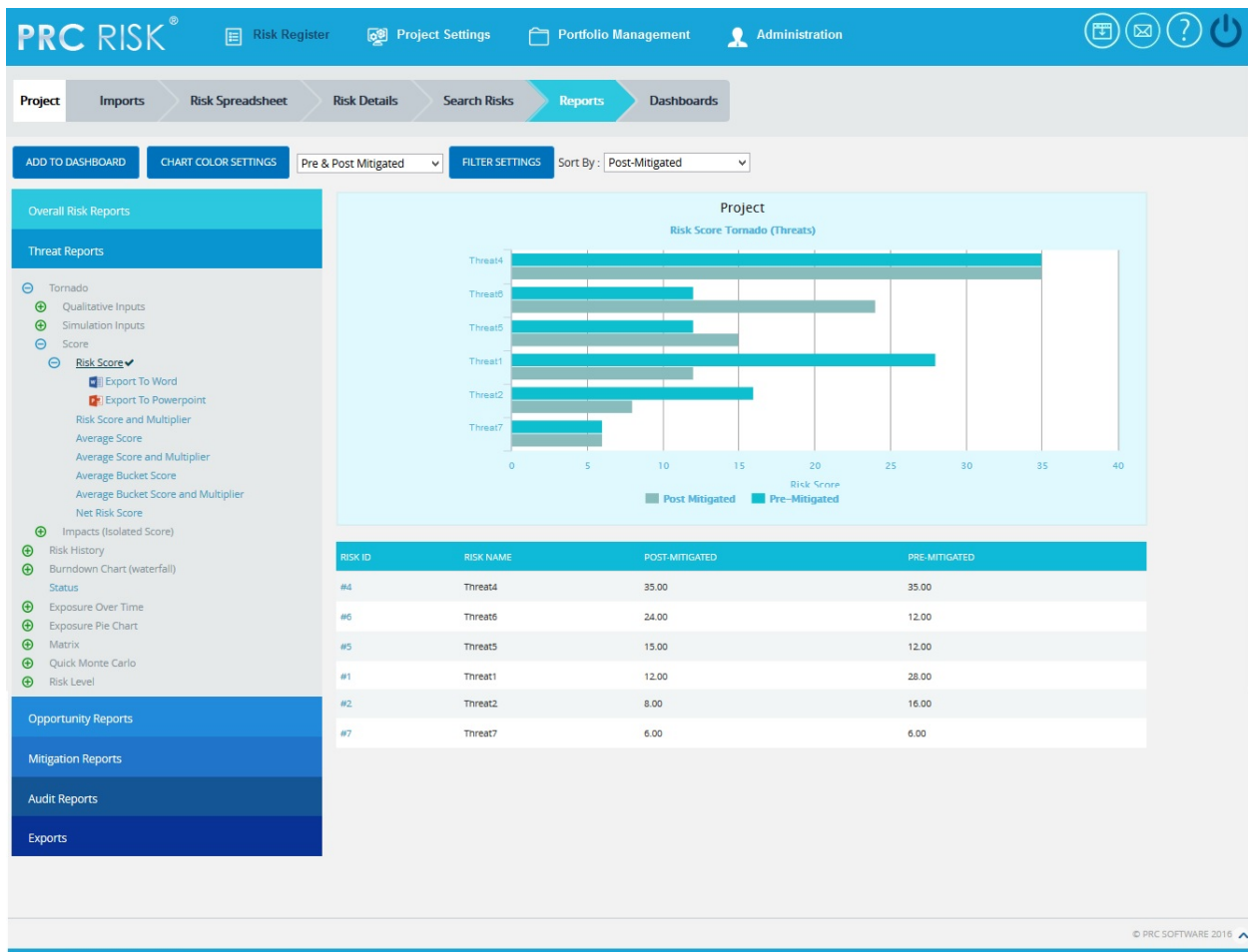
Figure 1

Reports:

There are several types of reports in the **Standard Report (Project)** page. In order to generate a chart, the primary option that should be selected is **Report**. The **Report** selected by default (while the page is loaded) is **Risk Tornado**. The various available reports are shown in Figure 2.

Figure 2

PRC SOFTWARE

Report Option:

The **Report option** decides for which risk type the chart should be generated. The risk type listed will vary for Status Reports. For all other reports its remains the same. The report option for all other reports is shown in Figure 3, Figure 4, Figure 5 and 6.

The report option for Tornado charts, Risk Exposure charts and Risk exposure-BS charts are **Threat Tornado, Opportunity Tornado**, **Overall Risk Tornado, Threat Exposure Over Time, Opportunity Exposure Over Time, Overall Risk Exposure Over Time, Threat Qualitative Exposure Pie Chart, Opportunity Qualitative Exposure Pie Chart, Overall Risk Qualitative Exposure Pie Chart, Threat Simulation Exposure Pie Chart, Opportunity Simulation Exposure Pie Chart and Overall Risk Simulation Exposure Pie Chart.**

Risk Tornado charts:

Figure 3

Risk Exposure Charts:
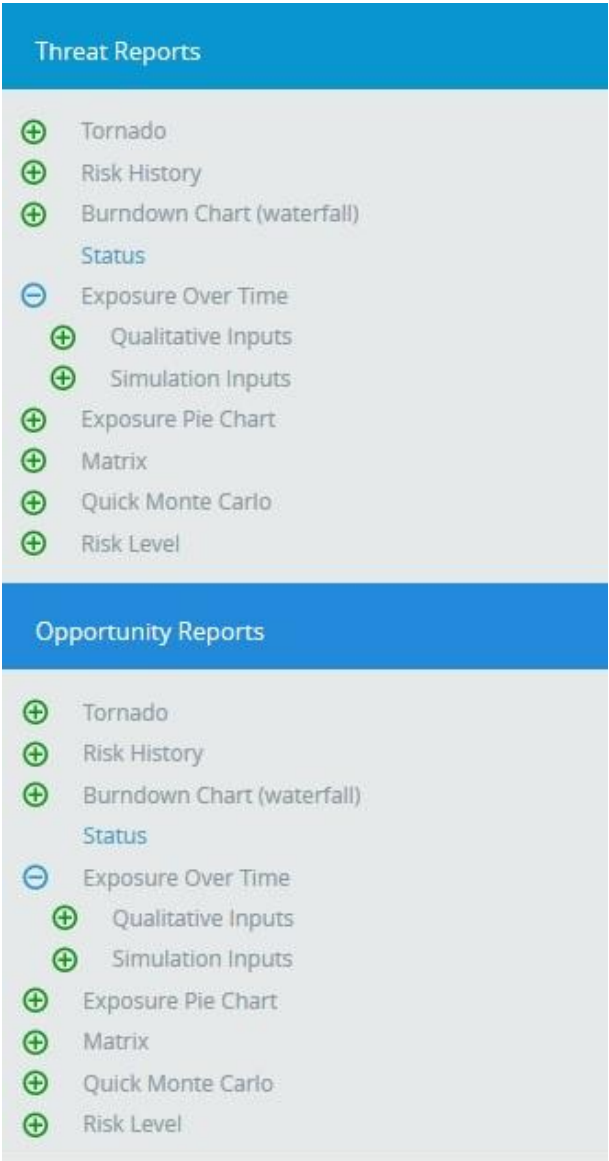
Figure 4

Risk Exposure Pie Charts:
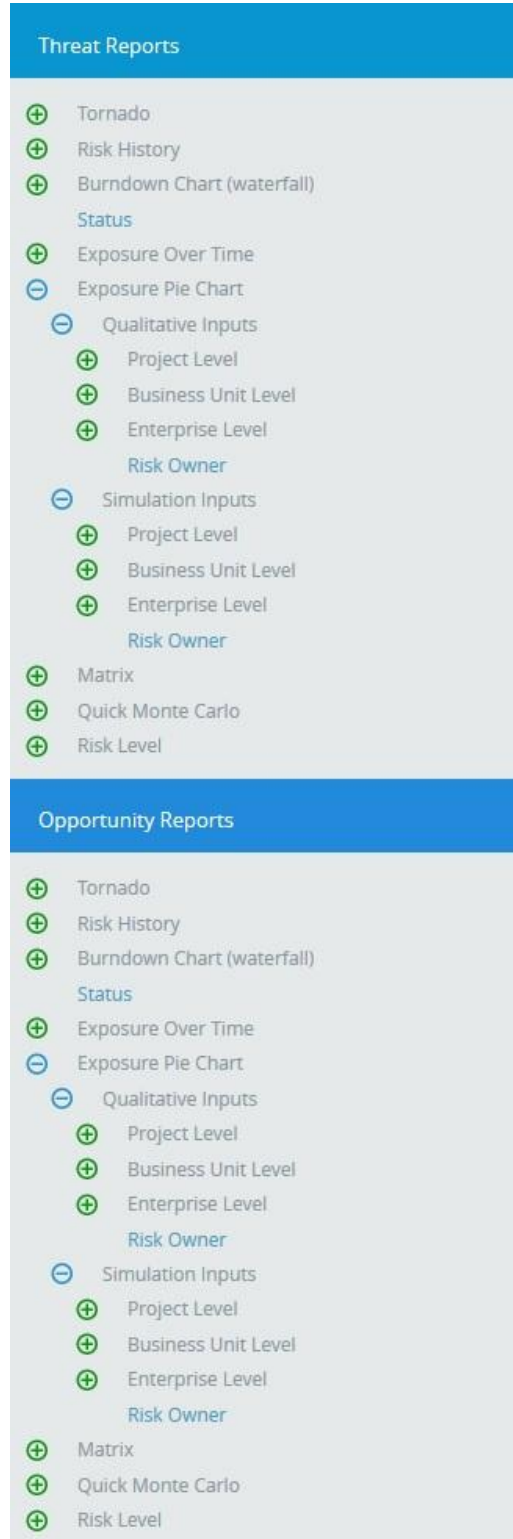
Figure 5

Risk History Charts:
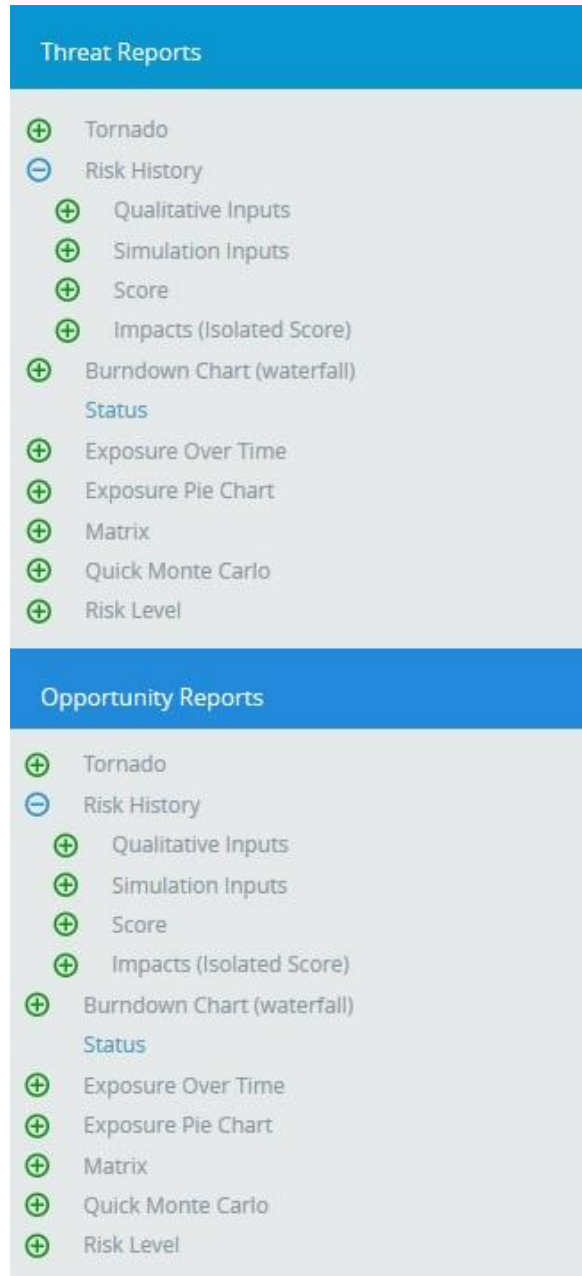
Figure 6

Status Charts:
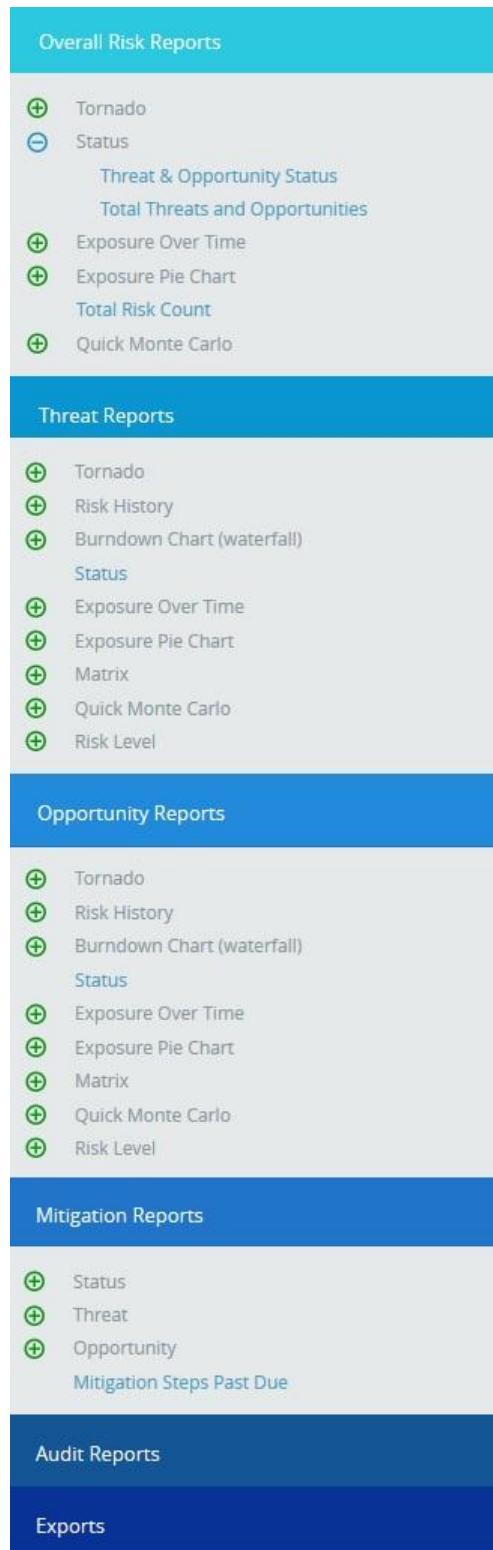
Figure 7

Risk:

Risk should be selected for **Risk History** and the **Burndown Chart (Waterfall)** using the **Select Risk** dropdown. (Figure 8) This dropdown is visible for only **Risk History** and the **Burndown Chart (Waterfall).**

Select Risk : #1 - Threat1

Figure 8

Data Option:

The **Data options** include additional impacts, if any. The various data options available for **Risk Tornado**, **Risk History,** and **Burn down (Waterfall)** are:

1. Risk Score
2. Risk Score and Multiplier
3. Average Score
4. Average Score and Multiplier
5. Average Bucket Score
6. Average Bucket Score and Multiplier
7. Mitigation Started Late (Days)
8. Mitigation Finished Late (Days)
9. Qualitative Cost
10. Qualitative Schedule
11. Other Qualitative impacts
12. Qualitative Probability
13. Simulation Cost
14. Simulation Schedule
15. Simulation Probability
16. Simulation Cost Exposure
17. Qualitative Cost Exposure
18. Simulation Schedule Exposure

For Example:

Consider the following 3 x 5 matrix

	VL	L	M	H	VH
H	3	6	9	12	30
M	2	4	6	8	20
L	1	2	3	4	10

Table 1

Multiplier = 2

Probability Range = L (Low), M (Medium), H (High)
Impact Range = VL, L, M, H, VH
Impacts   = Cost, Schedule, Safety

Consider, Probability = H
        Cost = H
        Schedule = M
        Safety = L.

1. Risk Score:

By taking the combination of probability and all the impacts like schedule, cost etc, the highest of combination value in risk matrix is taken as **Risk Score**. The **Risk Score** for Threat/Opportunity is the pre-mitigated score. The **Risk Score** for Mitigation is the post-mitigated score.

In the Example, (Table 1)

    Risk score = High Probability x High Cost = 12

2. Risk Score and Multiplier:

The multiplier value setting can be done in the Project settings Scoring System. Then the formula for **Risk Score and Multiplier** is,

    Risk Score and Multiplier = Risk score * Multiplier

In the Example, (Table 1)

    Risk Score and Multiplier = 12 * 2 = 24

3. Average Score:

The **Average Score** is the sum of all the impact combinations (cost, schedule etc) with the probability in the risk matrix, divided by number of combinations.

In the Example, (Table 1)

Average Score = (6 + 9 + 12)/3 = 9

4. Average Score and Multiplier:

The multiplier value setting can be done in the Project settings Scoring System**.** Then the formula for **Average Score and Multiplier** is,

Average Score and Multiplier = Average score * Multiplier

In the Example, (Table 1)

Average score = (6 + 9 + 12)/3 = 9 *multiplier = 9 * 2 = 18

5. Average Bucket Score:

Bucket value is the index values given to each impacts. The Average Impact is the sum of the bucket values or index values of all the impact combinations with probability, by number of combinations. This Average Impact is considered as the index value for the Risk Matrix table. The value on this table corresponding to this index value is considered as **the Average bucket score.**

Note: If the calculated value of the bucket falls to say **3.66** round it to the nearest bucket which is **4**.

In the Example, (Table 2)

	VL	L	M	H	VH
H	3	6	9	12	30
M	2	4	6	8	20
L	1	2	3	4	10
	1	2	3	4	5

Table 2

Average Impact = High Probability x ((Low (bucket value) + Medium (bucket value) + High (bucket value)) / 3

That is, High probability x bucket value of (2 + 3 + 4) / 3 = 3
So here, the value corresponding to the index value 3 is 9 which is the average Bucket Score.

6. Average Bucket Score and Multiplier:

The multiplier value setting can be done in the Project settings Scoring System. Then the formula for **Average Bucket Score and Multiplier** is,

Average Bucket Score and Multiplier = Average Bucket score * Multiplier

In the Example, (Table 2)

Average Bucket score= 9* 2 = 18

7. Mitigation Started Late (Days):

The formula to calculate the **Mitigation Started Late (Days)** is:

No of days late = Positive value of proposed date – Current date

Condition: Risk status should not be closed and Mitigation should not be in Progress, Rejected, Completed status.

8. Mitigation Finished Late (Days):

The formula to calculate the **Mitigation Finished Late (Days)** is:

No of days late = Proposed finish date - current date (Positive value)

Condition: Risk status should not be closed, and Mitigation should not be in Completed, Rejected status.

9. Qualitative Cost:

The formulas for **Qualitative Cost** are:

1. [(Qualitative Cost Upper Limit + Qualitative Cost Lower Limit) / 2] . (Pre-Value)

2. [(Qualitative Mitigation Cost Upper Limit + Qualitative Mitigation Cost Lower Limit) / 2] . (Post-Value)

If there is no upper limit: Qualitative Cost = lower limit * 1.5

If there is no lower limit: Qualitative Cost = upper limit / 2

10. Qualitative Schedule:

The formulas for **Qualitative Schedule** are:

1. [(Qualitative Schedule Upper Limit + Qualitative Schedule Lower Limit) / 2] . (Pre-Value)

2. [(Qualitative Mitigation Schedule Upper Limit + Qualitative Mitigation Schedule Lower Limit) / 2] . (Post-Value)

If there is no upper limit: Qualitative Schedule = lower limit * 1.5

If there is no lower limit: Qualitative Schedule = upper limit / 2

11. Other Qualitative Impacts:

The formulas for **Additional Impacts** are:

1. [(Qualitative Additional Impact Upper Limit + Qualitative Additional Impact Lower Limit) / 2] (Pre-Value)

2. [(Qualitative Mitigation Additional Impact Upper Limit + Qualitative Mitigation Additional Impact Lower Limit) / 2] (Post Value)

If there is no upper limit: Average value = lower limit * 1.5

If there is no lower limit: Average value = upper limit / 2

12. Qualitative Probability:

The formulas for **Qualitative Probability** are:

1. [[(Qualitative Probability Upper Limit + Qualitative Probability Lower Limit) / 2]] (Pre-Value)

2. [[(Qualitative Mitigation Probability Upper Limit + Qualitative Probability Lower Limit) / 2]] (Post-Value)

If there is no upper limit: Qualitative Probability = [(lower-limit + 100) / 2]

If there is no lower limit: Qualitative Probability = [(0+upper-limit) / 2]

13. Simulation Cost:

The formulas for **Simulation Cost** are:

1. [(Cost min + Cost max + 4 * (Cost Most likely)) / 6] (Pre Value)

2. [(Mitigation Cost min + Mitigation Cost max + 4 * (Mitigation Cost Most likely)) / 6] (Post Value)

If there is no max then max = min * 2

If there is no min then min = max / 2

If there is no most likely then Avg = [(Min + Max) / 2]

14. Simulation Schedule

The formulas for **Simulation Schedule** are:

1. [(Schedule min + Schedule max + 4 * (Schedule Most likely)) / 6] (Pre-Value)

2. [(Mitigation Schedule min + Mitigation Schedule max + 4 * (Mitigation Schedule Most likely)) / 6] (Post-Value)

If there is no max then max = min * 2

If there is no min then min = max / 2

If there is no most likely then Avg = [(Min + Max) / 2]

15. Simulation Probability:

The formulas for **Simulation Probability** are:

1. [[Simulation Probability Percentage]] (Pre-Value)

2. [[Mitigation Simulation Probability]] (Post-Value)

16. Simulation Cost Exposure:

The formulas for **Simulation Cost Exposure** are:

1. [(Simulation Cost * Simulation Probability) / 100] (Pre-Value)

2. [(Mitigation Simulation Cost * Mitigation Simulation Probability) / 100](Post-Value)

17. Simulation Schedule Exposure:

The formulas for **Simulation Schedule Exposure** are:

1. [(Simulation Schedule * Simulation Probability) / 100] (Pre-Value)

2. [(Mitigation Simulation Schedule * Mitigation Simulation Probability) / 100] (Post-Value)

The various data options for **Threat Qualitative Exposure Pie Chart, Opportunity Qualitative Exposure Pie Chart, Threat Simulation Exposure Pie Chart and Opportunity Simulation Exposure Pie Chart** are:

1. Project-OBS
2. Project-WBS
3. Project-RBS
4. Business Unit-OBS
5. Business Unit-WBS
6. Business Unit-RBS
7. Enterprise-OBS
8. Enterprise-WBS
9. Enterprise-RBS
10. Risk Owner

Project OBS, **Project WBS** and **Project RBS** details are added from the page *Project Breakdown Structure (Project Settings ---> Project Breakdown Structure)*

Business OBS, Business RBS, **Business WBS**, **Enterprise OBS**, **Enterprise RBS, Enterprise WBS** are added from the page *Manage Breakdown Structure* (*Portfolio Management ---> Manage Breakdown Structure)*

Enterprise Risk details are added from page:

Portfolio Management ---> Reports ---> Other Risk Reports ---> Enterprise Risk List

In Figure 9 there is an option to select (Pre-Mitigated/Post-Mitigated or Pre-Mitigated & Post-Mitigated). For The various data options for **Threat Qualitative Exposure Pie Chart, Opportunity Qualitative Exposure Pie Chart, Overall Risk Qualitative Exposure Pie Chart, Threat Simulation Exposure Pie Chart, Opportunity Simulation Exposure Pie Chart** and **Overall Risk Simulation Exposure Pie Chart** are shown in Figure 9.

Figure 9

Sort By:

This functionality is used to sort the data for the selected report based on post-mitigated and pre-mitigated

Steps:

1. *Risk Register ---> Reports*.
2. Select the **Sort By** drop down to sort the report based on post-mitigated and pre-mitigated. (Figure 1)

Filter:

This functionality is used to apply the **Filter** to the chart.

Steps:

2. *Risk Register ---> Reports*

1. Click the **ADD FILTER** button. (Figure 10) A pop up shown in Figure 11 appears.

2. Select the field from the **Select Field** dropdown. (Figure 11)

3. Select the Operator from the **Select Operator** dropdown. (Figure 11) The various fields and the operators applicable are shown in Table 3.

4. The user can select values or enter values from the **SELECT VALUE** dropdown. (Figure 11)

5. Click the **ADD FILTER OPTION** button , to add another filter (Figure 11)

6. Click the **APPLY FILTER** button to view the filtered report. Or give the name, description, and global access option and then click the **SAVE AND APPLY FILTER** button to view the saved filter report. (Figure 11)

7. Select the filter name from the Name dropdown and click the **DELETE** button that appears, to delete that particular saved filter. (Figure 11)
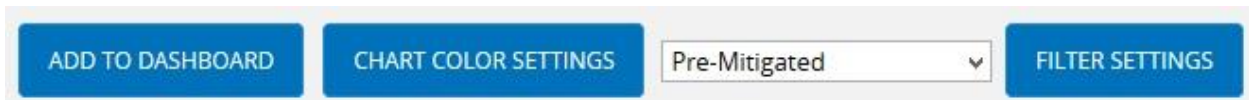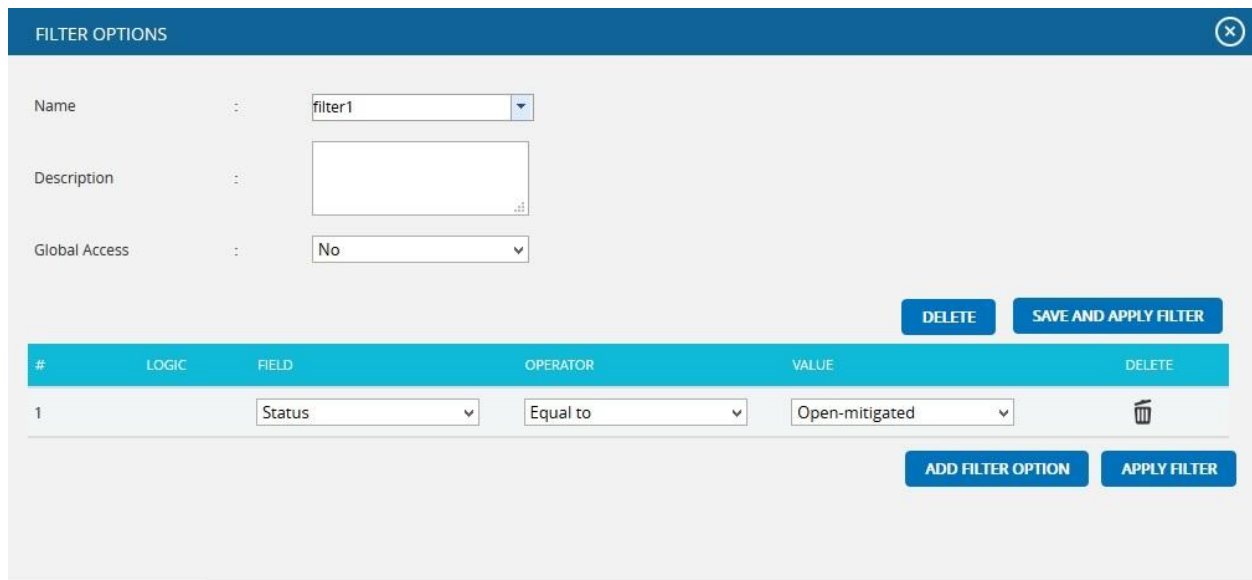

Figure 10

Figure 11

Field Type	Operator	Notes
Text	Equal to	User types text—This chart contains all the values that match the text exactly.
	Contains	User types text—This chart contains all the values that contain the text anywhere in the string.
	Not equal to	User types text—This chart contains all the values that do not match exactly.
	Does not contain	User types text—This chart contains all values where the text is not contained anywhere in the string.
Date	Equal to	Date popup box—This chart contains all values where the date matches exactly.
	Before	Date popup box—This chart contains all values where the date is before the selected date.
	After	Date popup box—This chart contains all values where the date is after the selected date.
	Not equal to	Date popup box—This chart contains all values where the date does not match exactly.
Number	Equal to	User enters number—This chart contains all values which match exactly with the number entered.
	Greater than	User enters number—This chart contains all values greater than the number

		entered.
	Greater than or Equal to	User enters number—This chart contains all values greater than or equal to the number entered.
	Less than	User entered number—This chart contains all values less than or equal to the number entered.
	Less than or equal to	User enters number—This chart contains all values less than the number entered
	Not equal to	User enters number—This chart contains all values which are not the exact match for the number entered.
WBS/OBS/RBS	Under	User selects WBS/OBS/RBS element via a check mark in a popup—All children under the node (and sub-nodes) are shown. If a user check marks Multiple Items, an OR is applied to all check-marked items.
	Not Under	User selects WBS/OBS/RBS element via a check mark in a popup—All items are shown except children under the node (and sub-nodes).
List Items (such as status)	Equal to	User selects list element from a dropdown box—This chart will contain all the values which match the selected value exactly.
	Equal to (select multiple)	User selects list element via a check mark in a popup—If

		a user check marks multiple items, then an OR is applied to all checked items. This chart will contain all values which match the selected values exactly.
	Not equal to	User selects list element from a dropdown box—This chart contains all values not equal to the selected value
	Contains	User selects list element from a dropdown box—This chart contains all values which contain the selected value
	Not equal to (select multiple)	User selects list element via a check mark in a popup—If the user checks multiple items an OR is applied to all checked items, and the results will not be equal to any checked items. This chart contains all values not equal to the selected values

Table 3

Tornado Chart:

Tornado Diagrams, also called **Tornado Plots** or **Tornado Charts,** are special types of **Bar Charts** where the data categories are listed vertically. These charts are generated by default when the **Standard Reports** (**Project**) page is initially loaded. The Post-Mitigated score is the Mitigation score and Pre-Mitigated score is the risk score.

Threat Tornado:

The **Threat Tornado** chart corresponds to all the threats in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Threat Reports** link to select **Threat Tornado Chart**. (Figure 1)

3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both** to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 10)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click the **Risk Score** data option or any other data option to generate the report. (Figure 11) The chart generated and the data table is shown in Figure 13.

Figure 12

RISK ID	RISK NAME	PRE-MITIGATED
#4	Threat4	35.00
#6	Threat6	12.00
#5	Threat5	12.00
#1	Threat1	28.00
#2	Threat2	16.00
#7	Threat7	6.00
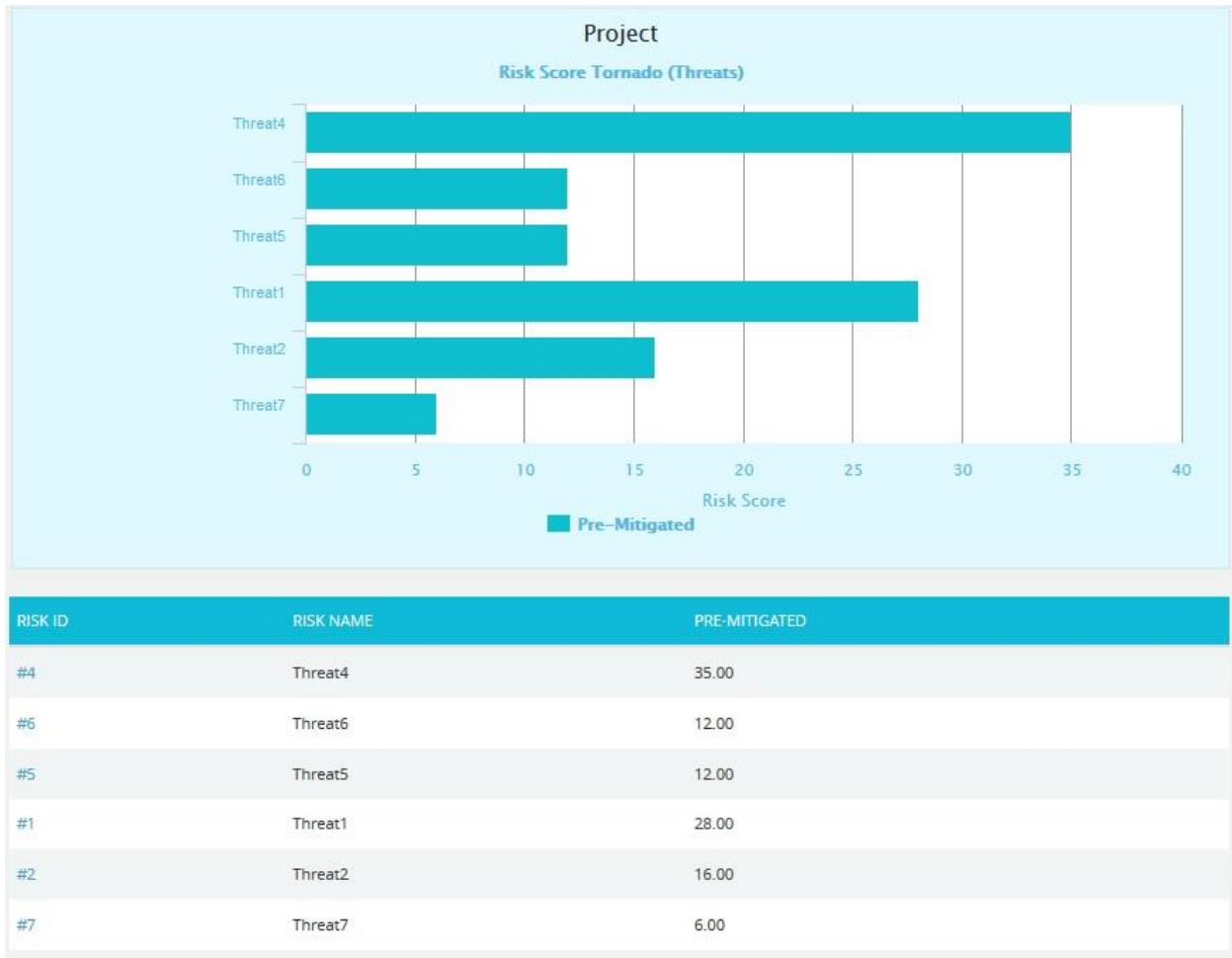
Figure 13

Clicking on the **Risk ID** shown in the data table in Figure 13 navigates to the page:

Risk Register ---> Risk Details (Threats)

Threat Net Risk Score:

The **Threat Net Risk Score Chart** shows the net risk score of each threat in a project. The impact types (cost, schedule, safety, etc.) are isolated and evaluated using the probability input. Each threat is ranked individually for all impact types. A threat with a qualitative score of high for cost and high for schedule will have a higher cumulative score than a threat with qualitative scores of high/medium (cost/schedule). Typical risk scoring may only show the highest impact type instead of isolating the impact types. The further breakdown can help to analyze the root cause of a threat receiving a high risk score. It shows only 5 threats in the chart and 20 threats in the table below the chart.

Steps:

1. ***Risk Register ---> Reports***

2. Click the **Threat Reports** link to select **Threat Tornado Chart**. (Figure 14)

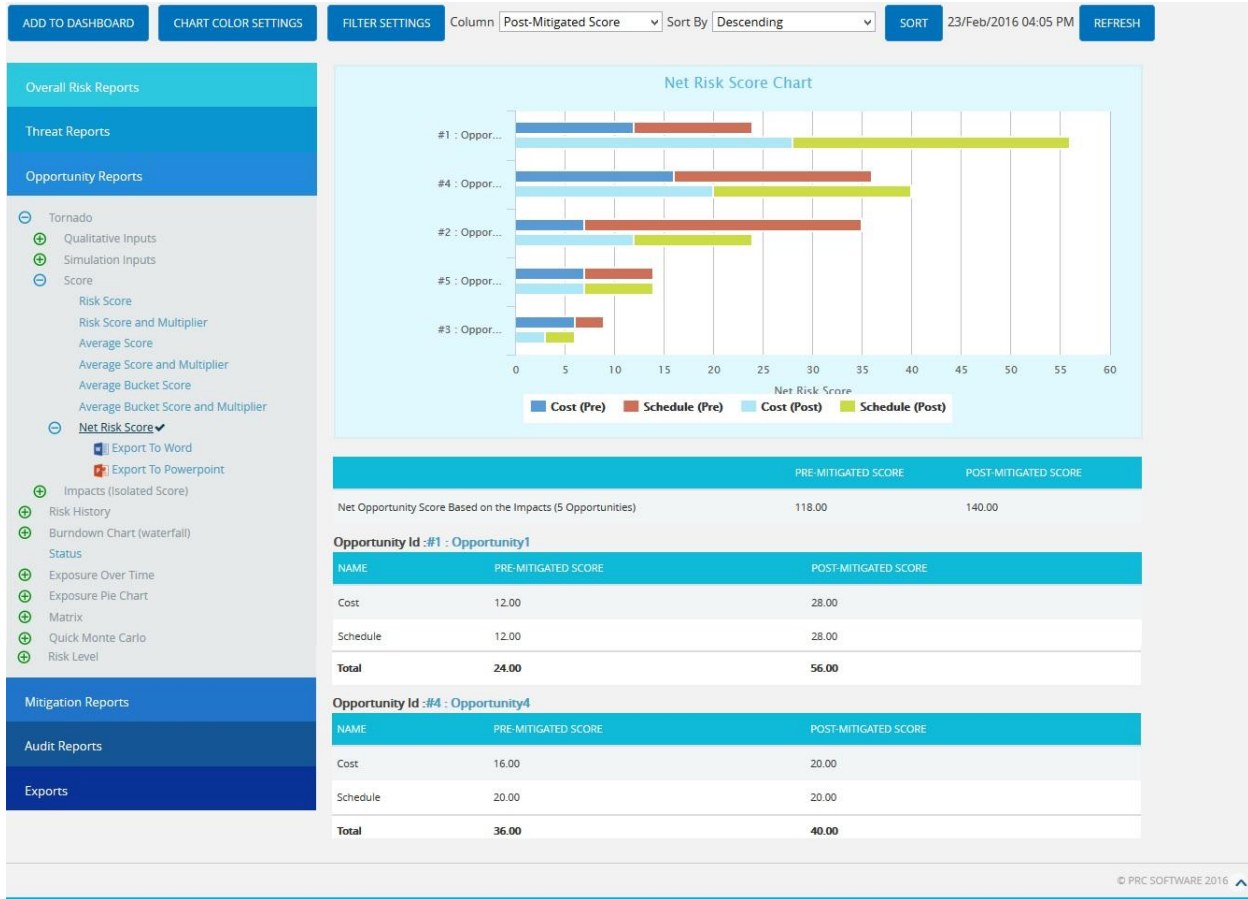3. Click the **Net Risk Score** link to view the net risk score of each threat in the selected project. (Figure 14)
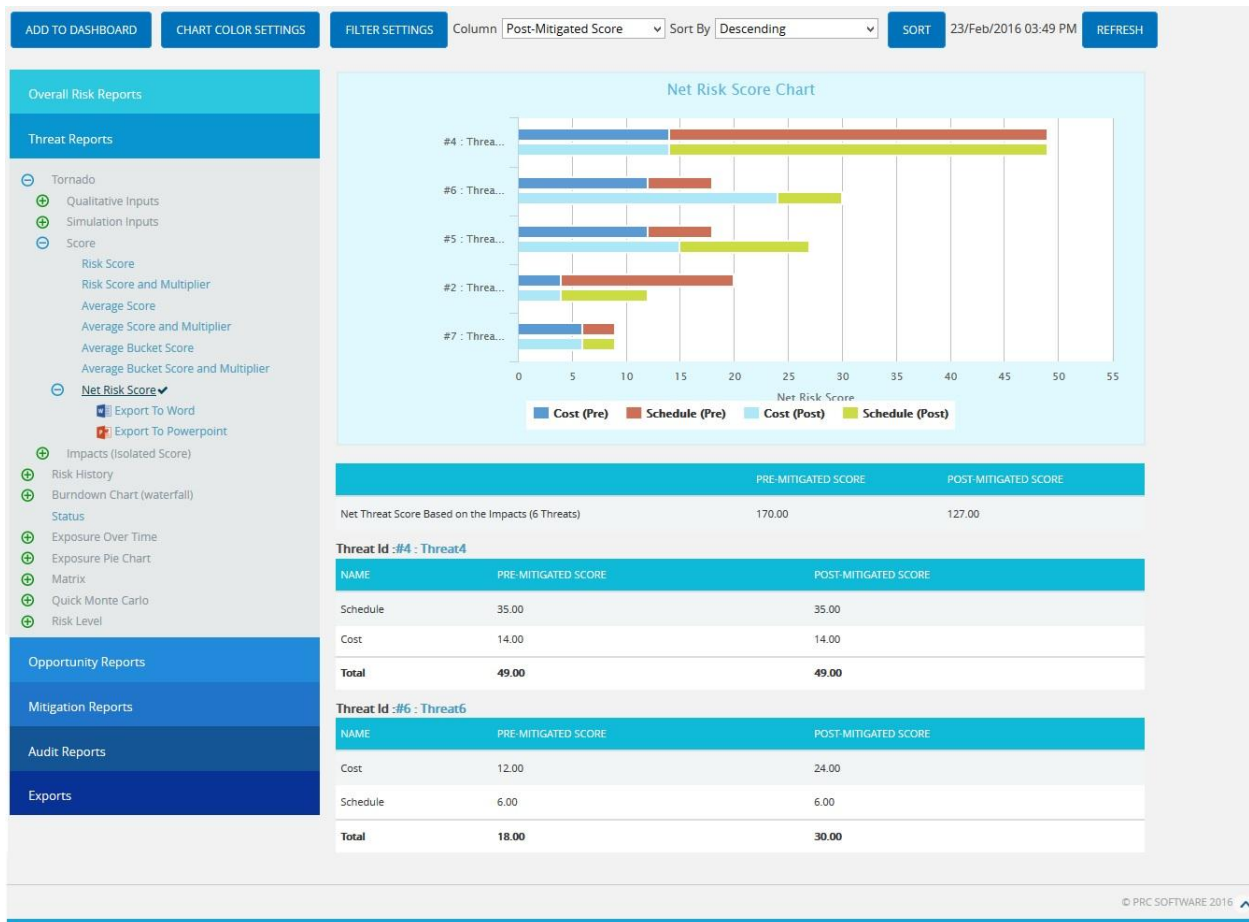
Figure 14

The table below the chart contains each threat's id and name link (Figure 14) that navigates the user to the **Risk Details** page of that particular threat.

Filter:

This functionality is used to apply the **Filter** to the net risk score chart based on the impact types. It shows all the impacts by default.

PRC SOFTWARE

Steps:

1. *Risk Register ---> Reports*
2. Click the **Threat Reports** link to select **Threat Tornado Chart**. (Figure 14)
3. Click the **Net Risk Score** link to view the net risk score of each threat in the selected project.
4. Click the **Add Filter** icon. (Figure 15) A pop up shown in Figure appears.
5. Select the impacts to be shown with their scores and click the **Load Impact Scores** button. (Figure 15)
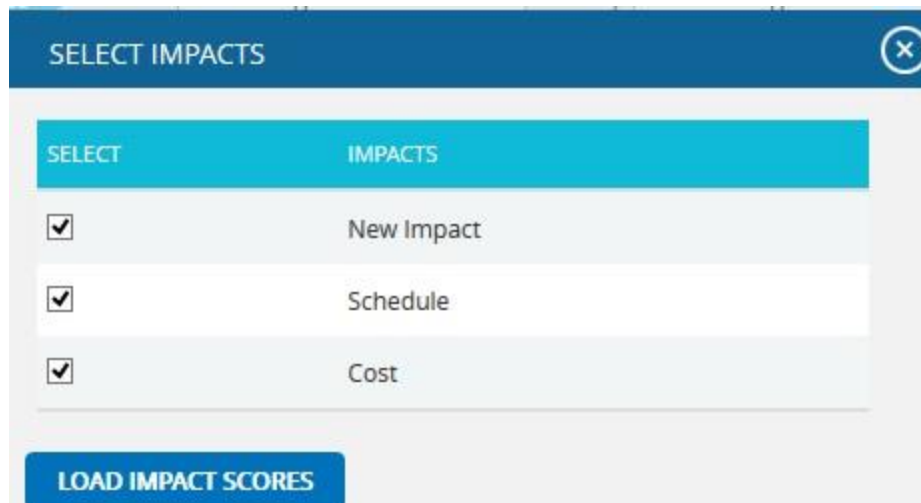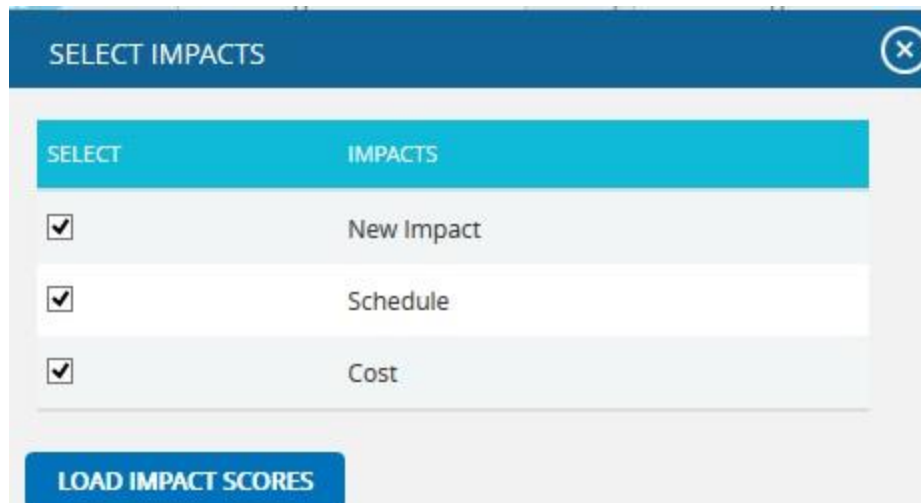

Figure 15

Sort By:

This functionality is used to sort the data for the Net Risk Score chart in ascending or descending order based on the sum of the impact scores.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Threat Reports** link to select **Threat Tornado Chart**. (Figure 14)
3. Click the **Net Risk Score** link to view the net risk score of each threat in the selected project.
4. Select the **Sort By** drop down to sort the report in ascending or descending order based on the sum of the impact scores. (Figure 14)
5. Click the **SORT** button. (Figure 14)

Refresh:

This functionality is used to refresh the chart with the most recently added threat in the project. To refresh the chart, click the **Refresh** button. (Figure 14)

Tornado:

Opportunity Tornado chart corresponds to all the opportunities in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Opportunity Reports** link to select **Opportunity Tornado** Chart. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated), Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both** to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 10)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in the filter section above) (Figure 10)
5. Click the **Risk Score** data option or any other data option to generate the report. (Figure 16) The chart generated and the data table is shown in Figure 17.

Figure 16

RISK ID	RISK NAME	POST-MITIGATED	PRE-MITIGATED
#1	Opportunity1	28.00	12.00
#4	Opportunity4	20.00	20.00
#2	Opportunity2	12.00	28.00
#5	Opportunity5	7.00	7.00
#3	Opportunity3	3.00	6.00

Figure 17

Clicking on the **Risk ID** shown in the data table in Figure 17 navigates to the page:

Risk Register ---> Risk Details (Opportunities)

Opportunity Net Risk Score:

The **Opportunity Net Risk Score Chart** shows the net risk score of each opportunity in a project. The impact types (cost, schedule, safety, etc.) are isolated and evaluated using the probability input. Each opportunity is ranked individually for all impact types. An opportunity with a qualitative score of high for cost and high for schedule will have a higher cumulative score than an opportunity with qualitative scores of high/medium (cost/schedule). Typical risk scoring may only show the highest impact type instead of isolating the impact types. The further breakdown can help to analyze the root cause of an opportunity receiving a high risk score. It shows only 5 opportunities in the chart and 20 opportunities in the table below the chart.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Opportunity Reports** link to select **Opportunity Tornado Chart**. (Figure 18)
3. Click the **Net Risk Score** link to view the net risk score of each opportunity in the selected project.

Figure 18

The table below the chart contains each opportunity's id and name link (Figure 18) that navigates the user to the **Risk Details** page of that particular opportunity.

Filter:

This functionality is used to apply the **Filter** to the net risk score chart based on the impact types. It shows all the impacts by default.

Steps:

1. ***Risk Register ---> Reports***
2. Click the **Opportunity Reports** link to select **Opportunity Tornado Chart**. (Figure 18)
3. Click the **Net Risk Score** link to view the net risk score of each opportunity in the selected project.
4. Click the **Add Filter** icon. (Figure 19) A pop up shown in Figure appears.
5. Select the impacts to be shown with their scores and click the **Load Impact Scores** button. (Figure 19)

Figure 19

Sort By:

This functionality is used to sort the data for the Net Risk Score chart in ascending or descending order based on the sum of the impact scores.

Steps:

1. ***Risk Register ---> Reports***

2. Click the **Opportunity Reports** link to select **Opportunity Tornado Chart**. (Figure 18)

3. Click the **Net Risk Score** link to view the net risk score of each opportunity in the selected project.

4. Select the **Sort By** drop down to sort the report in ascending or descending order based on the sum of the impact scores. (Figure 18)
5. Click the **SORT** button. (Figure 18)

Refresh:

This functionality is used to refresh the chart with the most recently added opportunity in the project. To refresh the chart, click the **REFRESH** button. (Figure 18)

Threats Risk History:

The **Risk History** chart plots a point of time when the corresponding data has changed.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Risk History** link to select the report as **Risk History**. (Figure 1)
3. Select **Threat Reports** link. If the **Threat** option is selected, the history chart will correspond to the threats in the selected project.(Figure 20)
4. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both** to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 20
5. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 20)
6. Click the **Risk Score** data option or any other data option to generate the report. (Figure 21) The chart generated and the data table is shown in Figure 22.

Opportunity Risk History:
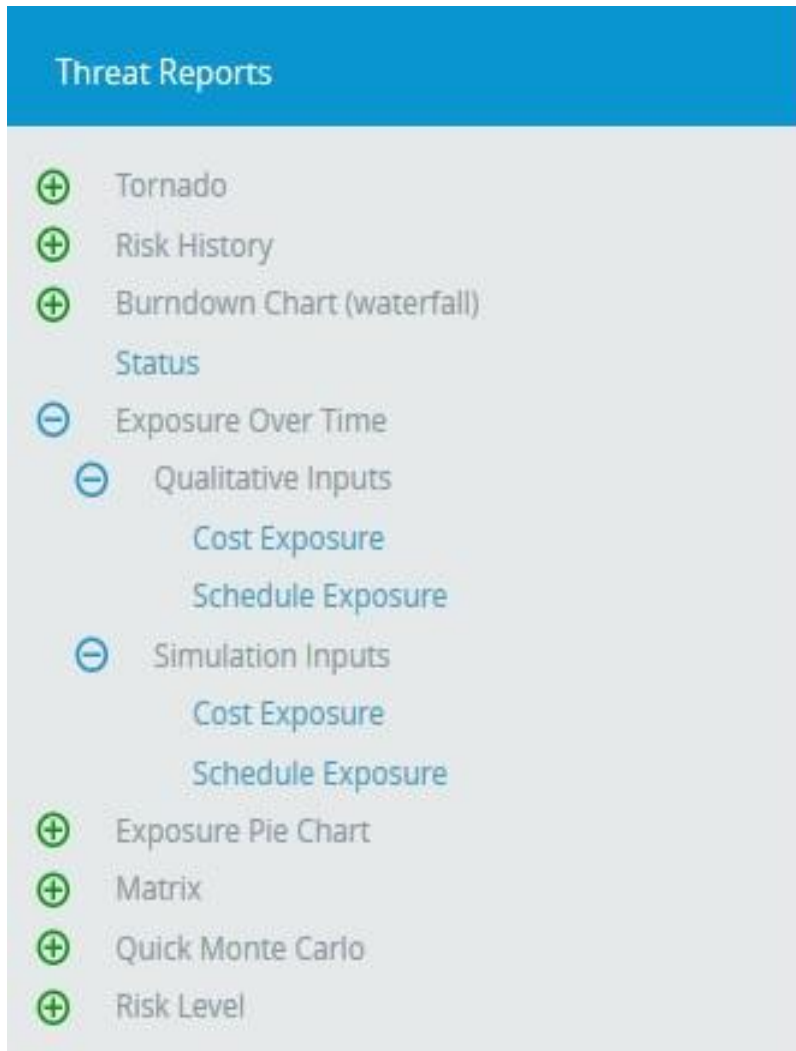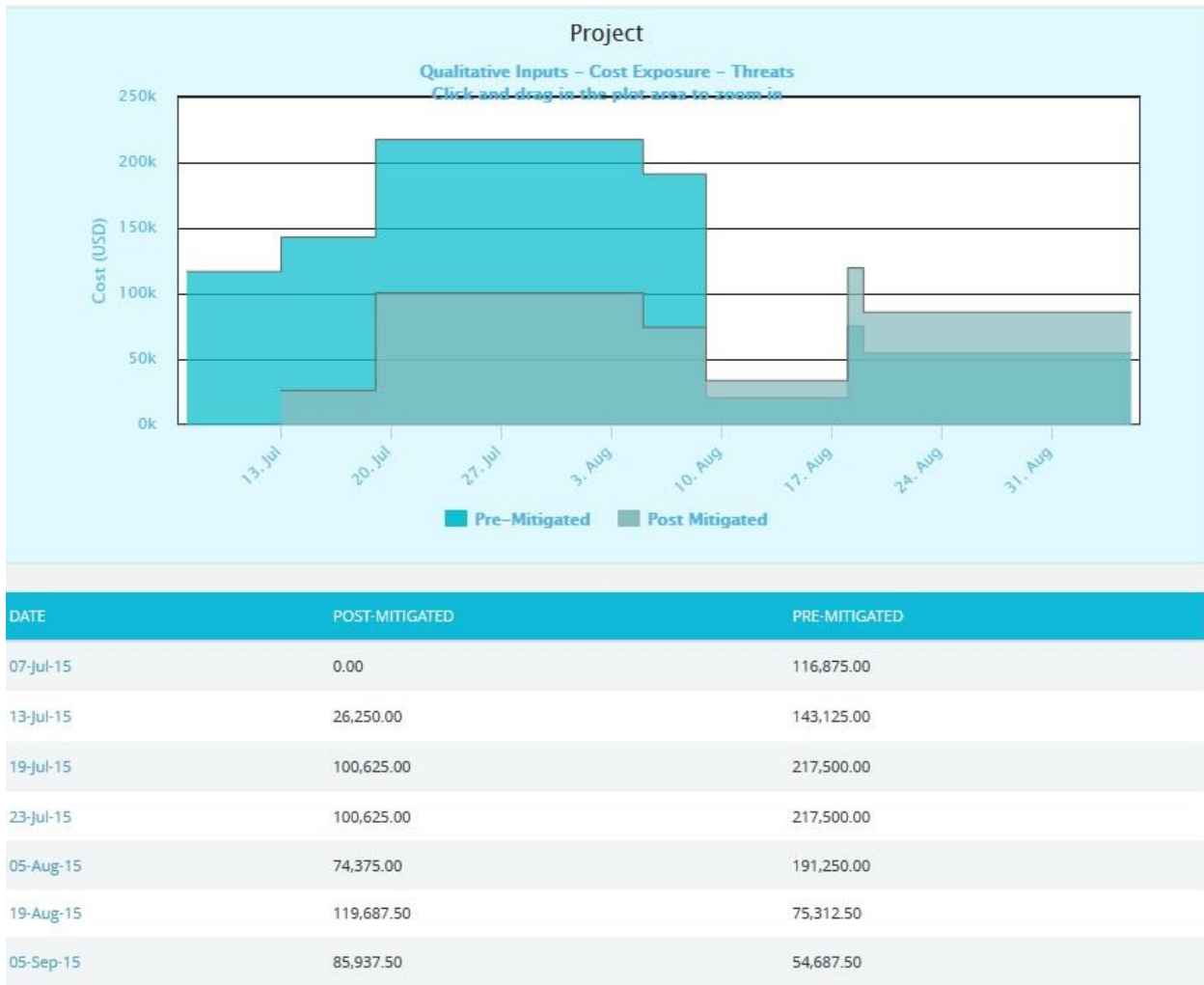
Steps:

1. *Risk Register ---> Reports*
2. Click the **Risk History** link to select the report as **Risk History**. (Figure 1)
3. Select **Opportunity Reports** link. If the **Opportunity** option is selected, the history chart will correspond to the Opportunity in the selected project. (Figure 20)
4. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both** to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 20)
5. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 20)
6. Click the **Risk Score** data option or any other data option to generate the report. (Figure 21) The chart generated and the data table is shown in Figure 23.

Figure 20

Figure 21
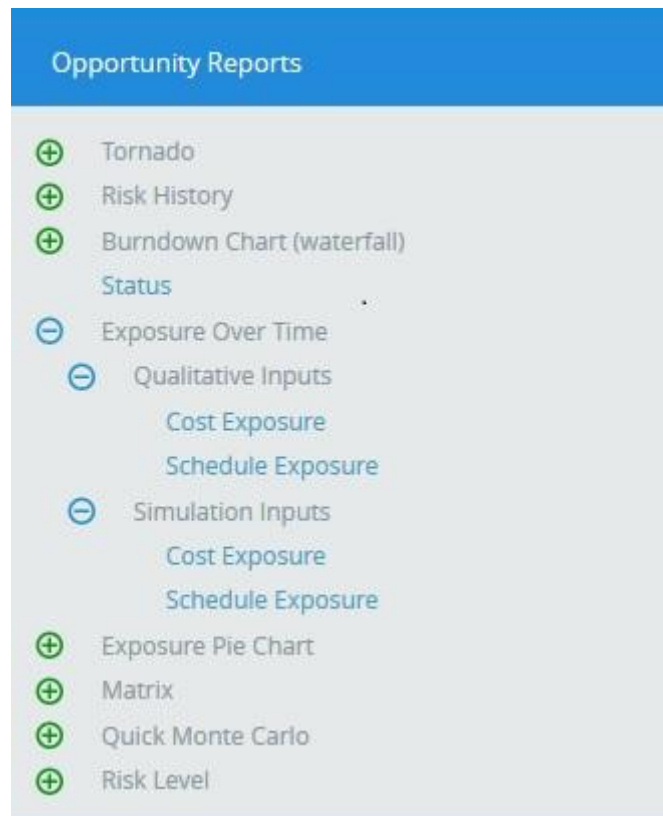
Figure 22

Figure 23

Status:

The **Status** chart is represented by a pie chart and corresponds to the status assigned to the risk.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Status** link to select the report **Status**. (Figure 1)
3. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
4. Click the *Status* link under Threat reports to know the status of threats in the selected project. Click the *Status* link under Opportunity reports to know the status of opportunity in the selected project. To know the status of mitigations in the selected project, click *Status ---> Mitigation Status* link. Click the **Threat and Opportunity Status** or **Total Threats and Opportunities** link under Overall Risk Reports to know the status of threats and opportunities in the selected project. (Figure 24) The chart generated and the data tables are shown in Figure 25 and Figure 26.

Overall Risk Reports

⊕ Tornado
⊖ Status
        Threat & Opportunity Status
        Total Threats and Opportunities
⊕ Exposure Over Time
⊕ Exposure Pie Chart
    Total Risk Count
⊕ Quick Monte Carlo

Threat Reports

⊕ Tornado
⊕ Risk History
⊕ Burndown Chart (waterfall)
    Status
⊕ Exposure Over Time
⊕ Exposure Pie Chart
⊕ Matrix
⊕ Quick Monte Carlo
⊕ Risk Level

Opportunity Reports

⊕ Tornado
⊕ Risk History
⊕ Burndown Chart (waterfall)
    Status
⊕ Exposure Over Time
⊕ Exposure Pie Chart
⊕ Matrix
⊕ Quick Monte Carlo
⊕ Risk Level

Mitigation Reports

⊕ Status
⊕ Threat
⊕ Opportunity
    Mitigation Steps Past Due

Audit Reports

Exports

Figure 24
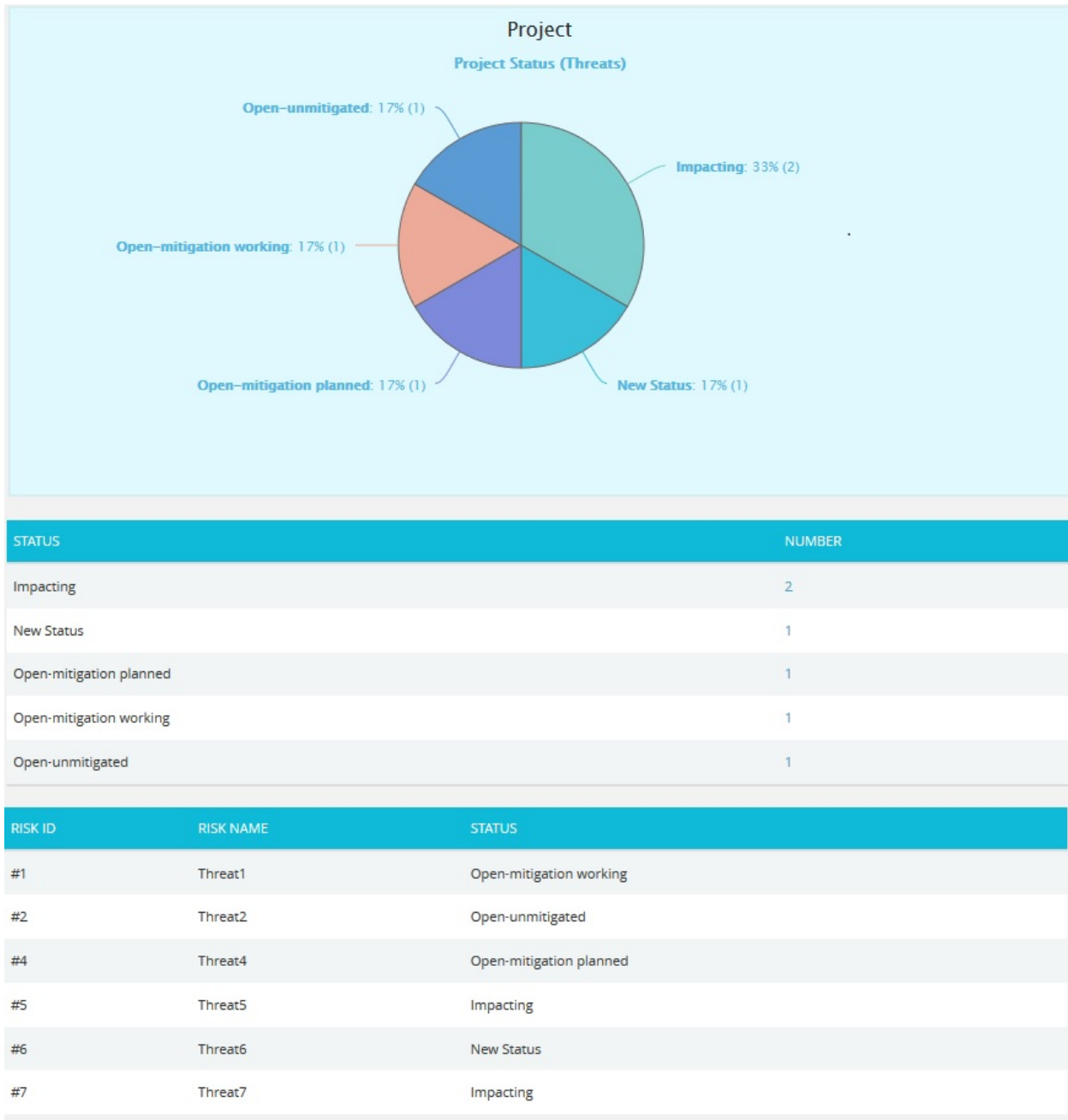
Figure 25

The count under the **Number** column shown in Figure 25 has a link to the **Risk Score Tornado (Threats) Chart**. (Figure 13)

Project

Project Status (Opportunities)

NewStatus1: 20% (1)
Open–mitigated: 20% (1)
Open–mitigation planned: 20% (1)
Open–mitigation working: 20% (1)
Open–unmitigated: 20% (1)

STATUS	NUMBER
NewStatus1	1
Open-mitigated	1
Open-mitigation planned	1
Open-mitigation working	1
Open-unmitigated	1

RISK ID	RISK NAME	STATUS
#1	Opportunity1	Open-unmitigated
#2	Opportunity2	Open-mitigated
#3	Opportunity3	Open-mitigation working
#4	Opportunity4	Open-mitigation planned
#5	Opportunity5	NewStatus1

Figure 26

The count under the **Number** column shown in Figure 26 has a link to the **Risk Score Tornado (Opportunities) Chart**. (Figure 17)

Burndown Chart (Waterfall):

The **Burndown** charts are plotted based on **Threat Start/Finish dates** and **Mitigation Actual and Proposed dates**. The first value used to plot the chart is the **Risk Start Date**.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Burndown Chart (waterfall)** link to select the report **Burndown Chart**. (Figure 1)
3. Select **Threat** or **Opportunity Reports** link. If the **Threat** option is selected, the history chart will correspond to the threats in the selected project. If the **Opportunity** option is selected, the history chart will correspond to the Opportunity in the selected project.
4. Click the **Risk Score** link or any other data option to generate the report for each risk. (Figure 28) The chart generated and the data table is shown in Figure 29.
5. Select any Threat/ Opportunity from the **Select Risk** dropdown. (Figure 27)
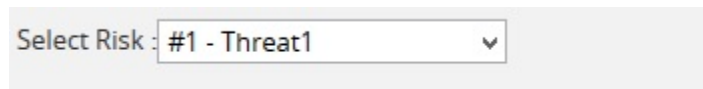
Figure 27

Figure 28

Figure 29

Threat Exposure Over Time:

The **Threat Exposure Over Time** chart is generated based on the Qualitative Cost Exposure, Simulation Cost Exposure, Qualitative Schedule Exposure and Simulation Schedule Exposure for all the threats in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Over Time** link under **Threat Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or **Both** to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 10)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click the **Cost Under Simulation** link or any other data option to generate the report. (Figure 30) The chart generated and the data table is shown in Figure 31.

Figure 30

DATE	POST-MITIGATED	PRE-MITIGATED
07-Jul-15	0.00	116,875.00
13-Jul-15	26,250.00	143,125.00
19-Jul-15	100,625.00	217,500.00
23-Jul-15	100,625.00	217,500.00
05-Aug-15	74,375.00	191,250.00
19-Aug-15	119,687.50	75,312.50
05-Sep-15	85,937.50	54,687.50

Figure 31

The Column **Date** of the data table (Figure 31) contains a link that navigates the user to the following charts:

1. **Simulation Cost Exposure Tornado (Threat),** if the option **Cost Under Simulation For Threat Reports** is selected.
2. **Qualitative Cost Exposure Tornado (Threat),** if the option **Cost Under Qualitative For Threat Reports** is selected.
3. **Simulation Schedule Exposure Tornado (Threat),** if the option **Schedule Under Simulation For Threat Reports** is selected.
4. **Qualitative Schedule Exposure Tornado (Threat),** if the option **Schedule Under Qualitative For Threat Reports** is selected.

Opportunity Exposure Over Time:

The **Opportunity Exposure Over Time** chart is generated based on the Qualitative Cost Exposure, Simulation Cost Exposure, Qualitative Schedule Exposure and Simulation Schedule Exposure for all the opportunities in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Over Time** link under **Opportunity Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) or both to view both **Pre-Mitigated** data and **Post-Mitigated** data from the dropdown. (Figure 10)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click the **Cost Under Simulation** link or any other data option to generate the report. (Figure 32) The chart generated and the data table is shown in Figure 33.

Figure 32

DATE	POST-MITIGATED	PRE-MITIGATED
07-Jul-15	116,875.00	54,687.50
12-Aug-15	203,437.50	118,437.50
14-Aug-15	203,437.50	118,437.50
17-Aug-15	92,187.50	76,875.00
20-Aug-15	92,187.50	76,875.00
10-Sep-15	78,750.00	48,125.00

Figure 33

The Column **Date** of the data table (Figure 33) contains a link that navigates the user to the following charts:

1. **Simulation Cost Exposure Tornado (Opportunities),** if the option **Cost Under Simulation For Opportunity Reports** is selected.
2. **Qualitative Cost Exposure Tornado (Opportunities),** if the option **Cost Under Qualitative For Opportunity Reports** is selected.
3. **Simulation Schedule Exposure Tornado (Opportunities),** if the option **Schedule Under Simulation For Opportunity Reports** is selected.
4. **Qualitative Schedule Exposure Tornado (Opportunities),** if the option **Schedule Under Qualitative For Opportunity Reports** is selected.

Threat Simulation Exposure Pie Chart:

The **Threat Simulation Exposure Pie Chart** depends on the simulation cost exposure of the threats mapped to the break down structure in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Pie Chart** link under Threat Reports. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 34) The chart generated and the data table is shown in Figure 35.

Figure 34

Figure 35

The **Name** column contains a link to **WBS Tornado (Threats)**. (Figure 35)

Opportunity Simulation Exposure Pie Chart:

The **Opportunity Simulation Exposure Pie Chart** depends on the simulation cost exposure of the opportunities mapped to the break down structure in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Pie Chart** link under **Opportunity Reports**. (Figure 1)

3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 36) The chart generated and the data table is shown in Figure 37.
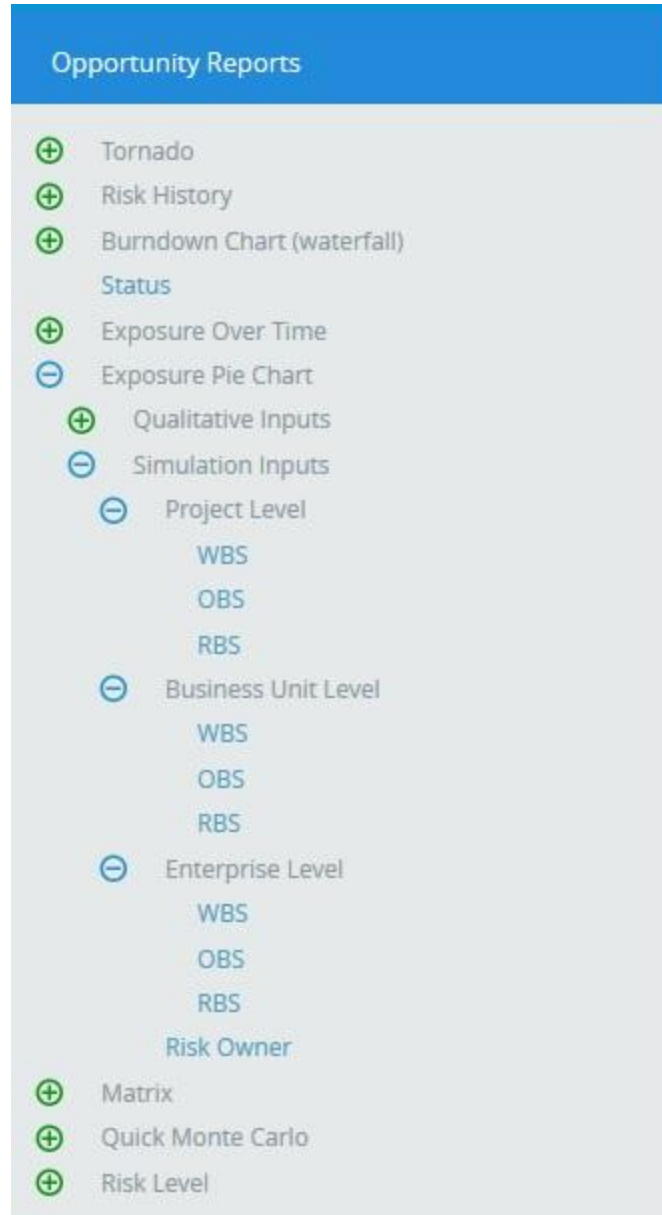
Figure 36

Figure 37

The **Name** column contains a link to **WBS Tornado (Opportunities)**. (Figure 37)

Threat Qualitative Exposure Pie Chart:

The **Threat Qualitative Exposure Pie Chart** depends on the qualitative cost exposure of the threats mapped to the break down structure in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Pie Chart** link under **Threat Reports**. (Figure 1)

3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in the filter section above). (Figure 10)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 38) The chart generated and the data table is shown in Figure 39.

Figure 38

Figure 39

The **Name** column contains a link to **WBS Tornado (Threats)**. (Figure 39)

Opportunity Qualitative Exposure Pie Chart:

The **Opportunity Qualitative Exposure Pie Chart** depends on the qualitative cost exposure of the opportunities mapped to the break down structure in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Pie Chart** link under **Opportunity Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)

4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click the **Project-WBS** link or any other data option to generate the report. (Figure 40) The chart generated and the data table is shown in Figure 41.
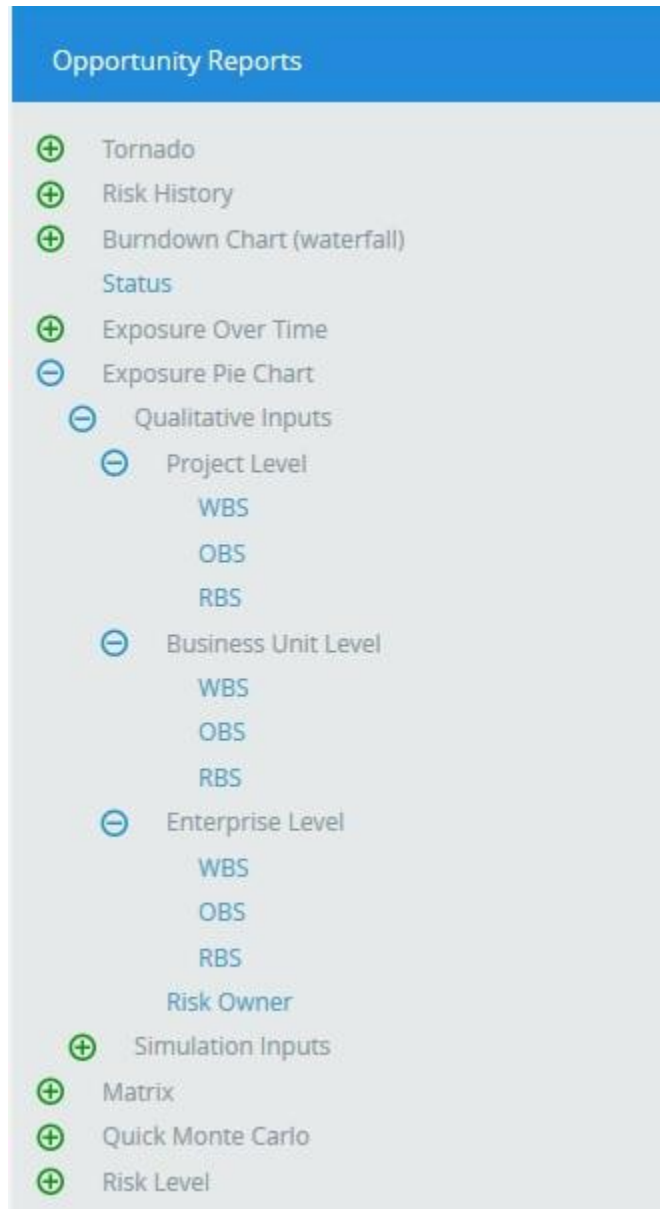
Figure 40

Figure 41

The **Name** column contains a link to **WBS Tornado (Threats)**. (Figure 41)

Matrix Chart:

Threat Score Matrix:

The Threat score matrix provides a summary of all the Threats in the project on the basis of probability and impacts. The details of those Threats whose **Risk Score** is **0** will not be displayed in this chart.

1. The **Pre-Mitigated Risks** section shows the Pre-mitigated risk score of all the threats in the project. For example, 12 (3) indicates that 3 threats has a pre-mitigated score of 12.

2. The **Post-Mitigated Risks** section shows the Post-mitigated risk score of all the threats in the project. For example, 24 (3) indicates that 3 threats has a post-mitigated score of 24.

The color is given based on the color that has been set for the probability and impact scale in the Project Settings Threat scoring system.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Matrix** link under **Threat Reports**. (Figure 1)
3. Click the **Threat Score Matrix** link. (Figure 42) The chart generated and the data table is shown in Figure 42.
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click **REFRESH** button to refresh the chart. (Figure 42)

Figure 42

PRC SOFTWARE
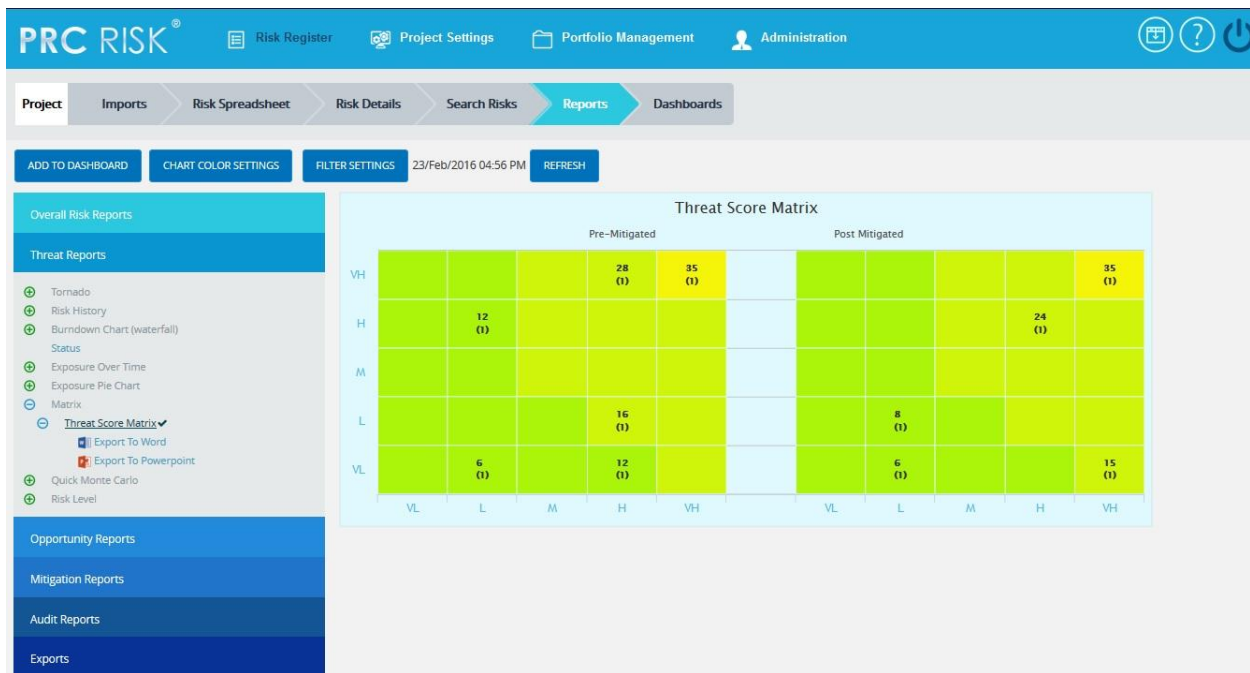
Opportunity Score Matrix:

The Opportunity score matrix provides a summary of all the Opportunities in the project on the basis of probability and impacts. The details of those Opportunities whose **Risk Score** is **0** will not be displayed in this chart.

1. The **Pre-Mitigated Risks** section shows the Pre-mitigated risk score of all the opportunities in the project. For example, 12 (3) indicates that 3 opportunities have a pre-mitigated score of 12.
2. The **Post-Mitigated Risks** section shows the Post-mitigated risk score of all the opportunities in the project. For example, 24 (3) indicates that 3 opportunities have a post-mitigated score of 24.

The color is given based on the color that has been set for the probability and impact scale in the Project Settings Opportunity scoring system.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Matrix** link under **Threat Reports**. (Figure 1)
3. Click the **Opportunity Score Matrix** link. (Figure 43) The chart generated and the data table is shown in Figure 43.
4. Click the **Add Filter** icon to add a filter. (Steps to be followed to add a filter are explained in filter section above). (Figure 10)
5. Click **REFRESH** button to refresh the chart. (Figure 43)
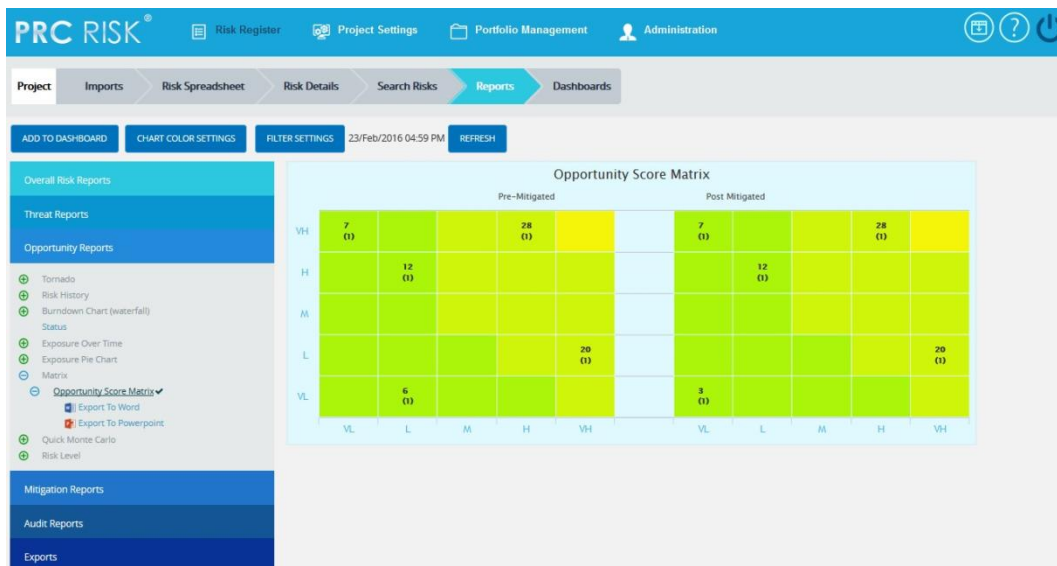
Figure 43

Quick Monte Carlo:

Cumulative S Curve:

The **Cumulative S Curve** report shows the distribution of the **Cost Exposure** of a selected project. It simulates cost values using Triangular Distribution. The columns show the hits for each of the total amount of risk cost exposure. The S curve shows the cumulative frequency of the hits in percentage.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Quick Monte Carlo** link under **Threat / Opportunity Reports**. (Figure 1)
3. Click the **Cumulative S Curve** link. (Figure 44) The chart generated and the data table is shown in Figure 44.
4. Click the **Add Filter** icon. **Cost Analysis Inputs** popup appears where the Iteration number and the Highlights are given based on which the Cumulative Frequency iterations and the Cumulative percentage values to be highlighted are shown in the chart and table. (Figure 45)
5. Click the **Run Analysis and Show Report** button to view the filtered report. (Figure 45)
6. Click **REFRESH** button to refresh the chart. (Figure 44)
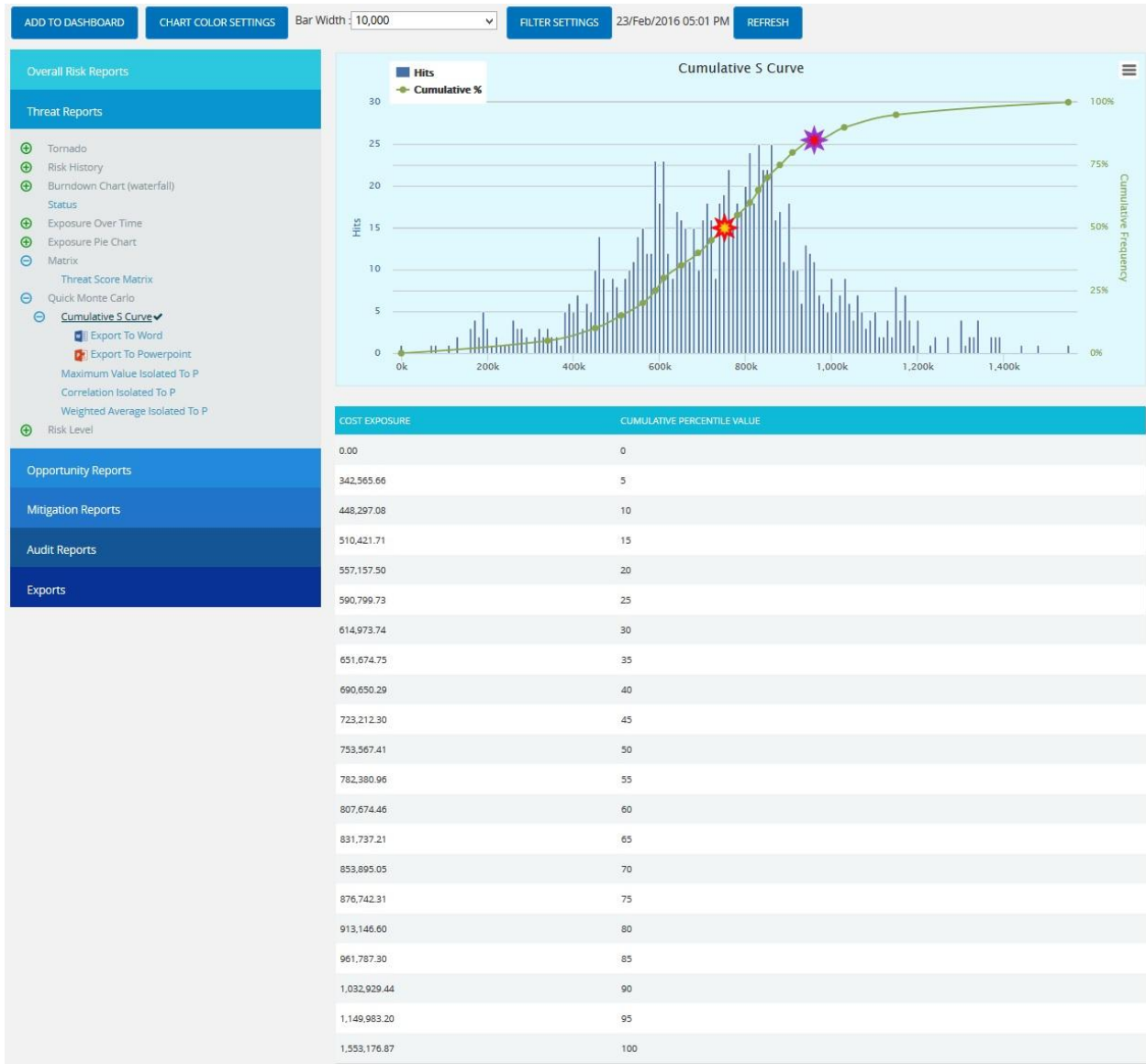
Figure 44

Figure 45

Top Risk Reports:

The **Top Risk** reports are Tornado Charts that depends on the simulated cost exposure values of each risk up to the Pn iteration value, where 'n' is the percentile value of total number of iterations given. The Top Risk reports include **Maximum Value Isolated to P**, **Correlation Isolated to P** and **Weighted Average Isolated to P** reports. The x axis represents the cost exposure and the y axis represents the top risk names. Cost Exposure is the qualitative cost multiplied by probability percentage.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Quick Monte Carlo** link under **Threat / Opportunity Reports**. (Figure 1)
3. Click the **Maximum Value Isolated to P** / **Correlation Isolated to P / Weighted Average Isolated to P** link. (Figure 46) The chart generated and the data table is shown in Figure 46.
4. Click the **Add Filter** icon. Cost Analysis Inputs popup appears where the Cumulative Frequency iteration number is given based on which the iterations are shown in the chart and in the table. (Figure 47)
5. Click the **RUN ANALYSIS AND SHOW REPORT** button to view the filtered report. (Figure 47)
6. Click **REFRESH** button to refresh the chart. (Figure 46)

Figure 46

Figure 47

Risk Level Reports:

The Risk Level reports are Pie Charts which shows the number of risks mapped to each impact level or probability level.

Steps:

1. *Risk Register ---> Reports*

2. Select any of the reports under Risk Level option. (Figure 48) The chart generated and the data table is shown in Figure 49

Figure 48
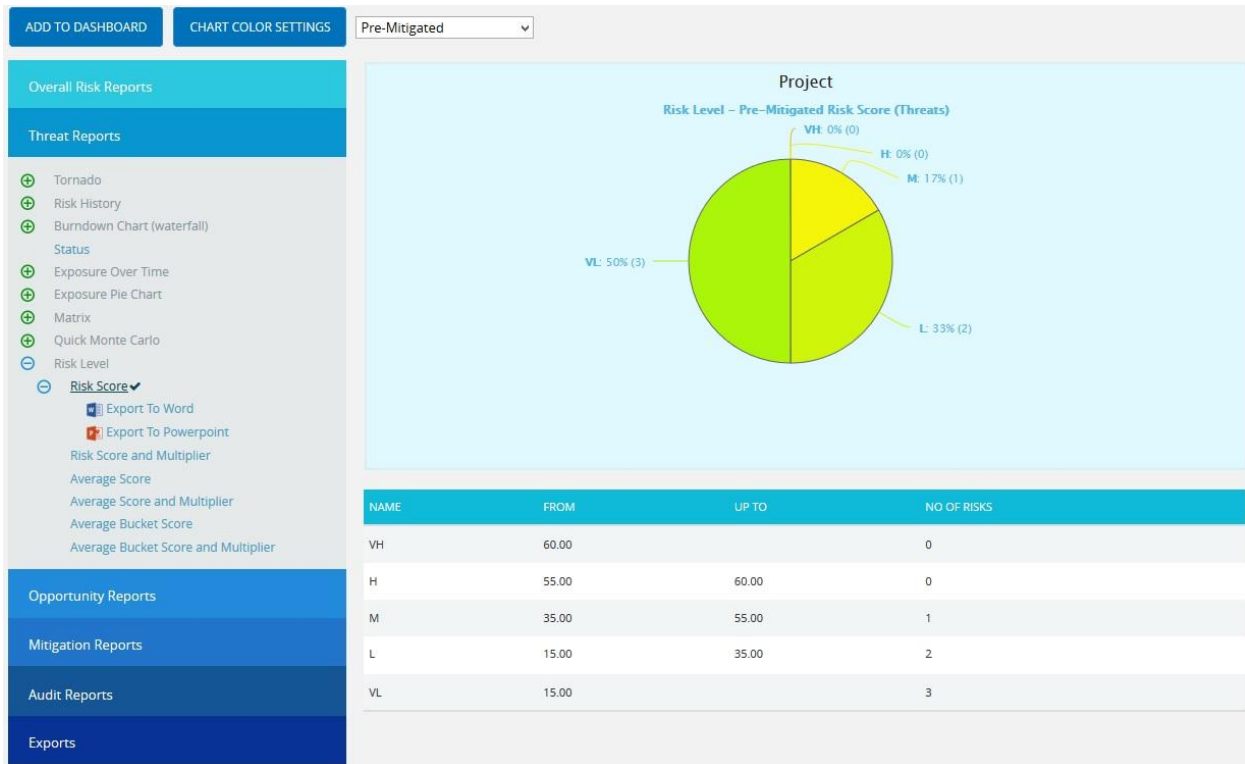
Figure 49

Email Settings:

This functionality is used to export the entire page to Word and send mail to the person selected. The functionality consists of two lists, **Available Users** and **Selected Users**. **Available Users** (Figure 50) contains all the portfolio level users. **Selected Users** (Figure 50) displays the users who have been selected. A user can be added to the **Selected Users** list using the **Add** button. All users under the **Available Users** list can be moved to **Selected Users** list using the **Add All** button. (Figure 50) A single user from the **Selected Users** list can be moved back to the **Available Users** list using the **Remove** button. The **Remove All** button moves all users from the **Selected Users** list to the **Available Users** list. The **Subject** by default has the value **Chart Title**, which can be changed if needed.

Steps:

1. *Risk Register ---> Reports*

2. Generate the desired report by clicking on the type of reports provided to the left.

3. Click the **Email** icon to send email.

4. Select at least one user to whom mail should be sent.

PRC SOFTWARE

5. Enter the message on Message text area.

6. Click the **SEND MESSAGE** button to finish. (Figure 50) To cancel, click the **Cancel** button. (Figure 50)
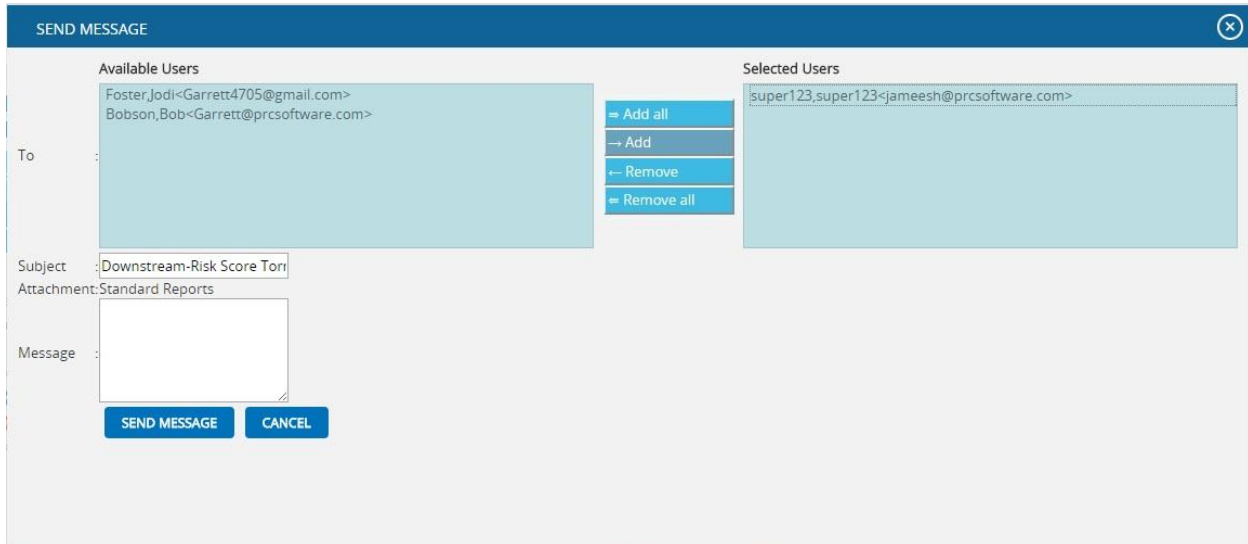
Figure 50

Chart Settings:

This functionality is used to modify the color of the charts generated, and also to create and save the editable chart settings and report script (Figure 49). The accessibility of these chart settings is different for different users.

1. Users with global access **Read/Write** option – The editable dropdown has all the global shared chart settings as well as those saved at the personal level. Global access saved name cannot be edited at the global level.
2. Users with global access **Read only (view only)** option – The editable dropdown has all the global shared chart settings as well as those saved at the personal level. The saved name stores only to the personal level, no other users can view that name.
3. Users with global access **No access** option – The editable dropdown has only the chart settings saved at personal level. The saved name stores only to the personal level, no other users can view that name.

Each chart has its own chart setting.
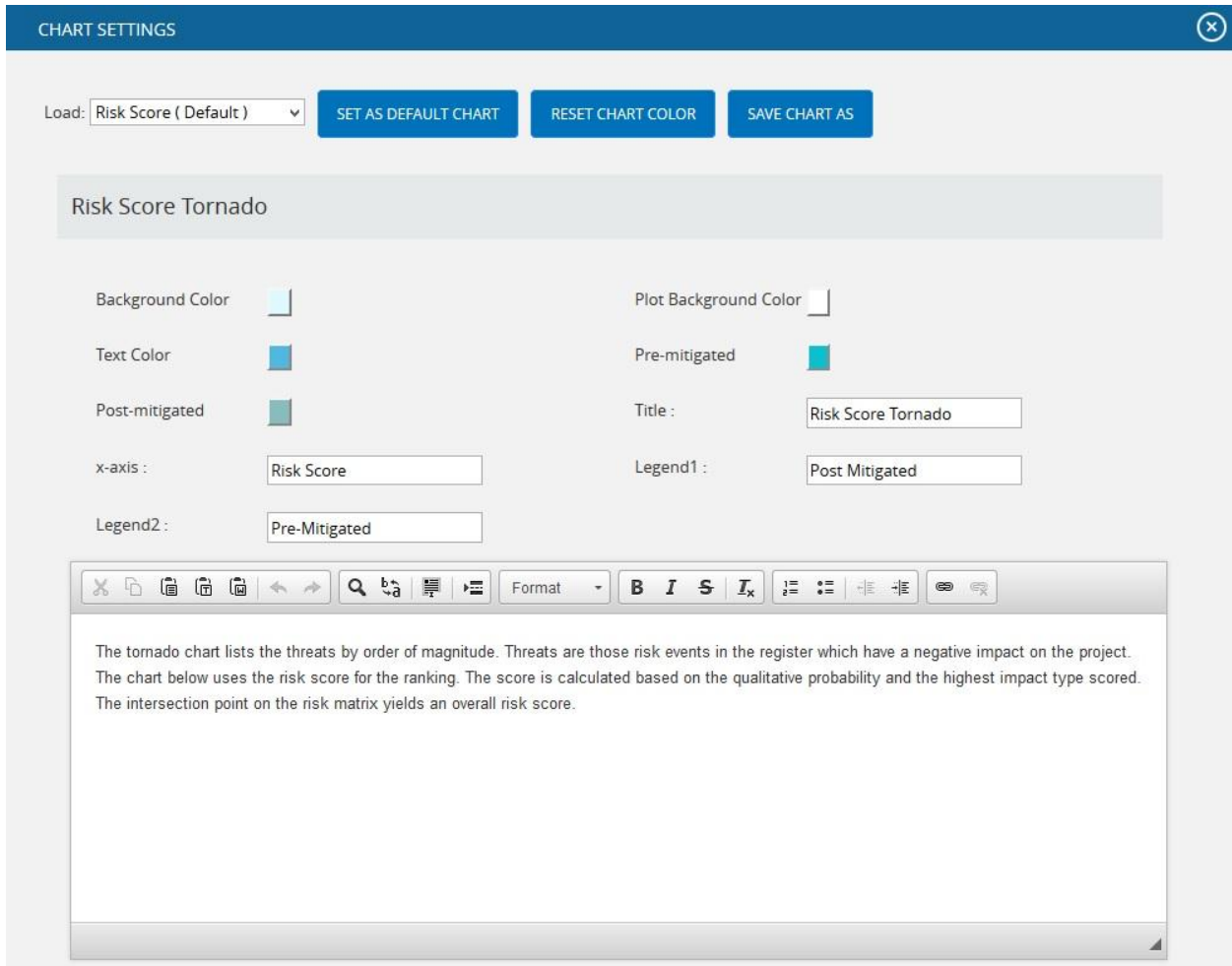
Figure 50

The color is set by clicking on the corresponding color shown beside each field. An example of the color picker for various fields is shown in Figure 52.

Figure 52

Edit Color:

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to chart settings page. (Figure 1)
3. Modify the colors needed.
4. Click the **Apply** button to apply the corresponding color or click **Cancel** to close the color picker. (Figure 52)

Insert Variables to Report Script:

This functionality is to insert the variables like Project Name, Project Cost, Project Owner etc., to the report script of each chart.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. To insert the variables, place the cursor anywhere in the report script and click the required variables from the **Insert Variables to Report Script** section. (Figure 50)

Save As:

This functionality is used to save the user editable chart settings globally or locally with a name and description.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Edit the report script and chart settings and click **SAVE AS** button. (Figure 50)
4. Give the name and description to save and also give the global access option in the pop up appears. (Figure 53)
5. Click the **SAVE** button. (Figure 53)
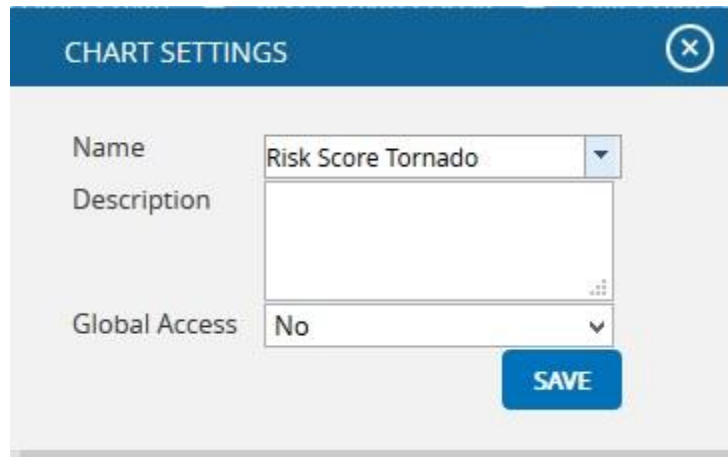
Figure 53

Set As Default Chart:

This functionality is to set the selected chat settings name, as the default chart.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Select a name from the **Load** dropdown. (Figure 50)
4. Click the **SET AS DEFAULT CHART** button to set the selected chart as default. (Figure 50)

Delete:

This functionality is to delete the selected chart settings name from the **Load** dropdown. This button appears only for the created users. The default chart settings name cannot be deleted by any user.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Select a name from the **Load** dropdown. (Figure 50)
4. Click the **DELETE** button to delete.

Reset:

This functionality is used to reset all the values and report script of the chart to predefined values and script.

Steps:

1. *Portfolio Management ---> Reports*
2. Click the **Chart Manager** icon to go to the chart settings page. (Figure 1)
3. Click the **Reset** button to reset the values and report script. (Figure 50)

Go to Reports:
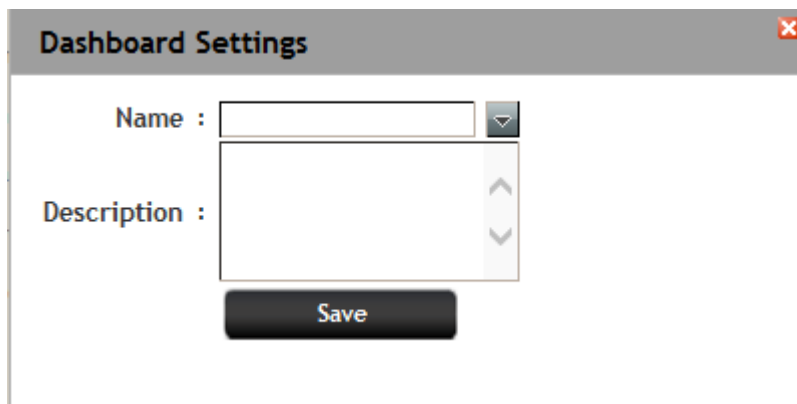
This functionality is used to navigate to Reports page from the chart setting. (Figure 50)

Add To Managers Dashboard:

This functionality is used to add the chart generated to the project's **Managers Dashboard**. A user with **View** access cannot add a chart to **Managers Dashboard**.

 Steps:

1. *Risk Register ---> Reports*

2. Generate the desired report by clicking on the type of reports provided to the left.

3. Click the **ADD TO DASHBOARD** button. (Figure 1) A pop up shown in Figure 54 appears.

4. Enter or select the name. Enter description.

5. Click the **SAVE** button to finish. (Figure 54)

Figure 54

Export to Word:

This functionality is used to export the chart and data table generated to Word.

 Steps:

1. *Risk Register ---> Reports*

2. Generate the desired report by clicking on the type of reports provided to the left.

3. Click the **Export to Word** link. (Figure 1)

Export to PowerPoint:

This functionality is used to export the chart generated to PowerPoint.

Steps:

1. *Risk Register ---> Reports*
2. Generate the desired report by clicking on the type of reports provided to the left.
3. Click the **Export to PowerPoint** link. (Figure 1)

Overall Risk Reports:

Overall Risk Tornado:

The **Overall Risk Tornado** shows all the threats and opportunities on a single tornado with the opportunities being to the left of the zero and the threats being to the right of the zero. The sort order should be based on a next value.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Overall Risk Reports** link to select **Overall Risk Tornado** Chart. (Figure 1)
3. Select the **Qualitative Inputs** or **Simulation Inputs** or **Score** data options to view the charts based on qualitative or simulative inputs or score. (Figure 54)
4. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated), Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)
5. Click the **Highest Cost Impact** data option or any other data option to generate the report. (Figure 54) The chart generated and the data table is shown in Figure 54.
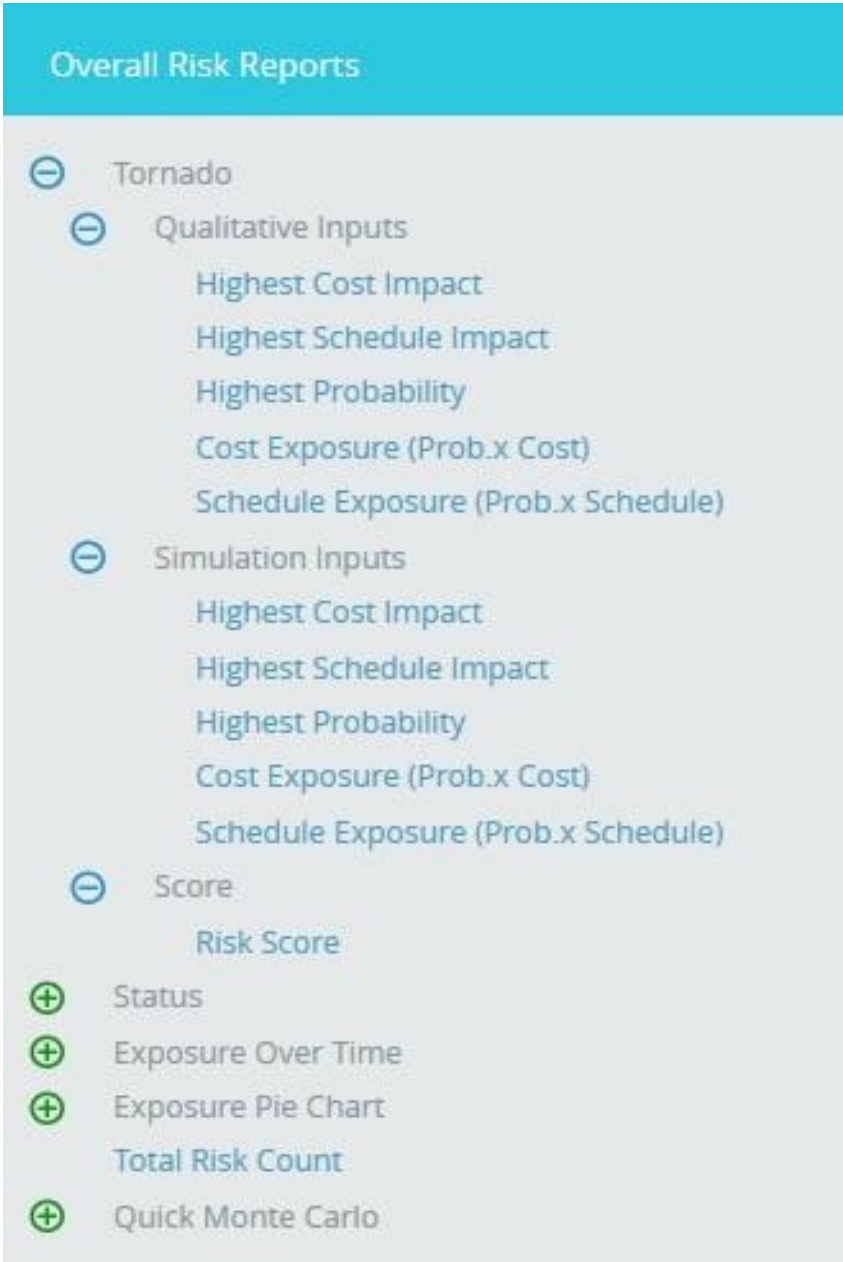
Figure 55

Figure 56

Overall Risk Status:

The **Overall Risk status** has two statuses, **Threat and Opportunity Status** which is represented by a bar diagram that shows total number of threats and opportunities in all statuses and **Total Threats and Opportunities** which is represented by a pie chart that shows total number of threats and opportunities in open status.

1. *Risk Register ---> Reports*

2. Click the **Status** from the **Overall Risk Reports** (Figure 57).
3. Click **Threat and Opportunity Status** to view the chart showing the total number of threats and opportunities in all statuses. The chart generated and the data table is shown in Figure 55.
4. Click **Total Threats and Opportunities** to view the chart showing the total number of threats and opportunities in open status. The chart generated and the data table is shown in Figure 56.

Figure 57

PRC SOFTWARE
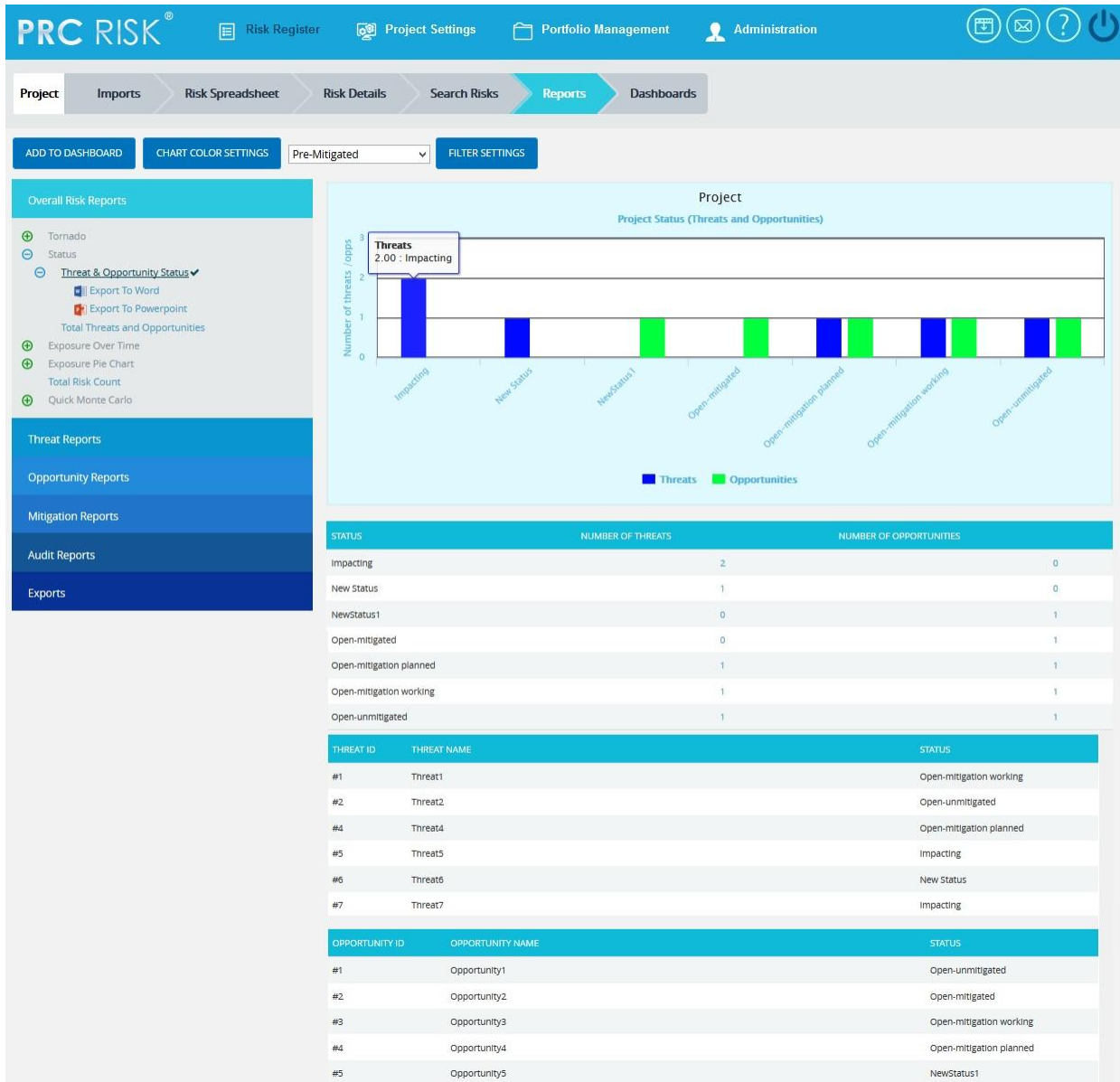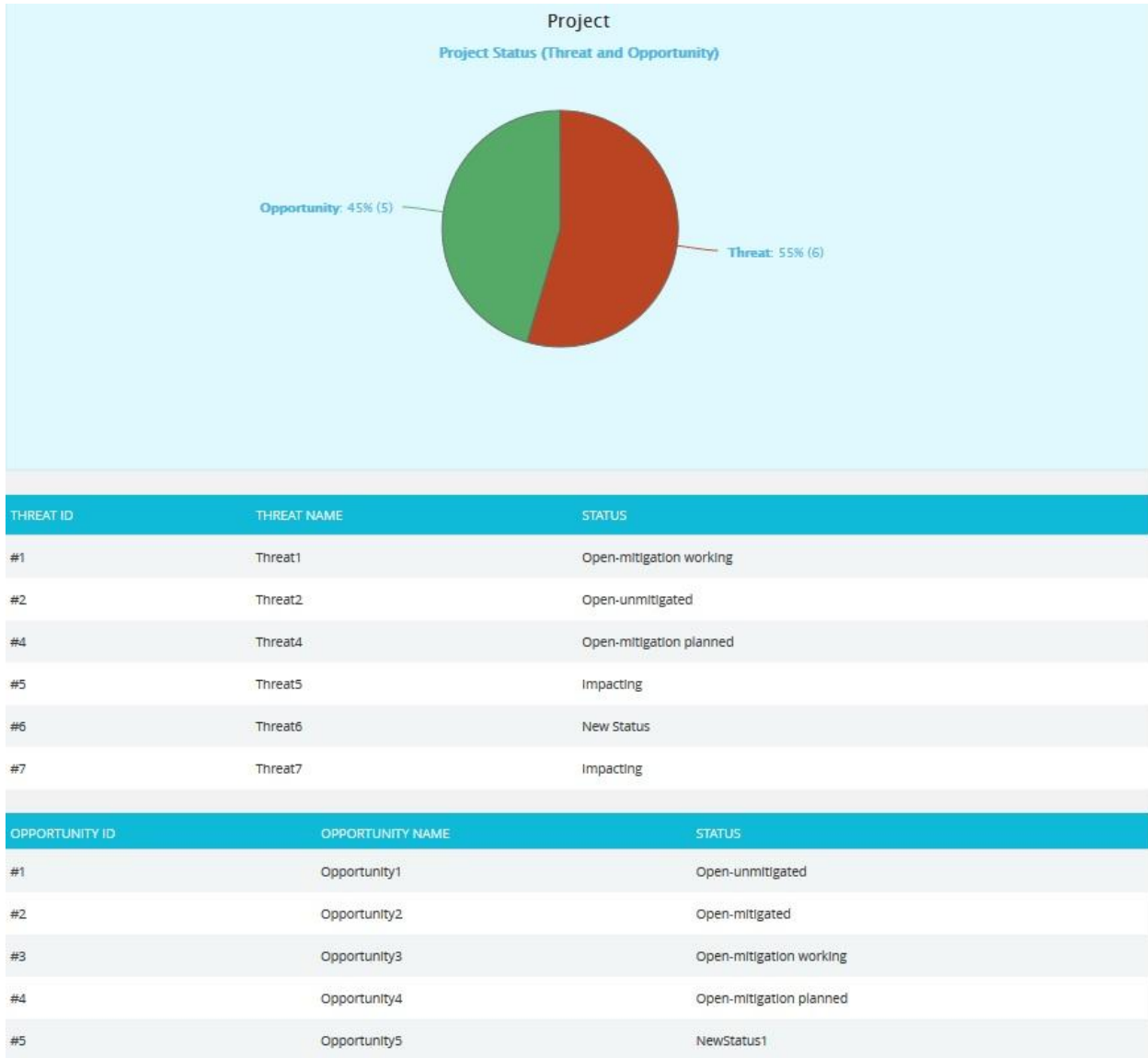
Figure 58

Overall Risk Exposure Over Time:

The **Overall Risk Exposure Over Time** chart is generated based on the Qualitative Cost Exposure, Simulation Cost Exposure, Qualitative Schedule Exposure and Simulation Schedule Exposure for all the threats and opportunities in the selected project. The values on the chart would be a combination of threats and opportunities. Threats would be a positive value and Opportunities would count as a negative value in the net value on the chart.

Steps:

1. *Risk Register ---> Reports*

2. Click the **Exposure Over Time** link under **Overall Risk Reports**. (Figure 1)

3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)

4. Click the **Cost Under Simulation/Qualitative** link or any other data option to generate the report. (Figure 59) The chart generated and the data table is shown in Figure 58.

Figure 59

Figure 60

DATE	THREAT PRE-MITIGATED
07-Jul-15	116,875.00
13-Jul-15	143,125.00
19-Jul-15	217,500.00
23-Jul-15	217,500.00
05-Aug-15	191,250.00
09-Aug-15	20,625.00
05-Sep-15	54,687.50

DATE	OPPORTUNITY PRE-MITIGATED
07-Jul-15	54,687.50
12-Aug-15	118,437.50
14-Aug-15	118,437.50
17-Aug-15	76,875.00
20-Aug-15	76,875.00
28-Aug-15	13,125.00
02-Sep-15	48,125.00
10-Sep-15	48,125.00
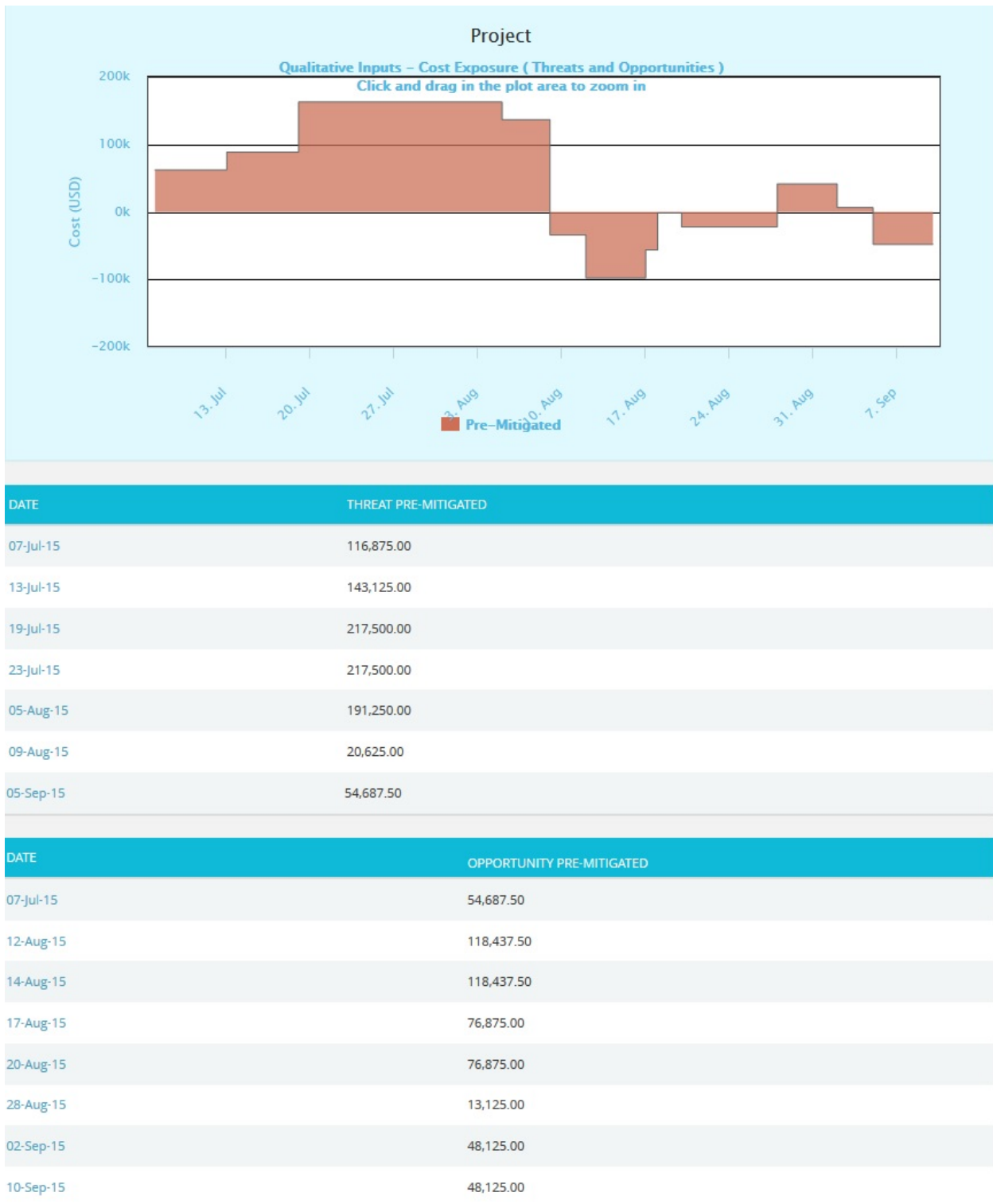
The Column **Date** of the data table (Figure 60) contains a link that navigates the user to the following charts:

1. **Simulation Cost Exposure Tornado (Threat),** if the option **Cost Under Simulation For Threat Reports** is selected.
2. **Qualitative Cost Exposure Tornado (Threat),** if the option **Cost Under Qualitative For Threat Reports** is selected.
3. **Simulation Schedule Exposure Tornado (Threat),** if the option **Schedule Under Simulation For Threat Reports** is selected.
4. **Qualitative Schedule Exposure Tornado (Threat),** if the option **Schedule Under Qualitative For Threat Reports** is selected
5. **Simulation Cost Exposure Tornado (Opportunities),** if the option **Cost Under Simulation For Opportunity Reports** is selected.
6. **Qualitative Cost Exposure Tornado (Opportunities),** if the option **Cost Under Qualitative For Opportunity Reports** is selected.
7. **Simulation Schedule Exposure Tornado (Opportunities),** if the option **Schedule Under Simulation For Opportunity Reports** is selected.
8. **Qualitative Schedule Exposure Tornado (Opportunities),** if the option **Schedule Under Qualitative For Opportunity Reports** is selected.

Overall Risk Simulation Exposure Pie Chart:

The **Overall Risk Simulation Exposure Pie Chart** depends on the simulation cost exposure of the threats and opportunities mapped to the break down structure in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Pie Chart** link under **Overall Risk Reports**. (Figure 1)
3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**),**Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)
4. Click the **Project-WBS** link or any other data option to generate the report. (Figure 61) The chart generated and the data table is shown in Figure 62.

Figure 61
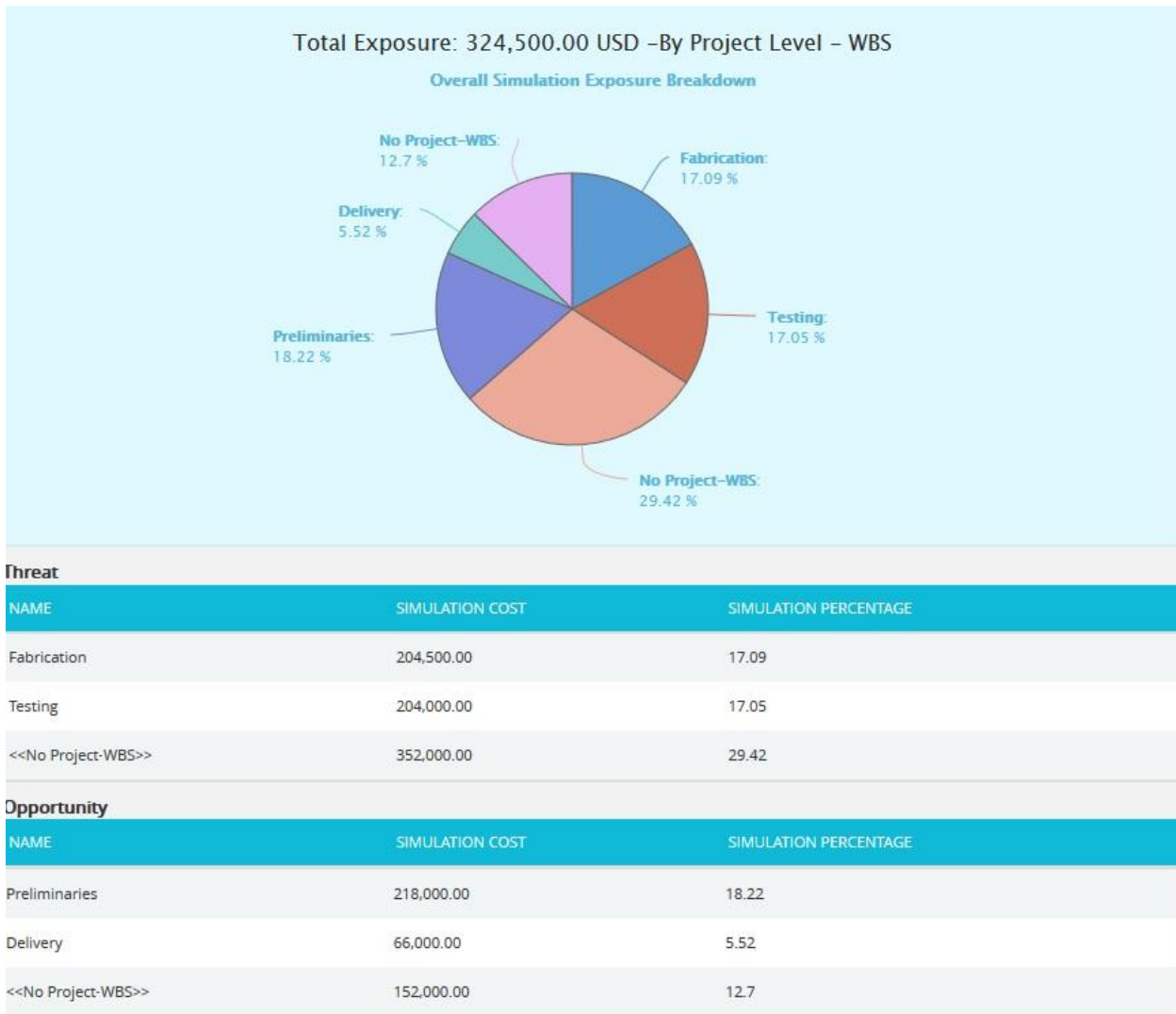
Figure 62

Overall Risk Qualitative Exposure Pie Chart:

The **Overall Risk Qualitative Exposure Pie Chart** depends on the qualitative cost exposure of the threats and opportunities mapped to the break down structure in the selected project.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Exposure Pie Chart** link under **Overall Risk Reports**. (Figure 1)

3. Select **Pre-Mitigated** to view **Pre-Mitigated** data only (sorted by **Pre-Mitigated**), **Post-Mitigated** to view **Post-Mitigated** data (sorted by **Post-Mitigated**) from the dropdown. (Figure 10)
4. Click the **Project-WBS** link or any other data option to generate the report. (Figure 63) The chart generated and the data table is shown in Figure 64.

Figure 63

Figure 64

Total Risk Count:

The **Total Risk Count** chart shows the total count of risks in the selected project, while counting the total number of Threats and Opportunities separately. The Threats and Opportunities count is shown both in percentage and number.

Steps:

1. ***Risk Register ---> Reports***
2. Click the **Total Risk Count** link under **Overall Risk Reports**. (Figure 65)

3. The chart generated and the data table is shown in Figure 65.
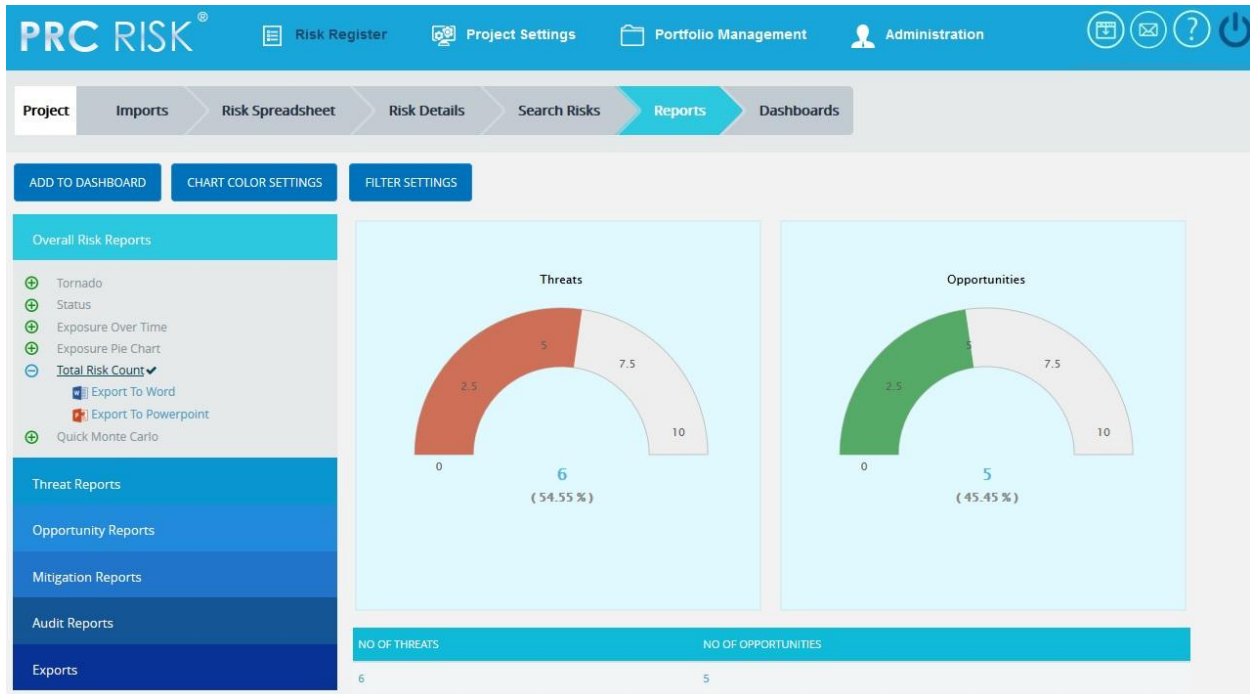
Figure 65

Overall Quick Monte Carlo:

Cumulative S Curve:

The **Cumulative S Curve** report shows the distribution of Cost Exposure of the threats and opportunities of a selected project. It simulates threats and opportunities cost values using Triangular Distribution. The columns show the hits for each of the total amount of risk cost exposure. The S curve shows the cumulative frequency of the hits in percentage.

Steps:

1. *Risk Register ---> Reports*

2. Click the **Quick Monte Carlo** link under **Overall Reports**. (Figure 1)

3. Click the **Cumulative S Curve** link. (Figure 66) The chart generated and the data table is shown in Figure 66.

4. Click the **Add Filter** icon. **Cost Analysis Inputs** popup appears where the Iteration number and the Highlights are given based on which the Cumulative Frequency iterations

and the Cumulative percentage values to be highlighted are shown in the chart and table. (Figure 65)

5. Click the **Run Analysis and Show Report** button to view the filtered report. (Figure 67)

6. Click **Refresh** button to refresh the chart. (Figure 66)
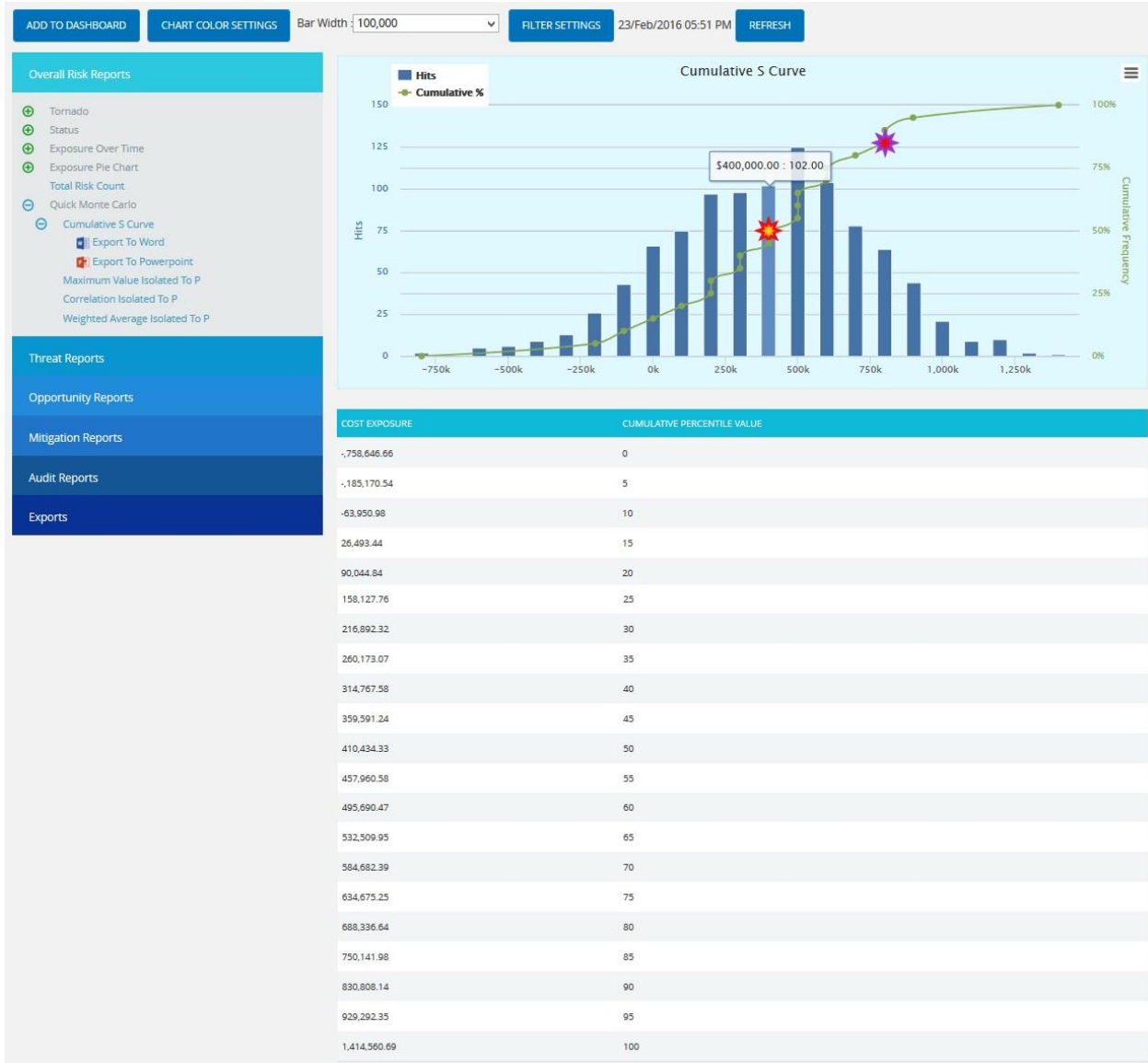
Figure 66

Figure 67

Top Risk Reports:

The **Top Risk** reports are Tornado Charts that shows the top ten threats and opportunities on a single tornado with the opportunities being to the left of the zero and the threats being to the right of the zero. It depends on the simulated cost exposure values of each top Threat and Opportunity up to the Pn iteration value, where 'n' is the percentile value of total number of iterations given. Cost Exposure is the qualitative cost multiplied by probability percentage. The Top Risk reports include **Maximum Value Isolated to P**, and **Correlation Isolated to P and Weighted Average Isolated to P** reports.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Quick Monte Carlo** link under **Overall Reports**. (Figure 1)
3. Click the **Maximum Value Isolated to P** / **Correlation Isolated to P / Weighted Average Isolated to P** link. (Figure 46) The chart generated and the data table is shown in Figure 46.
4. Click the **Add Filter** icon. Cost Analysis Inputs popup appears where the Cumulative Frequency iteration number is given based on which the iterations are shown in the chart and in the table. (Figure 47)
5. Click the **Run Analysis and Show Report** button to view the filtered report. (Figure 47)
6. Click **Refresh** button to refresh the chart. (Figure 46)
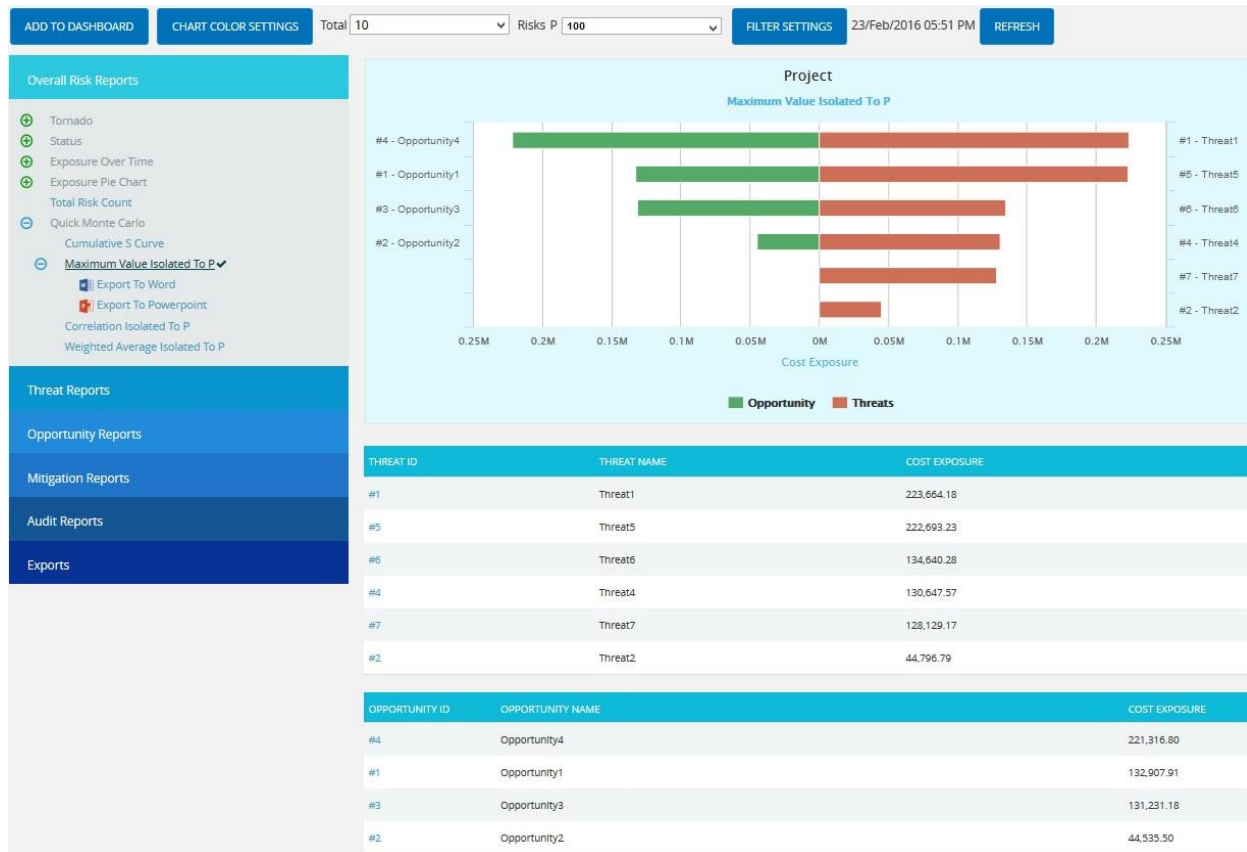
Figure 68

Mitigation Efficiency Reports:

The **Mitigation Efficiency** reports are Tornado charts that list the top efficient mitigations linked to threats or opportunities by order of magnitude. These reports consider the mitigations that reduce the overall impacts of the mapped threats or opportunities. The **Most Linked Mitigations** reports show the top efficient mitigations linked to the most number of threats or opportunities.

Steps:

1. ***Risk Register ---> Reports***
2. Click the **Mitigation Reports** link to select **Threat / Opportunity Mitigation Efficiency** Reports. (Figure 69)

PRC SOFTWARE

3. Click the **Most Linked Mitigations** data option or any other data option to generate the report. (Figure 68) The chart generated and the data table is shown in Figure 71.
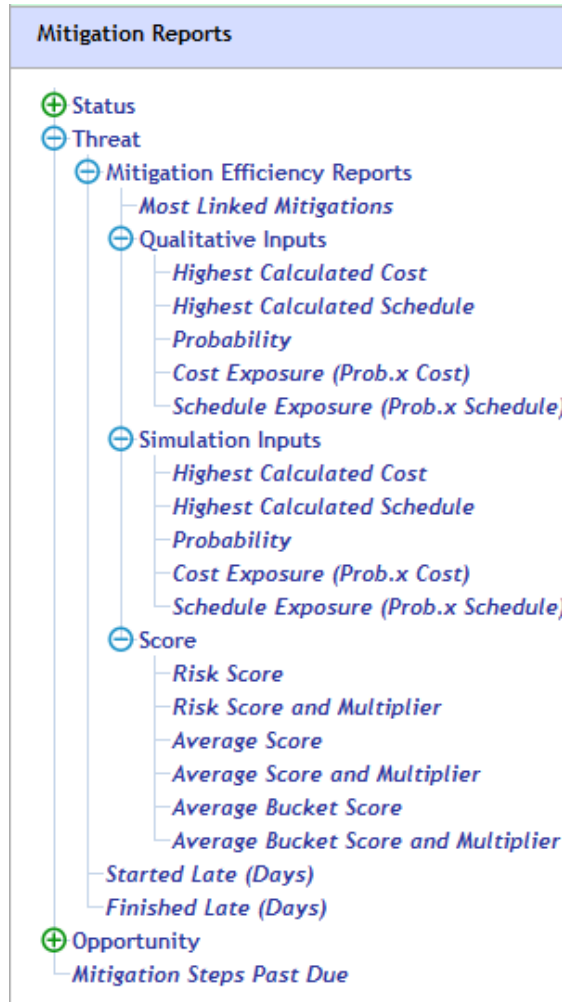
Figure 69
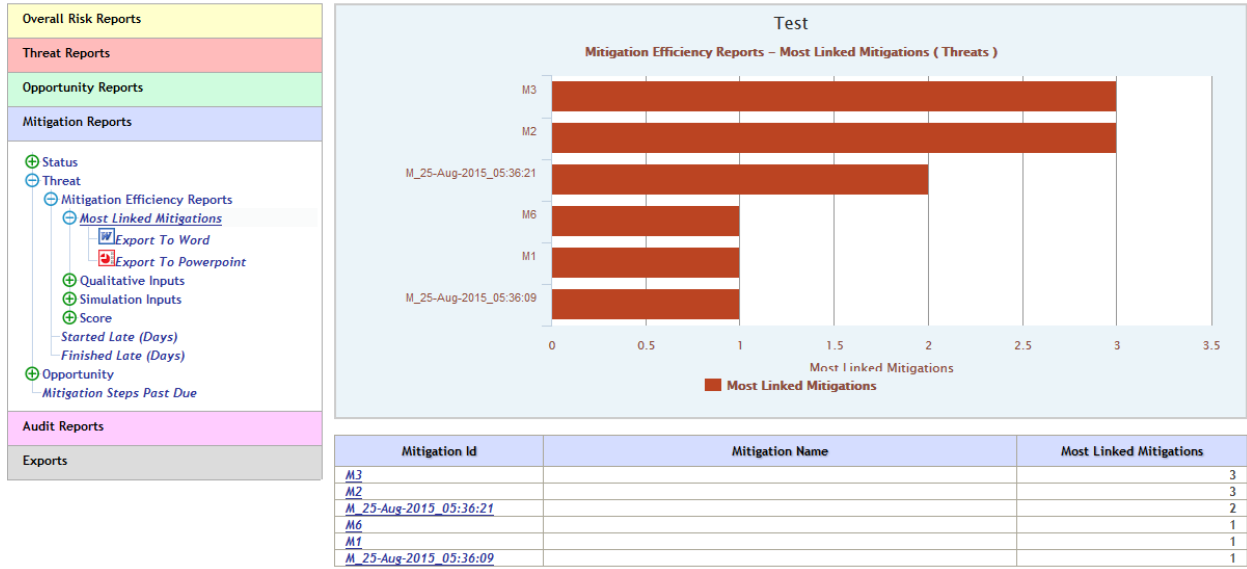
Figure 70

Mitigation Steps Past Due:

The Mitigation Steps Past Due shows all mitigation steps that are past due in the selected project. This is calculated on the basis of the number of days that a mitigating action has started or finished late. In this chart the needle is pointed to the total number of overdue mitigations.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Mitigation Steps Past Due** link under **Mitigation Reports**. (Figure 71)
3. The chart generated and the data table is shown in Figure 71.
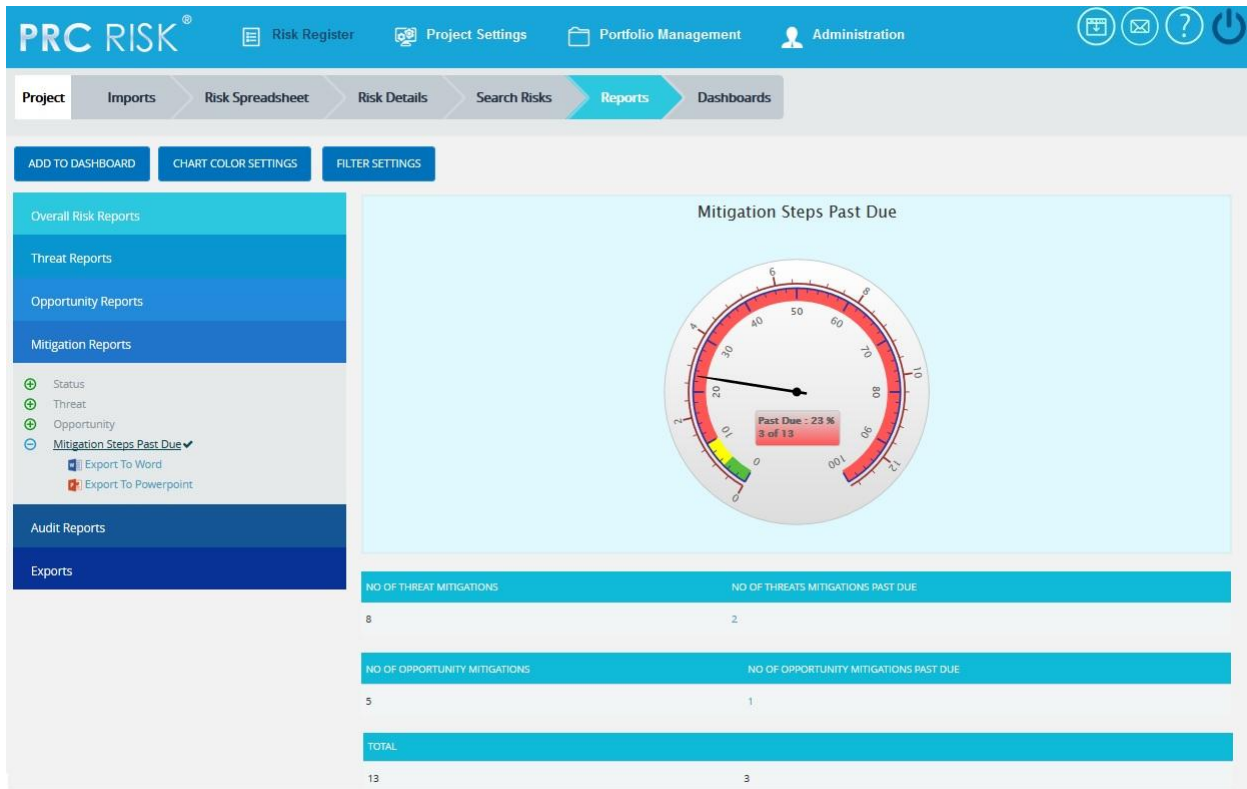
Figure 71

Exports:
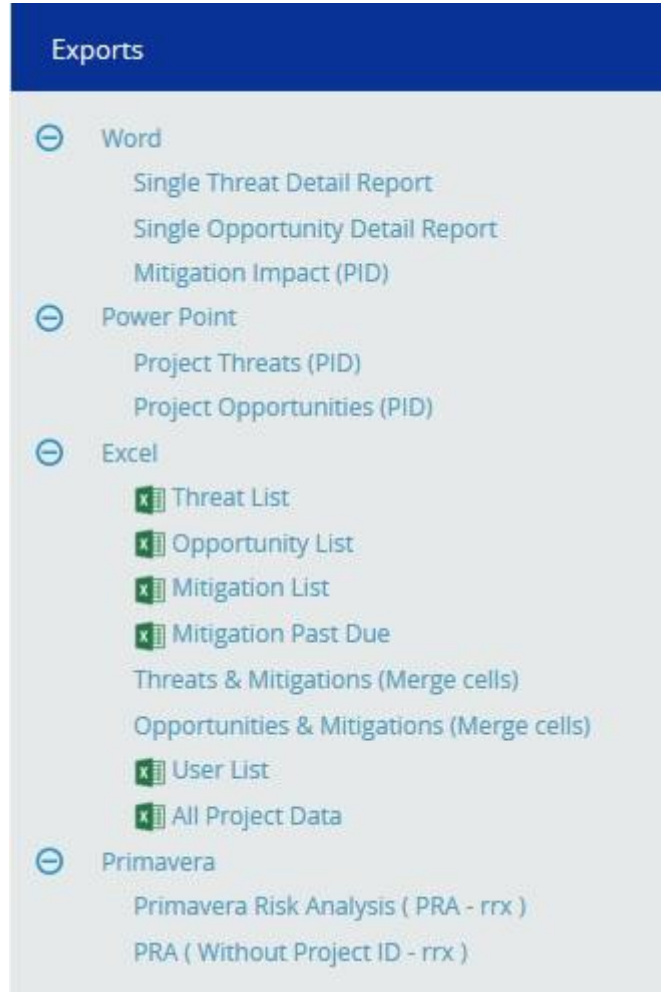
Figure 72

Single Threat Detail Report

The Single Threat Detail Report shows the details of the threat summary of the selected threat (Figure 71). Select **Threat Id** from the **Select Risk** dropdown to view the summary report of the threat. To export the threat summary report to Word, click the **Export to Word** link.

PRC SOFTWARE

Closure Section

Cost Incurred	0.00
Schedule Impact Incurred	0
Date Risk Occurred	
Closure Note	
Lessons Learned	

Qualitative Score

Probability	Very High
Cost	High
Schedule	High
New Impact	Undefined
Multiplier	
(Pre) Highest Impact	28.00
(Pre) Highest Impact & Multiplier	28.00
(Pre) Average Score	28.00
(Pre) Average Score & Multiplier	28.00
(Pre) Average Bucket Value	28.00
(Pre) Average Bucket Value & Multiplier	28.00

Simulation Data

Linked Projects	Project
Link to Schedule ID(s)	
Simulation Probability	88
Cost (Min)	
Cost (ML)	400,000.00
Cost (Max)	500,000.00
Schedule (Min)	
Schedule (ML)	6
Schedule (Max)	7
Duration Unit	Hours

Data Mapping

Project Work Breakdown Structure	map data
Project Organizational Breakdown Structure	map data
Project Risk Breakdown Structure	map data
Business Work Breakdown Structure	map data
Business Organizational Breakdown Structure	map data
Business Risk Breakdown Structure	map data
Enterprise Work Breakdown Structure	map data
Enterprise Organizational Breakdown Structure	map data
Enterprise Risk Breakdown Structure	map data
Enterprise Risk	map data

Figure 73

Single Opportunity Detail Report

The Single Opportunity Detail report shows the details of the selected opportunity (Figure 74). Select **Opportunity Id** from the **Select Risk** dropdown to view the summary report of the opportunity.

Recovery Plan

Recovery Plan Name	
Recovery Plan Description	
Recovery Plan Notes	

Closure Section

Cost Incurred	0.00
Schedule Impact Incurred	0
Date Risk Occurred	
Closure Note	
Lessons Learned	

Qualitative Score

Probability	Very High
Cost	High
Schedule	High
New Impact	Undefined
Multiplier	
(Pre) Highest Impact	28.00
(Pre) Highest Impact & Multiplier	28.00
(Pre) Average Score	28.00
(Pre) Average Score & Multiplier	28.00
(Pre) Average Bucket Value	28.00
(Pre) Average Bucket Value & Multiplier	28.00

Simulation Data

Linked Projects	Project
Link to Schedule ID(s)	
Simulation Probability	88
Cost (Min)	
Cost (ML)	400,000.00
Cost (Max)	500,000.00
Schedule (Min)	
Schedule (ML)	6
Schedule (Max)	7
Duration Unit	Hours

Data Mapping

Project Work Breakdown Structure	map data
Project Organizational Breakdown Structure	map data
Project Risk Breakdown Structure	map data
Business Work Breakdown Structure	map data
Business Organizational Breakdown Structure	map data
Business Risk Breakdown Structure	map data
Enterprise Work Breakdown Structure	map data
Enterprise Organizational Breakdown Structure	map data
Enterprise Risk Breakdown Structure	map data
Enterprise Risk	map data

Mitigation Plan Information	
Plan Name	
Plan Description	
Plan Owner	
Response Type	
Proposed Cost	255,000.00
Actual Cost	279,400.00

Mitigation Steps						
#	MITIGATION ID	MITIGATION STEP NAME	MITIGATION STEP DESCRIPTION	MITIGATION OWNER	QUALITATIVE SCORE	PROPOSED MI
1	O_#1	Miti opp1	Miti oop des1	super123 super123	28.0	06-Jul-15

Figure 74

Mitigation Impact (PID) Report

The Mitigation Impact (PID) report shows the details of the mitigations for the selected threat/ opportunity (Figure 75).

Steps:

1. Select **Threat/Opportunity** from the **Select Threat/Opportunity** dropdown.
2. Select **Threat Id** or **Opportunity Id** from the **Select Risk** dropdown to view the mitigation summary of the Threat/Opportunity.
3. To export mitigation summary report to Word, click the **Export to Word** link.

Figure 75

PRC SOFTWARE
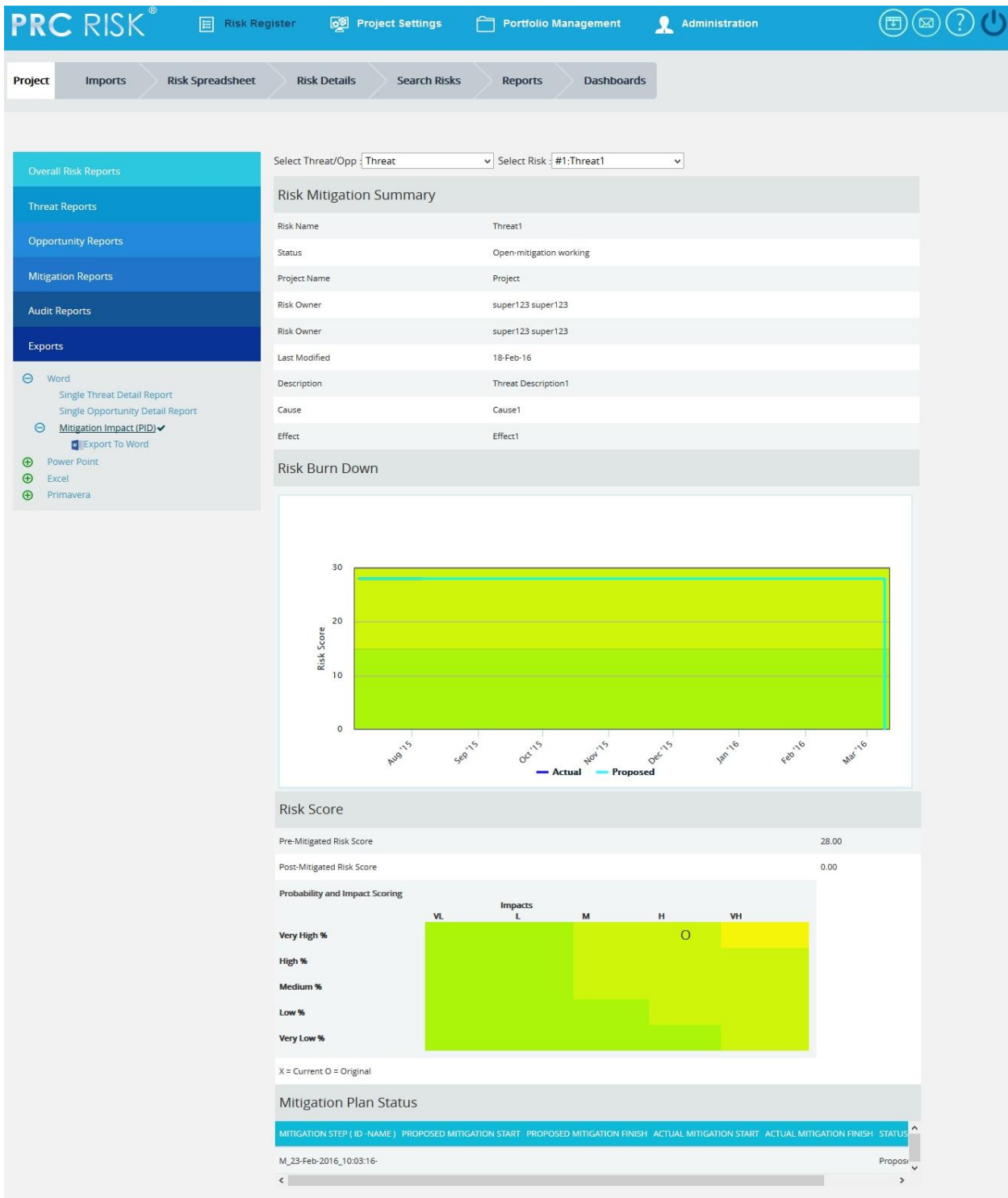
Project Threats (PID)

The **Project Threats (PID)** page provides a summary of all the risks in the project. (Figure 76) The details of those risks whose **Risk Score** is **0.000** will not be displayed in this page. The **Risk Overview** page also provides a mitigation summary report of each risk. While it is exported to **Power point**, the highest 10 numbers of burn down chart will be created.

Risk Overview Report

Pre-mitigated Risks :

Prob \ Impacts	VL	L	M	H	VH
VH %				1(28.0)	1(35.0)
H %		1(12.0)			
M %					
L %				1(16.0)	
VL %		1(6.0)		1(12.0)	

Post-mitigated Risks :

Prob \ Impacts	VL	L	M	H	VH
VH %					1(35.00)
H %				1(24.00)	
M %					
L %		1(8.00)			
VL %		1(6.00)			1(15.00)

Figure 76

Pre-Mitigated Risks:

The **Pre-Mitigated Risks** section shows the Pre-mitigated risk score of all the risks in the project. 1(24.000) indicates that only one threat has a pre-mitigated score of 24.000.

Post-Mitigated Risks:

The **Post-Mitigated Risks** section shows the Post-mitigated risk score of all the risks in the project.

1(24.000) indicates that only one threat has a post-mitigated score of 24.000.

Project Opportunities (PID)

The **Project Opportunities (PID)** page provides the overall information of all the risks in the project. (Figure 75)The details of those risks whose **Risk Score** is **0.000** will not be displayed in this page. The **Opportunity Overview** page also provides a mitigation summary report of each risk. While it is exported to **Power point**, the highest 10 numbers of burn down chart will be created.

Risk Overview Report					
Pre-mitigated Risks :					
Prob \ Impacts	**VL**	**L**	**M**	**H**	**VH**
VH %		1(7.0)			
H %					
M %			1(5.0)		
L %					
VL %					
Post-mitigated Risks :					
Prob \ Impacts	**VL**	**L**	**M**	**H**	**VH**
VH %		1(7.0)			
H %					
M %			1(5.0)		
L %					
VL %					

Figure 77

Pre-Mitigated Risks:

The **Pre-Mitigated Risks** section shows the Pre-mitigated risk score of all the risks in the project. 1(10.000) indicates that only one threat has a pre-mitigated score of 10.000.

Post-Mitigated Risks:

The **Post-Mitigated Risks** section shows the Post-mitigated risk score of all the risks in the project.

1(10.000) indicates that only one threat has a post-mitigated score of 10.000.

Export threat details:

This functionality is used to export the threat list of the selected project to **MS Excel.** A sample Excel sheet after export (only few fields are shown) is illustrated in Figure 76.

Steps:

1. *Risk Register ---> Reports ---> Exports*
2. Click the **Threat List** link to export. (Figure 72)

Id	Name	Description	Cause	Effect	Status	Start Date
ID_2 tht	Schedule tht	Schedule critical path	A P&ID is a complex	It may slow down the	Open-unmitigated	07/02/2012

Figure 78

Export Opportunity details:

This functionality is used to export the opportunity list of the selected project to **MS Excel.** A sample Excel spreadsheet after export (only few fields are shown) is illustrated in Figure 73.

Steps:

1. *Risk Register ---> Reports ---> Exports*
2. Click the **Opportunity list** link to export. (Figure 70)

Id	Name	Description	Cause	Effect	Status	Start Date
ID_2 opp	Schedule opp	Schedule critical path rur	A P&ID is a complex	It may slow down the	Open-unmitigated	07/02/2012

Figure 79

Export Mitigation details:

This functionality is used to export the mitigation list of the selected project to **MS Excel.** A sample Excel spreadsheet after export (only few fields are shown) including the mitigation details for both Threat and Opportunity is illustrated in Figure 80.

Steps:

1. *Risk Register ---> Reports ---> Exports*
2. Click the **Mitigation List** link to export. (Figure 72)

Risk ID	Mitigation Step Name	Mitigation Step Description	Mitigation Plan Name	Mitigation Owner	Response Type
ID_2 tht	Arrange Trainging for team ASAP	Training	Arrange Training	super123 super123	reduce
ID_2 opp	Arrange Trainging for team ASAP	Training	Arrange training	super123 super123	reduce

Figure 80

Export Mitigation Past Due details:

This functionality is used to export the mitigation past due list of the selected project to **MS Excel.** A sample sheet is shown (only few fields are displayed) in Figure 79. The **Number of Days** column in the mitigation past due list is calculated as follows:

Number of Days = **Current Date -Proposed Mitigation Finish**

For example, consider the first row in Figure 79. The **Proposed Mitigation Finish** is 03/23/2012 and if the current date is 04/12/2012, the Number of days = 20.

Steps:

1. *Risk Register ---> Reports ---> Exports*

2. Click the **Mitigation Past Due** link to export. (Figure 72)

Risk ID	Mitigation Step Name	Mitigation Step Description	Proposed Mitigation Start	Proposed Mitigation Finish	Number Of Days
ID_2 tht	Arrange Trainging for team ASAP	Training	03/02/2012	03/23/2012	20
ID_2 opp	Arrange Trainging for team ASAP	Training	03/01/2012	03/30/2012	13

Figure 81

Threats and Mitigations (Merge Cells):

The **Threat and Mitigation (Merge Cells)** report allows grouping of Threat Identification and Threat Analysis with its corresponding Mitigation Steps. The user has the option to set the fields, colors and titles for the three sections. To export this report to Excel, click **Export to Excel** link.

Steps:

1. *Risk Register ---> Reports*

2. Click the **Threats and Mitigations (Merge Cells)** link under **Exports**. (Figure 82)

3. Select the fields to be exported from the **Available Fields** column.

4. Click the **Copy** button to copy the selected field to the **Selected Fields** column or click the **Copy all** button to copy all the fields to the **Selected Fields**.

5. Similarly select the fields to be removed from the **Selected Fields** column and click the **Remove** button or click the **Remove All** button to remove all the fields from the **Selected Fields** column.

6. Click the **Export to Excel** link to export the selected fields. (Figure 82)
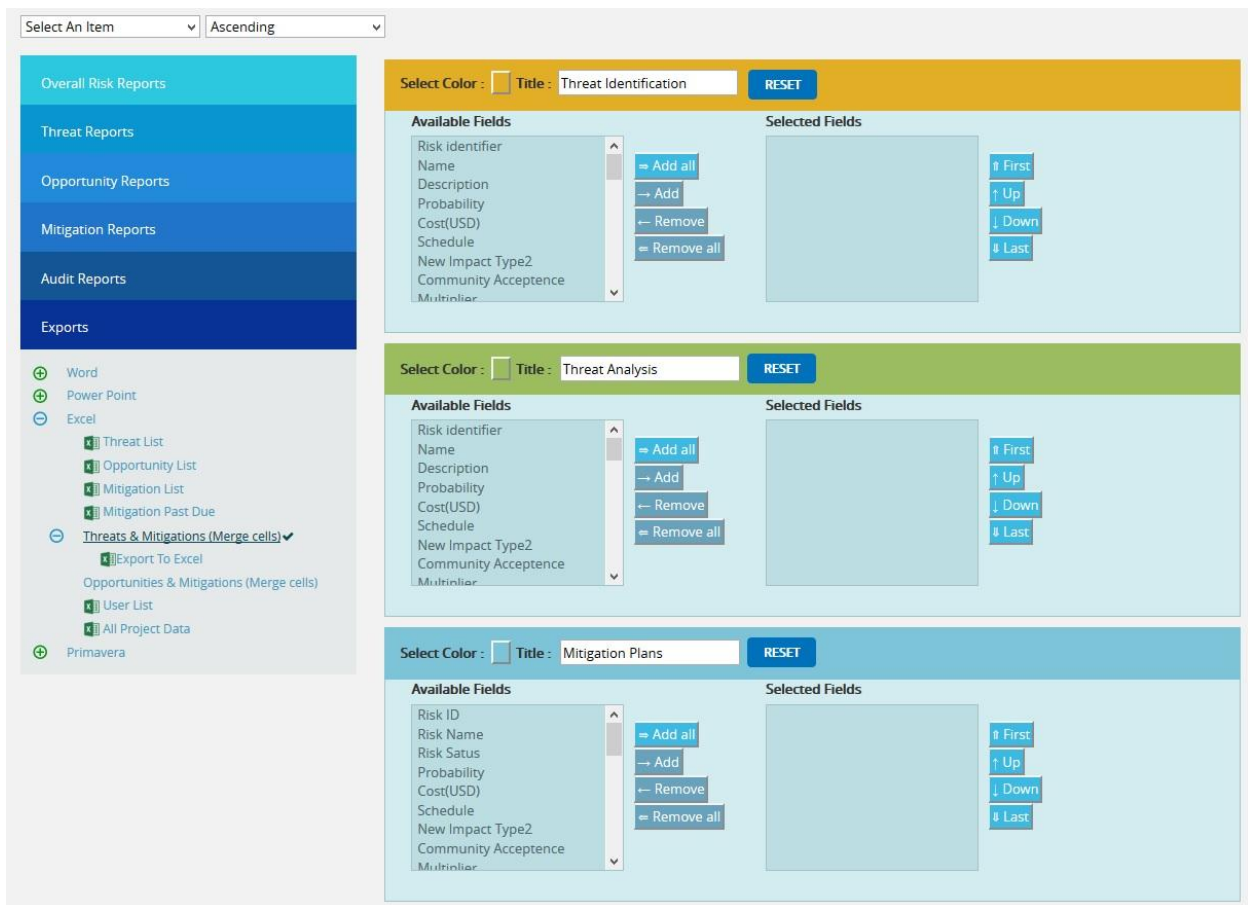
Figure 82

Opportunities and Mitigations (Merge Cells):

The **Opportunities and Mitigations (Merge Cells)** report allows grouping of Opportunity Identification and Opportunity Analysis with its corresponding Mitigation Steps. The user has

the option to set the fields, colors and titles for the three sections. To export this report to Excel, click **Export to Excel** link.

Steps:

1. *Risk Register ---> Reports*
2. Click the **Opportunity and Mitigation (Merge Cells)** link under **Exports**. (Figure 83)
3. Select the fields to be exported from the **Available Fields**.
4. Click the **Copy** button to copy the selected field to the **Selected Fields** column or click the **Copy all** button to copy all the fields to the **Selected Fields**.
5. Similarly select the fields to be removed from the **Selected Fields** column and click the **Remove** button or click the **Remove All** button to remove all the fields from the **Selected Fields** column.
6. Click the **Export to Excel** link to export the selected fields. (Figure 83)
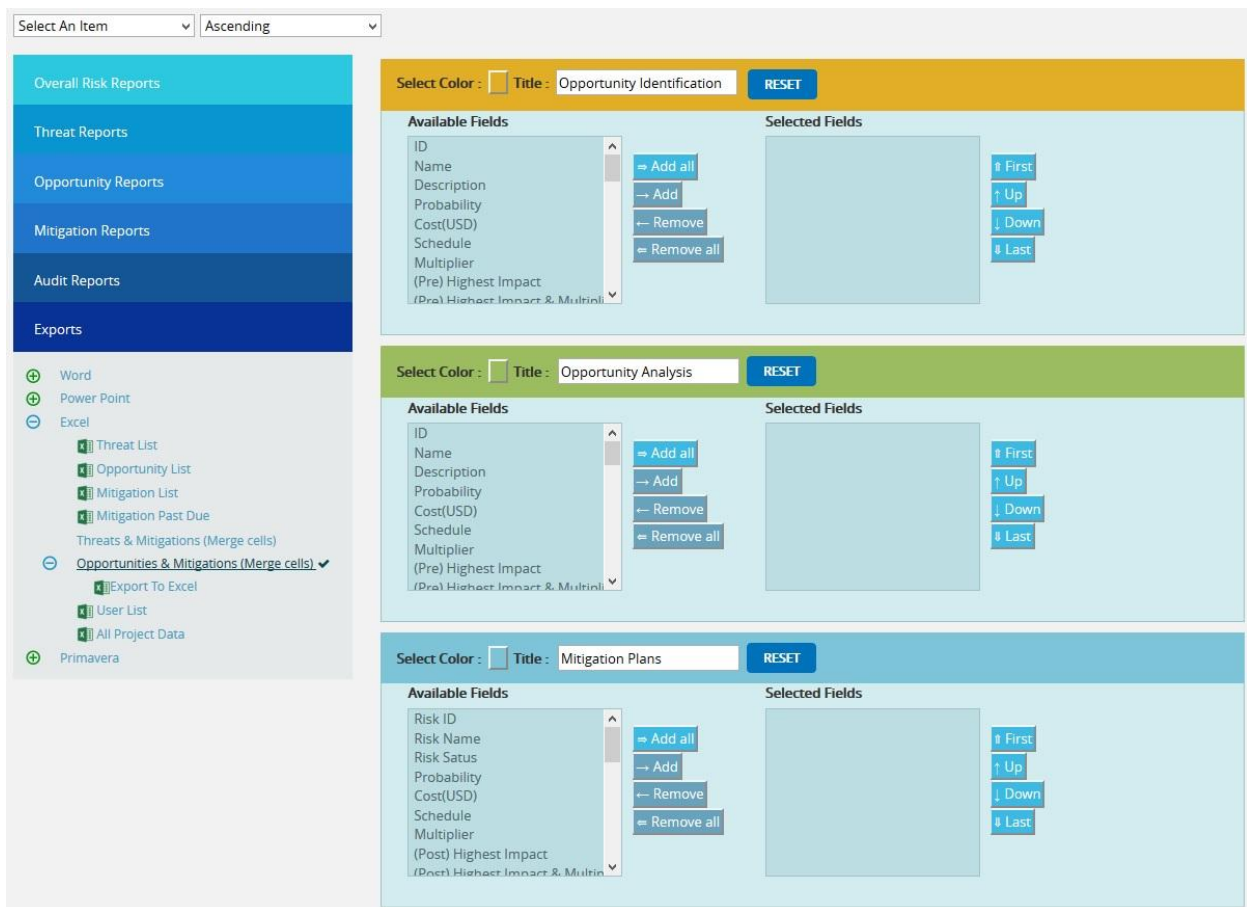
Figure 83

Export User Details:

This functionality is used to export the entire list of users assigned to the project to **MS Excel**. The sample spreadsheet shown in Figure 82 has all the user details in it.

 Steps:

1. ***Risk Register ---> Reports ---> Exports***
2. Click the **User List** link to export. (Figure 72)

First Name	Last Name	User Name	Email	Address1	Address2	City	State	Country	Phone
Caroline	Mathew	caroline	caroline@gmail.com	Street no 2	Suite 150	Houston	TX	United States	996-990-345-8900
Joy	Samuel	joysam	joysam@gmail.com	Street no 2	suite 152	Houston	TX	United States	776-990-123-6789

Figure 82

Export Risk Register to Primavera Risk:

This functionality is used to export the Threats, Opportunities and their Mitigation details of the selected Project along with the linked Project Ids and its corresponding Task Ids that can be viewed / imported using the **Primavera Risk (Pert master)** tool. The **PRA (Without Project ID-rrx)** exports all the details without the Project Ids.

Steps:

1. ***Risk Register ---> Reports ---> Standard Reports***
2. Click the **Export to Pert master** links to export. (Figure 72)

    The sample XML sheet generated is shown in Figure 85.

```xml
- <pmrr:Pertmaster Version="8.7.0046" xml:space="preserve">
  - <RiskRegister>
    - <Risks>
      - <Risk ID="NCRA.101" IsVisible="true">
        - <Post-mitigation>
          - <Quantitative>
            - <TaskImpacts>
              - <TaskImpact TaskID="">
                  <TaskID/>
                  <DurationShape>Triangle</DurationShape>
                  <DurMin>0d</DurMin>
                  <DurLikely>0d</DurLikely>
                  <DurMax>0d</DurMax>
                  <CostShape>Triangle</CostShape>
                  <CostMin>0.0</CostMin>
                  <CostLikely>0.0</CostLikely>
                  <CostMax>0.0</CostMax>
                  <Correlate>true</Correlate>
                  <CorrelateExistence>true</CorrelateExistence>
                  <LinkInSeries>false</LinkInSeries>
                  <EnteredDurMin>0d</EnteredDurMin>
                  <EnteredDurLikely>0d</EnteredDurLikely>
                  <EnteredDurMax>0d</EnteredDurMax>
                  <EnteredCostMin>0.0</EnteredCostMin>
                  <EnteredCostLikely>0.0</EnteredCostLikely>
                  <EnteredCostMax>0.0</EnteredCostMax>
                </TaskImpact>
              </TaskImpacts>
              <Probability>0</Probability>
            </Quantitative>
          </Post-mitigation>
        - <Pre-mitigation>
          - <Quantitative>
            - <TaskImpacts>
              - <TaskImpact TaskID="">
                  <TaskID/>
                  <DurationShape>Triangle</DurationShape>
                  <DurMin>0d</DurMin>
                  <DurLikely>0d</DurLikely>
                  <DurMax>0d</DurMax>
                  <CostShape>Triangle</CostShape>
                  <CostMin>0.0</CostMin>
                  <CostLikely>0.0</CostLikely>
                  <CostMax>0.0</CostMax>
                  <Correlate>true</Correlate>
                  <CorrelateExistence>true</CorrelateExistence>
                  <LinkInSeries>false</LinkInSeries>
                  <EnteredDurMin>0d</EnteredDurMin>
                  <EnteredDurLikely>0d</EnteredDurLikely>
                  <EnteredDurMax>0d</EnteredDurMax>
                  <EnteredCostMin>0.0</EnteredCostMin>
                  <EnteredCostLikely>0.0</EnteredCostLikely>
                  <EnteredCostMax>0.0</EnteredCostMax>
                </TaskImpact>
              </TaskImpacts>
              <Probability>0</Probability>
            </Quantitative>
          </Pre-mitigation>
          <ID>NCRA.101</ID>
          <Type>Threat</Type>
          <Title>CHECK/ISSUE COKER CS PIPING ISOs--IFC</Title>
          <Mitigation>Reduce</Mitigation>
          <ResponseTitle/>
          <ResponseTotalCost>0.00</ResponseTotalCost>
          <ResponseHasActions>false</ResponseHasActions>
```

```xml
- <Risk ID="ID_2 tht" IsVisible="true">
  - <Post-mitigation>
    - <Quantitative>
      - <TaskImpacts>
        - <TaskImpact TaskID="">
            <TaskID/>
            <DurationShape>Triangle</DurationShape>
            <DurMin>12d</DurMin>
            <DurLikely>15d</DurLikely>
            <DurMax>18d</DurMax>
            <CostShape>Triangle</CostShape>
            <CostMin>35.0</CostMin>
            <CostLikely>70.0</CostLikely>
            <CostMax>140.0</CostMax>
            <Correlate>true</Correlate>
            <CorrelateExistence>true</CorrelateExistence>
            <LinkInSeries>false</LinkInSeries>
            <EnteredDurMin>12d</EnteredDurMin>
            <EnteredDurLikely>15d</EnteredDurLikely>
            <EnteredDurMax>18d</EnteredDurMax>
            <EnteredCostMin>35.0</EnteredCostMin>
            <EnteredCostLikely>70.0</EnteredCostLikely>
            <EnteredCostMax>140.0</EnteredCostMax>
          </TaskImpact>
        </TaskImpacts>
        <Probability>27</Probability>
      </Quantitative>
    </Post-mitigation>
  - <Pre-mitigation>
    - <Quantitative>
      - <TaskImpacts>
        - <TaskImpact TaskID="">
            <TaskID/>
            <DurationShape>Triangle</DurationShape>
            <DurMin>45d</DurMin>
            <DurLikely>54d</DurLikely>
            <DurMax>55d</DurMax>
            <CostShape>Triangle</CostShape>
            <CostMin>234.0</CostMin>
            <CostLikely>235.0</CostLikely>
            <CostMax>236.0</CostMax>
            <Correlate>true</Correlate>
            <CorrelateExistence>true</CorrelateExistence>
            <LinkInSeries>false</LinkInSeries>
            <EnteredDurMin>45d</EnteredDurMin>
            <EnteredDurLikely>54d</EnteredDurLikely>
            <EnteredDurMax>55d</EnteredDurMax>
            <EnteredCostMin>234.0</EnteredCostMin>
            <EnteredCostLikely>235.0</EnteredCostLikely>
            <EnteredCostMax>236.0</EnteredCostMax>
          </TaskImpact>
        </TaskImpacts>
        <Probability>54</Probability>
      </Quantitative>
    </Pre-mitigation>
    <ID>ID_2 tht</ID>
    <Type>Threat</Type>
    <Title>Schedule tht</Title>
    <Mitigation>Reduce</Mitigation>
    <ResponseTitle>Arrange Training </ResponseTitle>
    <ResponseTotalCost>34.00</ResponseTotalCost>
    <ResponseHasActions>false</ResponseHasActions>
    <Status>Proposed</Status>
    <Quantifiable>true</Quantifiable>
    <Quantified>true</Quantified>
    <Publish>Insert</Publish>
  </Risk>
```

```xml
- <Risk ID="ID_2 opp" IsVisible="true">
  - <Post-mitigation>
    - <Quantitative>
      - <TaskImpacts>
        - <TaskImpact TaskID="P1G11067">
            <TaskID>P1G11067</TaskID>
            <DurationShape>Triangle</DurationShape>
            <DurMin>12d</DurMin>
            <DurLikely>15d</DurLikely>
            <DurMax>18d</DurMax>
            <CostShape>Triangle</CostShape>
            <CostMin>35.0</CostMin>
            <CostLikely>70.0</CostLikely>
            <CostMax>140.0</CostMax>
            <Correlate>true</Correlate>
            <CorrelateExistence>true</CorrelateExistence>
            <LinkInSeries>false</LinkInSeries>
            <EnteredDurMin>12d</EnteredDurMin>
            <EnteredDurLikely>15d</EnteredDurLikely>
            <EnteredDurMax>18d</EnteredDurMax>
            <EnteredCostMin>35.0</EnteredCostMin>
            <EnteredCostLikely>70.0</EnteredCostLikely>
            <EnteredCostMax>140.0</EnteredCostMax>
          </TaskImpact>
        </TaskImpacts>
        <Probability>27</Probability>
      </Quantitative>
    </Post-mitigation>
  - <Pre-mitigation>
    - <Quantitative>
      - <TaskImpacts>
        - <TaskImpact TaskID="P1G11067">
            <TaskID>P1G11067</TaskID>
            <DurationShape>Triangle</DurationShape>
            <DurMin>45d</DurMin>
            <DurLikely>54d</DurLikely>
            <DurMax>55d</DurMax>
            <CostShape>Triangle</CostShape>
            <CostMin>234.0</CostMin>
            <CostLikely>235.0</CostLikely>
            <CostMax>236.0</CostMax>
            <Correlate>true</Correlate>
            <CorrelateExistence>true</CorrelateExistence>
            <LinkInSeries>false</LinkInSeries>
            <EnteredDurMin>45d</EnteredDurMin>
            <EnteredDurLikely>54d</EnteredDurLikely>
            <EnteredDurMax>55d</EnteredDurMax>
            <EnteredCostMin>234.0</EnteredCostMin>
            <EnteredCostLikely>235.0</EnteredCostLikely>
            <EnteredCostMax>236.0</EnteredCostMax>
          </TaskImpact>
        </TaskImpacts>
        <Probability>54</Probability>
      </Quantitative>
    </Pre-mitigation>
    <ID>ID_2 opp</ID>
    <Type>Opportunity</Type>
    <Title>Schedule opp</Title>
    <Mitigation>Enhance</Mitigation>
    <ResponseTitle>Arrange training</ResponseTitle>
    <ResponseTotalCost>34.00</ResponseTotalCost>
    <ResponseHasActions>false</ResponseHasActions>
    <Status>Proposed</Status>
    <Quantifiable>true</Quantifiable>
    <Quantified>true</Quantified>
    <Publish>Insert</Publish>
  </Risk>
  </Risks>
  </RiskRegister>
</pmsr:Pertmaster>
```

Figure 85

Audit Report - Threats

The **Audit Report** page is used to track the value of **Threat fields**. This page helps to make a comparison of previous and present values of each field of Threat.

The entire page can be exported as a **CSV** file (Figure 86), which can be done by following the path below:

Risk Register ---> Reports --->Audit Reports – Threats (CSV)

	A	B	C	D	E	F	G	H
1	User Name	User Id	Risk Id	Field Name	Pre-Value	Post-Value	Date	Time
2	super123 super123	super	Threat_2		<<Deleted>>	<<Deleted>>	7/12/2012	16:17:55
3	super123 super123	super	Threat_2	Cost	Undefined	High	7/12/2012	16:17:51
4	super123 super123	super	Threat_2	Probability	Undefined	High	7/12/2012	16:17:51
5	Rehman DIyab	diyu	6	Project RBS		Contractual	3/26/2012	17:04:50
6	Rehman DIyab	diyu	54	Business RBS		Contractual	3/26/2012	17:04:22
7	Rehman DIyab	diyu	54	Project RBS		Contractual	3/26/2012	17:04:22
8	Rehman DIyab	diyu	53	Business RBS		Procurement	3/26/2012	17:03:47
9	Rehman DIyab	diyu	53	Project RBS		Procurement	3/26/2012	17:03:47
10	Rehman DIyab	diyu	20	Status	Open-unmitigated	Open-mitigated	3/26/2012	9:53:31
11								

Figure 86

User Name and **User ID** correspond to the user who has modified the Threat/Opportunity value and the ID of that Threat/Opportunity under the **Risk ID** column. **Pre-Value** and **Post-Value** corresponds to the previous and present value of each field. The date and time of modification is mentioned in columns **Date** and **Time** respectively.

The entire page can be exported as a **PDF** file (Figure 87), which can be done by following the path below:

Risk Register ---> Reports --->Audit Reports – Threats (PDF)

User Name	User ID	Risk ID	Field Name	Previous Value	Post Value	Date	Time
super123 super123	super	threat4	ID1	Sin008	threat4	12-Nov-13	13:43:25
super123 super123	super	threat4	Name1	Re	threats	12-Nov-13	13:43:25
super123 super123	super	threat4	Project Risk Breakdown Structure1		projectss	12-Nov-13	13:43:25
super123 super123	super	threat4	Project Work Breakdown Structure1		pbs	12-Nov-13	13:43:25
super123 super123	super	threat4	Project Organizational Breakdown Structure1		eds1345	12-Nov-13	13:43:25

Figure 87

Audit Report – Opportunities

The **Audit Report** page is used to track the value of **Opportunity fields**. This page helps to make a comparison of previous and present values of each field of Opportunity.

The entire page can be exported as a **CSV** file (Figure 88), which can be done by following the path below:

Risk Register ---> Reports --->Audit Reports – Opportunities (csv)

	A	B	C	D	E	F	G	H
1	User Name	User Id	Risk Id	Field Name	Pre-Value	Post-Value	Date	Time
2	super123 super123	super	Threat_2		<<Deleted>>	<<Deleted>>	7/12/2012	16:17:55
3	super123 super123	super	Threat_2	Cost	Undefined	High	7/12/2012	16:17:51
4	super123 super123	super	Threat_2	Probability	Undefined	High	7/12/2012	16:17:51
5	Rehman DIyab	diyu	6	Project RBS		Contractual	3/26/2012	17:04:50
6	Rehman DIyab	diyu	54	Business RBS		Contractual	3/26/2012	17:04:22
7	Rehman DIyab	diyu	54	Project RBS		Contractual	3/26/2012	17:04:22
8	Rehman DIyab	diyu	53	Business RBS		Procurement	3/26/2012	17:03:47
9	Rehman DIyab	diyu	53	Project RBS		Procurement	3/26/2012	17:03:47
10	Rehman DIyab	diyu	20	Status	Open-unmitigated	Open-mitigated	3/26/2012	9:53:31
11								

Figure 88

User Name and **User ID** correspond to the user who has modified the Threat/Opportunity value and the ID of that Threat/Opportunity under the **Risk ID** column. **Pre-Value** and **Post-Value** corresponds to the previous and present value of each field. The date and time of modification is mentioned in columns **Date** and **Time** respectively.

The entire page can be exported as a **PDF** file (Figure 89), which can be done by following the path below:

Risk Register ---> Reports --->Audit Reports – Opportunities (pdf)

User Name	User ID	Risk ID	Field Name	Previous Value	Post Value	Date	Time
super123 super123	super	Threat008	Cost1 Most Likely	0.00	56.00	12-Nov-13	13:51:2
super123 super123	super	Threat008	Cost1	Undefined	Low	12-Nov-13	13:51:2
super123 super123	super	Threat008	Schedule1 Maximum	0	56	12-Nov-13	13:51:2
super123 super123	super	Threat008	Cost1 Maximum	0.00	78.00	12-Nov-13	13:51:2
super123 super123	super	Threat008	Schedule1	Undefined	Low	12-Nov-13	13:51:2
super123 super123	super	Threat008	Project Work Breakdown Structure1		pbs2	12-Nov-13	13:51:2

Figure 89

Audit Report – Mitigation

The **Audit Report** page is used to track the value of **Mitigation fields**. This page helps to make a comparison of previous and present values of each field of Mitigation.

The entire page can be exported as a **CSV** file (Figure 90), which can be done by following the path below:

Risk Register ---> Reports --->Audit Reports – Mitigation

	User Name	User Id	Risk Id	Mitigation Id	Field Name	Pre-Value	Post-Value	Date	Time
1	User Name	User Id	Risk Id	Mitigation Id	Field Name	Pre-Value	Post-Value	Date	Time
2	super123 super123	super	T_21-Oct-2013_01:04:09	M_23-Oct-2013_11:14:19	<<Copy To Project - T_21-Oct-2	0	0	23-Oct-13	16:53:07
3	super123 super123	super	T_21-Oct-2013_01:04:09	M_23-Oct-2013_11:13:33	<<Copy To Project - T_21-Oct-2	0	0	23-Oct-13	16:53:07
4	super123 super123	super	test_risk_id	step_1	<<Deleted>>	0	0	23-Oct-13	16:52:42
5	super123 super123	super	test_risk_id	step_1	Response Type	0	response type 1	23-Oct-13	16:52:33
6	super123 super123	super	test_risk_id	step_1	Proposed Mitigation Start	0	9-Oct-13	23-Oct-13	16:52:17
7	super123 super123	super	test_risk_id	step_1	Mitigated Probability	Very High	Low	23-Oct-13	16:52:17
8	super123 super123	super	test_risk_id	step_1	Proposed Mitigation Finish	0	30-Oct-13	23-Oct-13	16:52:17
9	super123 super123	super	test_risk_id	step_1	<<Created>>	0	0	23-Oct-13	16:52:02

Figure 90

User Name and **User ID** correspond to the user who has modified the Threat/Opportunity value and the ID of that Threat/Opportunity under the **Risk ID** column. **Pre-Value** and **Post-Value** corresponds to the previous and present value of each field. The date and time of modification is mentioned in columns **Date** and **Time** respectively.

The entire page can be exported as a **PDF** file (Figure 91), which can be done by following the path below:

Risk Register ---> Reports --->Audit Report – Mitigation

User Name	User ID	Risk ID	Mitigation ID	Field Name	Previous Value	Post Value	Date	Time
super123 super123	super	T_21-Oct-2013_01:04:09	M_23-Oct-2013_11:14:19	<<Copy To Project - T_21-Oct-2013_01:04:09>>			23-Oct-13	16:53:7
super123 super123	super	T_21-Oct-2013_01:04:09	M_23-Oct-2013_11:13:33	<<Copy To Project - T_21-Oct-2013_01:04:09>>			23-Oct-13	16:53:7
super123 super123	super	test_risk_id	step_1	<<Deleted>>			23-Oct-13	16:52:42
super123 super123	super	test_risk_id	step_1	Response Type		response type 1	23-Oct-13	16:52:33
super123 super123	super	test_risk_id	step_1	Proposed Mitigation Start		09-Oct-13	23-Oct-13	16:52:17
super123 super123	super	test_risk_id	step_1	Mitigated Probability	Very High	Low	23-Oct-13	16:52:17
super123 super123	super	test_risk_id	step_1	Proposed Mitigation Finish		30-Oct-13	23-Oct-13	16:52:17
super123 super123	super	test_risk_id	step_1	<<Created>>			23-Oct-13	16:52:2

Figure 91

Risk Details (Threats)

Risk Details (Threats) contains basic identification information for a risk. Identifying the risk is useful in order to isolate the root cause of that particular risk. To track the time phasing or cost exposures, users can track the risk window **Start** and **Finish date**. For accountability and reporting, the **risk owner** can be tracked (person, subcontractor, department, etc). When the **status** of a risk is set as **Closed**, it will no longer be considered in cost exposure and tornado charts (report section, dashboards). This page is visible only to those users who have **Read/Write** access or **View** access for **Risk Details** (**Threats**). Users with **Read/Write** access can create new threats, edit threats, delete threats, and send email. Users designated with **View** access can view the threat details and send email.

PRC RISK®	Risk Register	Project Settings	Portfolio Management	Administration				
Downstream	Imports	Risk Spreadsheet	**Risk Details**	Search Risks	Reports	Dashboards		

1:POOR UNDERSTANDING AND ▾	ADD NEW THREAT	● Threats ○ Opportunities ○ Mitigations

⊙ Risk Details		DELETE THREAT	EDIT THREAT INFO
Risk identifier	1		
Start Date	11-Jan-14		
End Date			
Status	Open-mitigated		
Risk Owner	Mark Richt		
Name	Poor understanding and detail in specification		
Description	The design is more complex than expected.		
Cause	Due to poor understanding and detail in the initial specification.		
Effect	Could delay the project schedule and increase cost.		
Currency	USD		

▶ User Defined Fields
▶ Risk Notes
▶ Risk Documents
▶ Recovery Plan(if risk occurs)
▶ Closure Section

⊙ Qualitative Score		EDIT QUALITATIVE SCORE
Probability	Low	
Cost	Medium	
Schedule	High	
Community Acceptence	Undefined	
New Impact Type2	Undefined	
Multiplier		
(Pre) Highest Impact	5.00	
(Pre) Highest Impact & Multiplier	5.00	
(Pre) Average Score	4.50	
(Pre) Average Score & Multiplier	4.50	
(Pre) Average Bucket Value	5.00	
(Pre) Average Bucket Value & Multiplier	5.00	

Monte Carlo Inputs

Linked Projects	
Cost Minimum(USD)	142,857.14
Cost Most Likely(USD)	178,571.42
Cost Maximum(USD)	214,285.72
Link to Schedule ID(s)	601_2010
Schedule Minimum	90
Schedule Most Likely	135
Schedule Maximum	180
Simulation Probability	22%
Duration Unit	Days

Data Mapping   EDIT DATA MAPPING

Project Work Breakdown Structure	map data
Project Organizational Breakdown Structure	map data
Project Risk Breakdown Structure	map data
Business Work Breakdown Structure	map data
Business Organizational Breakdown Structure	map data
Business Risk Breakdown Structure	map data
Enterprise Work Breakdown Structure	map data
Enterprise Organizational Breakdown Structure	map data
Enterprise Risk Breakdown Structure	map data
Enterprise Risk	map data

Mitigation Plan Information   EDIT MITIGATION PLAN

Plan Name	
Plan Description	
Plan Owner	
Proposed Cost (USD)	0.00
Response Type	
Actual Cost (USD)	0.00

Mitigation Steps   EDIT IN SPREADSHEET

#	MITIGATION ID	MITIGATION STEP NAME	MITIGATION STEP DESCRIPTION	DELETE
1	1	Include penalties for any design changes	Include penalties for any design changes	🗑
2	2	Use supported design methodologies	Use supported design methodologies	🗑
3	17	Use supported design methodologies	Use supported design methodologies	🗑
4	20	Include penalties for any design changes	Include penalties for any design changes	🗑

Mitigation Step Information	ADD NEW STEP	EDIT MITIGATION
Mitigation ID	17	
Mitigation Step Name	Use supported design methodologies	
Mitigation Step Description	Use supported design methodologies	
Mitigation Owner		
Mitigated Probability	Very Low	
Mitigated Cost (USD)	Undefined	
Mitigated Schedule	Low	
New Impact Type2	Undefined	
Community Acceptence	Undefined	
Multiplier		
(Post) Highest Impact	2.00	
(Post) Highest Impact & Multiplier	2.00	
(Post) Average Score	2.00	
(Post) Average Score & Multiplier	2.00	
(Post) Average Bucket Value	2.00	
(Post) Average Bucket Value & Multiplier	2.00	
Proposed Mitigation Start		
Proposed Mitigation Finish		
Proposed Mitigation Cost (USD)	0.00	
Actual Mitigation Start		
Actual Mitigation Finish		
Actual Mitigation Cost (USD)	0.00	
Mitigation Status	Proposed	
Simulation Probability	0	
Schedule Minimum	30	
Schedule Most Likely	45	
Schedule Maximum	60	
Cost Minimum(USD)	71,428.57	
Cost Most Likely(USD)	107,142.86	
Cost Maximum(USD)	142,857.14	
Duration Unit	Days	
Currency	USD	

Figure 1

Navigate Page:

To go to the **Risk Details (Opportunity)** page or **Risk Details (Mitigations),** the user must **navigate** from the **Risk Details (Threats)** page.

The option for navigation from one page to another is placed on top of the page and is shown in Figure 1.

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Click the **Opportunities** radio button (Figure 1) to **navigate** to the **Risk Details (Opportunity)** page, or Click the **Mitigations** radio button (Figure 1) to **navigate** to the *Risk Details (Mitigations)* page.

Searching For Threats:

Searching for threats in *Risk Details* **(Threats)** can be done in two ways. The **Search** function allows the user to search for a threat based on a keyword. This method is faster when you are working with a large amount of data. The **Select** function is commonly used for databases with less data and when the search objective is known.

Using the search function:

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Click the **SEARCH** button. (Figure 1)

3. Enter the search keyword (which can be the ID or name) and click the **SEARCH** button and select the required threat. (Figure 2)

Figure 2

The **Show All** button in the search area lists all the threats available (by default). (Figure 2) In order to **Filter** or **Sort** threat details displayed in the search area, click the **Advanced Search** button. The search area changes to that shown in Figure 3.

Figure 3

To **Filter** the search area contents:

 Steps:

1. **Select** the required column. (Figure 3)
2. Enter the value based on which filtering is to be done. (Figure 3)
3. Click the **Filter** button. (Figure 3)

To **Sort** the data:

1. **Select** the required column. (Figure 3)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 3)
3. Click the **Sort** button (Figure 3) to **sort** the data in the search area.
4. To go to the previous search page shown in Figure 2, click the **Basic Search** button shown in Figure 3.

Using the select function (dropdown list):

Steps:

1. ***Risk Register ---> Risk Details (Threats)***
2. Click the **Select Threat** dropdown. (Figure 1)
3. **Select** the required threat from the list shown.

Creating a new threat:

Creating a new threat in the risk register is quick and easy. The risk **ID** is a required field to save the threat.

Steps:

1. ***Risk Register ---> Risk Details (Threats)***
2. Click the **Add New Threat** button*.* (Figure 1)
3. After entering threat details, click the **Save** button. (Figure 1)

Risk owner has an editable select box where we can either enter or select the risk owner's name. (Figure 4)

Figure 4

Editing threat information:

When editing threat details in the *Risk Details* **(threats)**, all fields under the **Threat Detail** section, **User Defined Fields** section, **Recovery Plan** section, **Qualitative Score** section, **Monte Carlo Inputs** section and **Data Mapping** section will be unlocked and the user will be able to modify those fields.

Steps:

1. *Risk Register ---> Risk Details (Threats)*
2. Select the required threat.
3. Click the **Edit Threat Info** button. (Figure1)
4. After the data is modified, click the **Save** button. (Figure 1)

User Defined Fields Section:

Any user defined or custom field will be shown in this section. There is no limit to the number of user defined fields.

User Defined Fields are added as follows:

Project settings ---> Custom Fields

Risk notes Section:

Users can add a short risk note. The note will be saved with the user name and a time stamp for future tracking purposes. Risk notes once added cannot be edited. Risk notes added can only be deleted by a **Super User**. The **Super User** can **delete** risk notes by clicking the **Close** button. (Figure 5)

Figure 5

To **Add New Note** check the following steps below:

Steps:

1. *Risk Register ---> Risk Details (Threats)*
2. Select the threat if the threat is already created.
3. Click the **Add New Note** link to add risk notes. (Figure 5) A pop up shown in Figure 6 appears.

<p align="center">Figure 6</p>

4. Enter the note and click the **Add note** button. (Figure 6)

Risk Documents Section:

This functionality is used to upload any additional documents required. It can be of type xls, csv, xer, mpp, jpeg, jpg, png, tif, gif, txt, doc, docx and pdf.

Steps:

1. *Risk Register ---> Risk Details (Threats)*
2. Click the **Upload Risk Documents** link. (Figure 1) A pop up appears. (Figure 7)
3. Click the **Browse** button. Select the required file. (Figure 7)
4. Click the **Upload File** button to finish. (Figure 7)

Figure 7

Recovery Plan Section:

The **Recovery Plan** section is to document what will be done if mitigation is not successful and the risk event does occur. It also documents the steps the team should be prepared to take if the risk becomes a reality.

Closure Section:

The **Closure Section** is used for documenting the actual impact of the risk event on the project. Fully documenting this section will allow similar projects in the future to learn and benefit from the lessons learned.

Qualitative Score Section:

Qualitative Score fields include Probability, Cost and Schedule and Additional Impacts, if any. (Figure 1) These fields are used to set the pre-mitigated score. If Probability and impacts have a value of either **Undefined** or **No Risk**, the risk score will be zero.

Map Schedule ID:

Schedule ID called as **Activity ID** is used for simulation purposes.

To map activity ID:

Steps:

1. Click the **map data** link shown in Figure 8. A pop up shown in Figure 9 appears.

2. Click the **checkbox** to select the corresponding activity ID you want to map for your threat. Click the **Save** button to finish. (Figure 9)

Figure 8

Figure 9

Data Mapping Section:

The **Data Mapping** section shows to which Breakdown structure the selected threat is mapped and at what level (Project, Business Unit, or Enterprise) it is mapped. It is not required to map data, but it will be useful when the time comes to report at the portfolio level.

Project Organizational Breakdown Structure, **Project Work Breakdown Structure** and **Project Risk Breakdown structure** details are added from the page:

Project Settings ---> Project Breakdown Structure

Business Organizational Breakdown Structure, Business Work Breakdown Structure, **Business Risk Breakdown structure**, **Enterprise Organizational Breakdown Structure**, **Enterprise Risk Breakdown structure, Enterprise Work Breakdown Structure** are added from the page:

Portfolio Management ---> Project Breakdown Structure

Enterprise Risk details are added from the page:

Portfolio Management ---> Reports ---> Enterprise Risk List

To Map data:

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure1)

2. Select the **check box** corresponding to the data to be mapped. (Figure 10)

3. Click the **Select WBS** button (if Work Breakdown Structure), the **Select OBS** button (if Organizational Breakdown Structure), the **Select RBS** button (if Risk Breakdown Structure) to finish. (Figure 10)

The step described above applies to all Organizational Breakdown Structure, Work Breakdown Structure and Risk Breakdown Structure fields.

Figure 10

For **Enterprise Risk**

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure1)
2. Select the required enterprise risk from the select box. (Figure 11)
3. Click the **Set Enterprise Risk** button to finish. (Figure 11)

Figure 11

Mitigation Plan Information:

Users can track their **Mitigation Plan** or individual mitigation steps. The mitigation plan is a compilation of the individual steps below it. The mitigation plan cost is rolled up from the cost of each mitigation step. Tracking mitigation steps creates accountability when the step owner and planned dates are tracked. Reports can be generated to identify all mitigation steps that are currently behind schedule.

The qualitative and simulation scoring fields (Probability, Cost, Schedule, etc.) in the mitigation steps represent the residual risk that remains after a mitigation step is completed. The goal is to mitigate a risk until it is gone, however often this is not possible. It is important to document any residual risk that cannot be removed for the benefit of the project team and the accuracy of Monte Carlo simulations. Any graph that highlights a post-mitigated score will focus on the residual risk after all mitigation steps have been completed. The status of a mitigation step and the actual dates should be updated as the steps are started and finished. **Proposed cost** is the sum of all **Proposed Cost** of mitigation steps and **Actual Cost** is the sum of all **Actual Cost** of mitigation steps.

Mitigation Plan Information		EDIT MITIGATION PLAN
Plan Name	reduce_threat_1	
Plan Description	description to introduce miti plan	
Plan Owner	Jodi Foster	
Proposed Cost (USD)	30.00	
Response Type	Avoid	
Actual Cost (USD)	40.00	

Figure 12

Figure 13

Edit Mitigation Plan Information:

This functionality is to edit the mitigation plan information such as Plan Name, Plan Description, Plan Owner, Proposed Cost, Response Type and Actual Cost.

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Select the required threat.

3. Click the **Edit Mitigation Plan** button. (Figure12)

4. After the data is modified, click the **Save** button. (Figure 13)

Mitigations Steps Information:

Mitigation step information can be added from **Spreadsheet** page or can be added from the **Risk Details** page itself.

Mitigation Steps

EDIT IN SPREADSHEET

#	MITIGATION ID	MITIGATION STEP NAME	MITIGATION STEP DESCRIPTION	DELETE
1	17	Use supported design methodologies	Use supported design methodologies	🗑
2	1	Include penalties for any design changes	Include penalties for any design changes	🗑
3	2	Use supported design methodologies	Use supported design methodologies	🗑
4	20	Include penalties for any design changes	Include penalties for any design changes	🗑

Mitigation Step Information

ADD NEW STEP   EDIT MITIGATION

Mitigation ID	17
Mitigation Step Name	Use supported design methodologies
Mitigation Step Description	Use supported design methodologies
Mitigation Owner	Jodi Foster
Mitigated Probability	Very Low
Mitigated Cost (USD)	High
Mitigated Schedule	Low
New Impact Type2	Low
Community Acceptence	Undefined
Multiplier	
(Post) Highest Impact	4.00
(Post) Highest Impact & Multiplier	4.00
(Post) Average Score	2.67
(Post) Average Score & Multiplier	2.67
(Post) Average Bucket Value	3.00
(Post) Average Bucket Value & Multiplier	3.00
Proposed Mitigation Start	14-Dec-15
Proposed Mitigation Finish	13-Jan-16
Proposed Mitigation Cost (USD)	10.00
Actual Mitigation Start	30-Dec-15
Actual Mitigation Finish	
Actual Mitigation Cost (USD)	0.00
Mitigation Status	In Progress
Simulation Probability	24
Schedule Minimum	30
Schedule Most Likely	45
Schedule Maximum	60
Cost Minimum(USD)	71,428.57
Cost Most Likely(USD)	107,142.86

Figure 14

Edit In Spreadsheet:

This functionality is to edit, add, delete and export mitigation steps for the selected threat in spreadsheet. Click the **Edit in Spreadsheet** button which navigates to a spreadsheet page.

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Select the required threat.

3. Click the **Edit in Spreadsheet** button. (Figure 14)

4. Edit, add, delete and export mitigation steps for the selected threat as in Spreadsheet View page. (Figure 15)

5. Click **Go to Risk Details** button to go back to the Advanced View page. (Figure 15)

Figure 15

Add new Step:

This functionality is to add a new mitigation step for the selected threat.

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Select the required threat.

3. Click the **Add New Step** button. (Figure 14)

4. After entering mitigation details, click the **Save Step** button. (Figure 16) This button is visible only after the **Add New Step** button or the **Edit Mitigation Step** button is clicked. (Figure 14)

Edit Mitigation Step:

This functionality is to edit the selected mitigation step of the selected threat.

Steps:

1. *Risk Register ---> Risk Details (Threats)*
2. Select the required threat.
3. Select the Mitigation step link that is to be edited, from Mitigation Steps section. (Figure 14)
4. Click the **Edit Mitigation Step** button. (Figure 14)
5. After entering mitigation details, click the **Save Step** button. (Figure 16) This button is visible only after the **Add New Step** button or the **Edit Mitigation Step** button is clicked. (Figure 14)

Figure 16

Recycle Bin:

To go to the **Recycle Bin** from **Risk Details** (Threats), click the **Recycle Bin** icon shown on top of the page in Figure 1.

9:Design changes RESTORE DELETE	
Risk identifier	9
Start Date	10-Dec-14
End Date	12-Nov-15
Status	Open-mitigation working
Risk Owner	Steve Spurrier
Name	Design changes
Description	The design needs to be altered.
Cause	Due to client changing their mind.
Effect	Which would delay the schedule.
Currency	USD

- ▶ User Defined Fields
- ▶ Risk Notes
- ▶ Risk Documents
- ▶ Recovery Plan(if risk occurs)
- ▶ Closure Section

Qualitative Score		4.0
Probability	Low	
Cost	Medium	
Schedule	Medium	
Multiplier		
(Pre) Highest Impact	4.0	
(Pre) Highest Impact & Multiplier	4.0	
(Pre) Average Score	4.0	
(Pre) Average Score & Multiplier	4.0	
(Pre) Average Bucket Value	4.0	
(Pre) Average Bucket Value & Multiplier	4.0	

Monte Carlo Inputs	
Linked Projects	
Cost Minimum(USD)	333,333.34
Cost Most Likely(USD)	416,666.66
Cost Maximum(USD)	500,000.00
Link to Schedule ID(s)	map data
Schedule Minimum	60
Schedule Most Likely	75
Schedule Maximum	90
Simulation Probability	22%
Duration Unit	Days

Data Mapping	
Project Work Breakdown Structure	map data
Project Organizational Breakdown Structure	map data
Project Risk Breakdown Structure	map data
Business Work Breakdown Structure	map data
Business Organizational Breakdown Structure	map data
Business Risk Breakdown Structure	map data
Enterprise Work Breakdown Structure	map data
Enterprise Organizational Breakdown Structure	map data
Enterprise Risk Breakdown Structure	map data
Enterprise Risk	map data

Mitigation Plan Information	
Plan Name	
Plan Description	
Plan Owner	
Proposed Cost (USD)	
Response Type	
Actual Cost (USD)	

Figure 17

Searching For Threats:

Searching for a Threat in the **Recycle Bin** can be done in two ways. The **Search** function allows you to search for a threat based on a keyword. This method is faster when the user is working with a large amount of data. The **Select** function is commonly used for databases with less data or when the search objective is known.

Using the search function:

Steps:

1. ***Risk Register ---> Risk Details (Threats)***

2. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.

3. Click the **Search** button. (Figure 17)

4. Enter the name (which can be either the ID or Name) and click the **Search** button and select the required threat. (Figure 18)

PRC SOFTWARE

Figure 18

The **Show All** button (Figure 18) in the search area lists all the threats available.

Using the select function (dropdown list):

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.

3. Click the **Select** dropdown. (Figure 18)

4. Select the required threat from the list shown.

Restore Threats:

The following steps restore threats and remove them from the **Recycle Bin** and back to the pages where threat details are being shown, such as **Risk Details** (threats).

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Click the **Recycle Bin** icon to go to **Recycle Bin** page.

3. Select the threat to restore.

4. Click the **Restore** button (Figure17) to **restore** selected threat.

Delete Threat From Recycle Bin:

The threat deleted from Recycle Bin will be removed completely from the system.

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.

3. Select the threat to delete.

4. Click the **Delete** button. (Figure 17)

After you receive the confirmation message (Figure 19), click the **OK** button. The threat will be deleted permanently. To cancel, click the **Cancel** button. (Figure 19)

Figure 19

Email Settings:

This functionality is used to export the entire page to Word and send it by email to the person selected.

Steps:

1. *Risk Register ---> Risk Details*
2. Click the **Threats** radio button to **navigate** to the **Risk Details (Threats)** page. (Figure 1)
3. Select the required threat.
4. Click the **Email** icon to send email.
5. Select the user from the drop down list to whom mail should be sent.
6. Enter the message in the Message text area.
7. Select the required fields for the email edit that can be edited and saved by the recipient. (Figure 21)
8. Click the **Update Fields** button to view the threats and its mitigations field values that are selected, where the email edit can be done. (Figure 20)
9. Click the **Send Mail** button to finish. (Figure 20)

Figure 20

PRC SOFTWARE

Figure 21

The recipients can see the page (Figure 21) and submit the changes by clicking the **Save Changes** button. The changes will be updated or error messages will be shown on another web page. The save changes can be done only once for an email sent.

Deleting Threat:

The deleted threats will be moved to the **Recycle Bin**.

Steps:

1. *Risk Register ---> Risk Details (Threats)*

2. Select the required threat.

3. Click the **Delete Threat** button. (Figure 1)

After you receive the confirmation message (Figure 22), click the **OK** button. The threat will be moved to the recycle bin. To cancel, click the **Cancel** button. (Figure 22)

Figure 22

Risk Details (Opportunities)

The **Risk Details (Opportunities)** page allows you to **Search**, **Edit**, **Map**, **Add**, and **Delete** Opportunities in the selected project. To view project data, a project must first be selected from the **Select Project** section of the menu. The user will only have access to select projects that have been assigned by the system administrator. Users with **Read/Write** access can create new opportunities, edit opportunities, delete opportunities, and send email. Users designated with **View** access can view the opportunity details, and send email.

Monte Carlo Inputs

Linked Projects	
Cost Minimum(USD)	100,000.00
Cost Most Likely(USD)	200,000.00
Cost Maximum(USD)	300,000.00
Link to Schedule ID(s)	map data
Schedule Minimum	3
Schedule Most Likely	4
Schedule Maximum	5
Simulation Probability	63%
Duration Unit	Days

Data Mapping   EDIT DATA MAPPING

Project Work Breakdown Structure	map data
Project Organizational Breakdown Structure	map data
Project Risk Breakdown Structure	map data
Business Work Breakdown Structure	map data
Business Organizational Breakdown Structure	map data
Business Risk Breakdown Structure	map data
Enterprise Work Breakdown Structure	map data
Enterprise Organizational Breakdown Structure	map data
Enterprise Risk Breakdown Structure	map data
Enterprise Risk	map data

Mitigation Plan Information   EDIT MITIGATION PLAN

Plan Name	
Plan Description	
Plan Owner	
Proposed Cost (USD)	255,000.00
Response Type	
Actual Cost (USD)	279,400.00

Figure 1

Navigate Page:

To go to the **Risk Details (Opportunities)** page, navigate from the **Risk Details (Threat)** page.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)

To go to the **Risk Details (Threat)** page or **Risk Details (Mitigations)** from the **Risk Details (Opportunities)** page:

Click the **Threats** radio button to **navigate** to the **Risk Details (Threat)** page. (Figure 1)

Or

Click the **Mitigations** radio button to **navigate** to **Risk Details (Mitigations)** page.(Figure 1)

Searching For Opportunities:

Searching for Opportunities in **Risk Details (Opportunities)** can be done in two ways. The **Search** function allows the user to search for an opportunity based on a keyword. This method is faster when you are working with a large amount of data. The **Select** function is commonly used for databases with less data and when the search objective is known.

Using the search function:

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Click the **Search** button. (Figure 1)
4. Enter the search keyword (which can be the ID or name) and click the **Search** button and select the required opportunity. (Figure 2)

Figure 2

The **Show All** button in the search area lists all the opportunities available (by default). (Figure 2) In order to **Filter** or **Sort** opportunity details displayed in the search area, click the **Advanced Search** button. The search area changes to that shown in Figure3.

PRC SOFTWARE

Figure 3

To **Filter** the search area contents

Steps:

1. **Select** the required column. (Figure 3)
2. Enter the value based on which filtering is to be done. (Figure 3)
3. Click the **Filter** button.(Figure 3)

To **Sort** the data

Steps:

1. **Select** the required column. (Figure 3)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 3)
3. Click the **Sort** button (Figure 3) to **sort** the data in the search area.
4. To go to the previous search page shown in Figure 2, click the **Basic Search** button. (Figure 3)

Using the select function (dropdown list):

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Click the **Select Opportunity** dropdown.   (Figure 1)
4. Select   the   required   Opportunity   from   the   list   shown.

Creating a new Opportunity:

Creating a new opportunity in the risk register is quick and easy. The risk **ID** is a required field to save the opportunity.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the *Risk Details* (**Opportunities**) page. (Figure 1)
3. Click the **Add New Opportunity** button. (Figure 1)
4. After entering opportunity details, click the **Save** button.(Figure 1)

The risk owner has an editable select box where the user can either enter or select the risk owner name. (Figure 4)

Risk Owner   Jodi Foster

Figure 4

Editing Opportunity information:

When editing opportunity details in **Risk Details (Opportunities)**, all fields under the **Opportunity Detail** section, **User Defined Fields** section, **Recovery Plan** section, **Qualitative Score** section, **Monte Carlo Inputs** section and **Data Mapping** section will be unlocked and the user will be able to modify those fields.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the *Risk Details* (**Opportunities**) page. (Figure 1)
3. **Select** the required opportunity.
4. Click the **Edit Opportunity Info** button. (Figure1)
5. After the data is modified, click the **Save** button. (Figure 1)

User Defined Fields Section:

Any user defined or custom field will be shown in this section. There is no limit to the number of user defined fields.

User Defined Fields are added as follows:

Project settings---> Custom Fields

Risk notes Section:

Users can add a short risk note. The note will be saved with the user name and a time stamp for future tracking purposes. Risk notes once added cannot be edited. Risk notes added can only be deleted by a **Super User**. The **Super User** can **delete** risk notes by clicking the **Close** button. (Figure 5)

Figure 5

To **Add New Note** check the following steps below:

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the *Risk Details* (**Opportunities**) page. (Figure 1)
3. **Select** the opportunity if the opportunity is already created.
4. Click the **Add New Note** link to add risk notes. (Figure 5) A pop up shown in Figure 6 appears.

Figure 6

5. Enter the note and click the **Add Note** button. (Figure 6)

Risk Documents Section:

This functionality is used to upload any additional documents required. It can be of type xls,csv,xer,mpp,jpeg,jpg,png,tif,gif,txt,doc,docx and pdf.

Steps:

1. *Risk Register --->Risk Details*

PRC SOFTWARE

2. Click the **Opportunities** radio button to **navigate** to the *Risk Details* **(Opportunities)** page. (Figure 1)
3. Click the **Upload Risk Documents** link. (Figure 1) A pop up appears. (Figure 7)
4. Click the **Browse** button (Figure 7) select the required file.
5. Click the **Upload File** button to finish. (Figure 7)

Figure 7

Recovery Plan Section:

The **Recovery Plan** section is to document what will be done if the mitigation is not successful and the risk event does occur. It also documents the steps the team should be prepared to take if the risk becomes a reality.

Closure Section:

The **Closure Section** is used for documenting the actual impact of the risk event on the project. Fully documenting this section will allow similar projects in the future to learn and benefit from the lessons learned.

Qualitative Score Section:

Qualitative Score fields include Probability, Cost, Schedule and Additional Impacts, if any. (Figure 1) These fields are used to set the pre-mitigated score. If Probability and impacts have a value of either **Undefined** or **No Risk**, the risk score will be zero.

Map schedule ID:

The Schedule ID called **Activity ID** is used for simulation purposes.

To map **Activity ID**:

Steps:

1. Click the **map data** link shown in Figure 8. A pop up shown in Figure 9 appears.
2. Click the **checkbox** to select the corresponding activity ID you want to map for your opportunity, Click the **Save** button to finish. (Figure 9)

Figure 8

Figure 9

Data Mapping Section:

The **Data Mapping** section shows which Breakdown structure the selected opportunity is mapped to, and at what level (Project, Business Unit, or Enterprise). It is not required to map data, but it will be useful when the time comes to report at the portfolio level.

Project Organizational Breakdown Structure, **Project Work Breakdown Structure** and **Project Risk Breakdown structure** details are added from the page:

Project Settings --->Project Breakdown Structure

Business Organizational Breakdown Structure, Business Work Breakdown Structure, **Business Risk Breakdown structure**, **Enterprise Organizational Breakdown Structure**, **Enterprise Risk Breakdown structure, Enterprise Work Breakdown Structure** are added from the page:

Portfolio Management --->Project Breakdown Structure

Enterprise Risk details are added from page:

Portfolio Management ---> Reports ---> Other Risk Reports ---> Enterprise Risk List

To Map data:

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure1)
2. Select the **check box** corresponding to the data to be mapped.   (Figure 10)
3. Click the **Select WBS** button (if Work Breakdown Structure), **Select OBS** button (if Organizational Breakdown Structure), **Select RBS** button (if Risk Breakdown Structure) to finish. (Figure 10)

The step described above applies to all Organizational Breakdown Structure, Work Breakdown Structure and Risk Breakdown Structure fields.

Figure 10

For **Enterprise Risk**

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure 1)
2. **Select** the required enterprise risk from the select box. (Figure 11)
3. Click the **Set Enterprise Risk** button to finish. (Figure 11)

Figure 11

Mitigation Details:

Users can track their **Mitigation Plan** or individual mitigation steps. The mitigation plan is a compilation of the individual steps below it. The mitigation plan cost is rolled up from the cost of each mitigation step. Tracking mitigation steps creates accountability when the step owner and planned dates are tracked. Reports can be generated to identify all mitigation steps that are currently behind schedule.

The qualitative and simulation scoring fields (Probability, Cost, Schedule, etc.) in the mitigation steps represent the residual risk that remains after a mitigation step is completed. The goal is to mitigate a risk until it is gone, however often this is not possible. It is important to document any residual risk that cannot be removed for the benefit of the project team and the accuracy of Monte Carlo simulations. Any graph that highlights a post-mitigated score will focus on the residual risk after all mitigation steps have been completed. The status of a mitigation step and the actual dates should be updated as the steps are started and finished. **Proposed Cost** is the sum of all **Proposed Cost** of the mitigation steps and **Actual Cost** is the sum of all **Actual Cost** of the mitigation steps.

Figure 12

Figure 13

Edit Mitigation Plan Information:

This functionality is to edit the mitigation plan information such as Plan Name, Plan Description, Plan Owner, Proposed Cost, Response Type and Actual Cost.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Select the required opportunity.
4. Click the **Edit Mitigation Plan** button. (Figure12)
5. After the data is modified, click the **Save** button. (Figure 13)

Mitigations Steps Information:

Mitigation step information can be added from the **Spreadsheet** page or can be added from the **Risk Details** page itself.

PRC SOFTWARE

Mitigation Steps

EDIT IN SPREADSHEET

#	MITIGATION ID	MITIGATION STEP NAME	MITIGATION STEP DESCRIPTION	DELETE
1	O_#1	Miti opp1	Miti oop des1	🗑

Mitigation Step Information

ADD NEW STEP   EDIT MITIGATION

Mitigation ID	O_#1
Mitigation Step Name	Miti opp1
Mitigation Step Description	Miti oop des1
Mitigation Owner	super123 super123
Mitigated Probability	Very High
Mitigated Cost (USD)	High
Mitigated Schedule	High
Multiplier	
(Post) Highest Impact	
(Post) Highest Impact & Multiplier	
(Post) Average Score	
(Post) Average Score & Multiplier	
(Post) Average Bucket Value	
(Post) Average Bucket Value & Multiplier	
Proposed Mitigation Start	06-Jul-15
Proposed Mitigation Finish	14-Jul-15
Proposed Mitigation Cost (USD)	255,000.00
Actual Mitigation Start	08-Jul-15
Actual Mitigation Finish	17-Jul-15
Actual Mitigation Cost (USD)	279,400.00
Mitigation Status	Proposed
Simulation Probability	86
Schedule Minimum	5
Schedule Most Likely	6
Schedule Maximum	7
Cost Minimum(USD)	300,000.00
Cost Most Likely(USD)	400,000.00
Cost Maximum(USD)	500,000.00
Duration Unit	Days
Currency	USD

Figure 14

Edit In Spreadsheet:

This functionality is to edit, add, delete and export mitigation steps for the selected opportunity in spreadsheet. Click the **Edit in Spreadsheet** button which navigates to a spreadsheet page.

Steps:

1. *Risk Register ---> Risk Details (Threats)*
2. Select the required opportunity.
3. Click the **Edit in Spreadsheet** button. (Figure 14)
4. Edit, add, delete and export mitigation steps for the selected opportunity as in Spreadsheet View page. (Figure 15)
5. Click **Go to Risk Details** button to go back to the Advanced View page. (Figure 15)

Figure 15

Add New Step:

This functionality is to add a new mitigation step for the selected opportunity.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Select the required opportunity.
4. Click the **Add New Step** button. (Figure 14)
5. After entering opportunity details, click the **Save Step** button. (Figure 16) This button is visible only after **Add New Step** button or **Edit Mitigation Step** button is clicked. (Figure 14)

Edit Mitigation Step:

This functionality is to edit the selected mitigation step of the opportunity selected.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. **Select** the required opportunity.
4. **Select** the mitigation step that is to be edited.
5. Click the **Edit Mitigation Step** button. (Figure 14)
6. After entering the opportunity details, click the **Save Step** button. (Figure 16) This button is visible only after the **Add New Step** button or **Edit Mitigation Step** button is clicked. (Figure 14)

Figure 16

Recycle Bin:

To go to the **Recycle Bin** from **Risk Details** (Opportunity) click the **Recycle Bin** icon on top of the page in Figure 1.

9:Design changes RESTORE DELETE	
Risk identifier	9
Start Date	10-Dec-14
End Date	12-Nov-15
Status	Open-mitigation working
Risk Owner	Steve Spurrier
Name	Design changes
Description	The design needs to be altered.
Cause	Due to client changing their mind.
Effect	Which would delay the schedule.
Currency	USD

▶ User Defined Fields
▶ Risk Notes
▶ Risk Documents
▶ Recovery Plan(if risk occurs)
▶ Closure Section

Qualitative Score		4.0
Probability	Low	
Cost	Medium	
Schedule	Medium	
Multiplier		
(Pre) Highest Impact	4.0	
(Pre) Highest Impact & Multiplier	4.0	
(Pre) Average Score	4.0	
(Pre) Average Score & Multiplier	4.0	
(Pre) Average Bucket Value	4.0	
(Pre) Average Bucket Value & Multiplier	4.0	

Monte Carlo Inputs	
Linked Projects	
Cost Minimum(USD)	333,333.34
Cost Most Likely(USD)	416,666.66
Cost Maximum(USD)	500,000.00
Link to Schedule ID(s)	map data
Schedule Minimum	60
Schedule Most Likely	75
Schedule Maximum	90
Simulation Probability	22%
Duration Unit	Days

Data Mapping	
Project Work Breakdown Structure	map data
Project Organizational Breakdown Structure	map data
Project Risk Breakdown Structure	map data
Business Work Breakdown Structure	map data
Business Organizational Breakdown Structure	map data
Business Risk Breakdown Structure	map data
Enterprise Work Breakdown Structure	map data
Enterprise Organizational Breakdown Structure	map data
Enterprise Risk Breakdown Structure	map data
Enterprise Risk	map data
Mitigation Plan Information	
Plan Name	
Plan Description	
Plan Owner	
Proposed Cost (USD)	
Response Type	
Actual Cost (USD)	

Figure 17

Searching For Opportunities:

Searching for an opportunity in the **Recycle Bin** can be done in two ways. The **Search** function allows you to search for an opportunity based on a keyword. This method is faster when the user is working with a large amount of data. The **Select** function is commonly used for databases with less data or when the search objective is known.

Using the search function:

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.
4. Click the **Search** button. (Figure 17)
5. Enter the name (which can be either ID or Name) and click the **Search** button and select the required opportunity. (Figure 18)

Figure 18

PRC SOFTWARE

The **Show All** button (Figure 18) in the search area lists all the opportunities available.

Using the select function (dropdown list):

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.
4. Click the **Select** dropdown. (Figure 18)
5. Select the required opportunity from the list shown.

Restore Opportunities:

The following steps restore opportunities and remove them from the **Recycle Bin** and move them back to the pages where opportunity details are being shown, such as **Risk Details (Opportunities)**.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Click the **Recycle Bin** icon to go to **Recycle Bin** page.
4. **Select** the opportunity to restore.
5. Click the **Restore** button to **restore** the selected opportunity. (Figure16)

Delete Opportunity from Recycle Bin

The opportunity deleted from the **Recycle Bin** will be removed completely from the system.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.
4. **Select** the opportunity to delete.
5. Click the **Delete** button. (Figure 17)

After you receive the confirmation message (Figure 19), click the **OK** button. The opportunity will be deleted permanently. To cancel, click the **Cancel** button. (Figure 19)

Figure 19

Email Settings:

This functionality is used to export the entire page to Word and send it by email to the person selected.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. Select the required Opportunity.
4. Click the **Email** icon to send the email.
5. Select the user from the drop down list to whom mail should be sent.
6. Enter the message in the Message text area.
7. Select the required fields for the email edit that can be edited and saved by the recipient. (Figure 21).
8. Click the **Update Fields** button to view the Threats and its Mitigations field values that are selected, where the email edit can be done. (Figure 20)
9. Click the **Send Mail** button to finish. (Figure 20)

Figure 20

Figure 21

The recipients can see the page (Figure 21) and submit the changes by clicking the **Save Changes** button**.** The changes will be updated or error messages will be shown on another web page. The save changes can be done only once for an email sent.

Deleting Opportunity:

The deleted opportunities will be moved to the **Recycle Bin**.

Steps:

1. *Risk Register --->Risk Details*
2. Click the **Opportunities** radio button to **navigate** to the **Risk Details (Opportunities)** page. (Figure 1)
3. **Select** the required opportunity.
4. Click the **Delete Opportunity** button. (Figure 1)
5. After you receive the confirmation message (Figure 22) click the **OK** button. The opportunity will be moved to the recycle bin. To cancel, click the **Cancel** button. (Figure 22)

Are you sure, you want to delete the Opportunity ?

OK   Cancel

Figure 22

Risk Details (Mitigations)

Risk Details (Mitigations) page is used to add mitigation details to either threat or opportunity. Users can track their **Mitigation Plan** or individual **Mitigation Steps**. The **Mitigation Plan** is a compilation of the individual steps below it. The mitigation plan cost is rolled up from the cost of each mitigation step. Tracking mitigation steps creates accountability when the step owner and planned dates are tracked. The qualitative and simulation scoring fields (Probability, Cost, Schedule, etc.) in the mitigation steps represent the residual risk that remains after a mitigation step is completed. Any graph that highlights a post-mitigated score will focus on the residual risk after all mitigation steps have been completed. The status of a mitigation step and the actual dates should be updated as the steps are started and finished. This page is visible only to those users who have **Read/Write** access or **View** access for **Risk Details (Mitigations)**.

Figure 1

Select Mitigations:

This functionality is used to select the mitigations to which the risks are mapped.

Steps:

1. *Risk Register ---> Risk Details*
2. Click the **Mitigations Radio button** to **navigate** to **Risk Details (Mitigations)** page. (Figure 1)
3. Select the mitigation from the **Select mitigations** drop down. (Figure 1)
4. It shows the list of risks mapped to the selected mitigation step. (Figure 2)
5. Click the **Unmap Risk** link to unmap the risks from the mitigation step. (Figure 2)

Figure 2

Map Risks:

This functionality is to select the risks to be mapped to the selected mitigation. This button is shown only after the mitigation is selected.

Steps:

1. *Risk Register ---> Risk Details*
2. Click the **Mitigations Radio button** to **navigate** to **Risk Details (Mitigations)** page. (Figure 1)
3. Select the mitigation from the **Select mitigation** drop down. (Figure 1)
4. Click the **Map Risks** button to map the risks to the selected mitigation. (Figure 2)
5. A pop up appears in which select the risks and click the **Map Selected Risks** button. (Figure 3)
6. Click **Search Risks** button to search the risks to be mapped with.
7. Click **Cancel** button to close the pop up window.

Figure 3

Add New Mitigation:

This functionality is to add a new mitigation which has to be associated with at least one risk.

Steps:

1. *Risk Register ---> Risk Details*
2. Click the **Mitigations Radio button** to **navigate** to **Risk Details (Mitigations)** page. (Figure 1)
3. Click the **Add New Mitigation** button to add a new mitigation. (Figure 1) A pop up appears

Select Type:

This functionality is used to select the risk type to which the mitigation details correspond, which is **Threat** by default.

Steps:

4. *Risk Register ---> Risk Details*
5. Click the **Mitigations Radio button** to **navigate** to **Risk Details (Mitigations)** page. (Figure 1)
6. **Select** the type Threat/Opportunity from the **Select Type** dropdown. (Figure 1)

To Filter the contents:

Steps:

1. **Select** the required column. (Figure 1)
2. Enter the value based on which filtering is to be done. (Figure 1)
3. Click the **Filter** button. (Figure 1)

To Sort the data:

Steps**:**

1. **Select** the required column. (Figure 1)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 1)
3. Click the **Sort** button to **sort** the data in the search area. (Figure 1)
4. Click the **Reset** button to reset the details for filter and sort fields. (Figure 1)

Edit Risk Score Section:

The **Risk Score Section for Risk** shows the post-mitigated scoring information relative to each individual risk mapped to the selected mitigation.

Steps:

1. *Risk Register ---> Risk Details*
2. Click the **Mitigations Radio button** to **navigate** to **Risk Details (Mitigations)** page. (Figure 1)
3. Select the required mitigation step name.
4. Click the corresponding mapped risk's id from the **Mapped Risks Information**.
5. Click the **Edit Mitigation** button. (Figure 4)
6. After the data is modified, click the **Save** button. (Figure 5)

Figure 4

Figure 5

Edit Mitigation Step Information:

Steps:

1. *Risk Register ---> Risk Details*
2. Click the **Mitigations Radio button** to **navigate** to **Risk Details (Mitigations)** page. (Figure 1)
3. **Select** the mitigation step that is to be edited.
4. Click the **Edit Mitigation Step** button. (Figure 1)
5. After entering the mitigation step details, click the **Save Step** button. This button is visible only after the **Add New Mitigation** button or the **Edit Mitigation Step** button is clicked. (Figure 1)

Delete Mitigation Step:

This functionality is used to delete the selected mitigation step information.

Steps:

1. *Risk Register ---> Risk Details*
2. Click the **Mitigations Radio button** to **navigate** to **Risk Details (Mitigations)** page. (Figure 1)
3. Click the **Delete Step** button. (Figure 1)
4. A pop up appears in which click **OK** button to delete the selected mitigation or else click **Cancel**. (Figure 6)
5. A pop up appears which shows the mitigation step is successfully deleted. (Figure 7)

Figure 6

Figure 7

Spreadsheet View (Threats)

The **Spreadsheet View (Threats)** page allows the user to add, edit, delete and export threats in a selected project. This page is visible only to those users who have **Read/Write** access or **View** access for the page **Spreadsheet View (Threat)**. Users with **Read/Write** access can create new threats, edit threats, delete threats and export to **Excel**. Users designated with **View** access can view the threat details and export to **Excel**. The Spreadsheet view does not contain mitigation data. Mitigation information can be viewed using the **Advanced View (Threats), Advanced View (Mitigation), Spreadsheet View (Mitigation)**.

This is a special component that has an **Auto Save** feature. When editing or adding new values to a cell the value is automatically saved by clicking in another cell. It is important to always click in another cell to trigger this auto save feature. The values in the spreadsheet can be **sorted** by clicking on the column header. Click again on the column header to reverse the order of sorting. The columns can be **resized** by clicking and dragging between the column headers. Each column has its own minimum width set. A column cannot be dragged narrower than its minimum width.

Figure 1

Figure 2

Save All:

The **Save All** button is to save all the changes done in the Threat Spreadsheet page when the Auto Save is off. (Figure 2)

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Select the **Auto Update Off** option from the dropdown. (Figure 2)
3. Give the necessary changes in the Threat Spreadsheet page and click **Save All** button to save all the changes done. (Figure 2)

Navigate Page:

To go to the **Spreadsheet View (Opportunity)** page or **Spreadsheet View (Mitigations),** we have to **navigate** from the **Spreadsheet view (Threats)** page.

The option for navigation from one page to another is placed on top of the page and is shown in Figure 1.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Opportunities** radio button to navigate to the **Spreadsheet view (Opportunity)** page. (Figure 1)

   Or

   Click the **Mitigations** radio button to navigate to the **Spreadsheet view (Mitigations)** page. (Figure 1)

PRC SOFTWARE

Export to Excel:

This functionality is used to export the entire page to Excel.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Export** button to export the entire page to Excel. (Figure 1)

Undo:

This functionality is used to reset the last saved value.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Undo** button to return to the last saved value. (Figure 1)

Status:

This functionality is used to display the project details whose status is open, closed or both.

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Status** drop down button and select open, close or both to display the project details with particular status. (Figure 1)

Delete Threats:

Threats can be deleted by clicking the **Delete** button corresponding to each row or multiple threats can be deleted simultaneously.

Delete Multiple Threats:

This functionality helps to delete multiple threats simultaneously. To delete multiple threats we must first select them. Deleted threats will be moved to the Recycle Bin from where they can be deleted permanently.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Select Threats** button to select the threats to delete. (Figure 1)
3. Select the threats by ticking the **check boxes**. (Figure 3)
4. Click the **Delete Multiple** button to delete the selected threats. (Figure 3)

Figure 3

Delete Threats Individually:

The deleted threats will be moved to the Recycle Bin.

 Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Threats***
2. Click the **Close** button to delete the required threat.

Copy to Monte Carlo:

This functionality helps to copy the **Qualitative details** of selected threats to their corresponding **Monte Carlo inputs**.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Threats***
2. Click the **Select Threats** button to select the threats. (Figure 1)
3. Select the threats by ticking the check boxes. (Figure 3)
4. Click the **Copy to Monte Carlo** button to copy the selected threats' Qualitative details to their Monte Carlo inputs. (Figure 3)

Copy to Qualitative:

This functionality helps to copy the **Monte Carlo details** of selected threats to their corresponding **Qualitative Score**.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Threats***
2. Click the **Select Threats** button to select the threats. (Figure 1)
3. Select the threats by ticking the **check boxes**. (Figure 3)
4. Click the **Copy to Qualitative** button to copy the selected threats' Monte Carlo details to their Qualitative Score. (Figure 3)

Reorder Columns:

This functionality is used to reorder the threat spreadsheet columns. (Figure 1)

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Threats***
2. Click the **Reorder Columns** button to reorder the spreadsheet columns. (Figure 1)

Quick Monte Carlo:

This functionality generates a **Quick Monte Carlo Analysis** that shows the **Cumulative S Curve** report and **Top Risk** reports for Threats / Opportunities / Threat and Opportunities. Top Risk reports are classified into 3 Tornado charts, **Maximum Value isolated, Weighted Average Isolated** and **Correlation Isolated.** The Iteration number and the Highlights are given based on which the Cumulative Frequency iterations and the Cumulative percentage values to be highlighted are shown in the chart and table. The Top Risk reports consider simulated cost exposure values of each Risk up to the Pn iteration value, where 'n' is the percentile value of total number of iterations given.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Threats***
2. Click the **Quick Monte Carlo** button. (Figure 1)
3. A pop up appears (Figure 4) where the **Cumulative S Curve** report and **Top Risks** reports are shown.
4. Select Threats/Opportunities/ Threats and Opportunities from **Options** dropdown and give the Iteration number. (Figure 4)
5. Click **Apply** button to apply the given highlights based on which the Pn percentile value for the Top Risk reports can be taken.
6. Click **Run Analysis** button generate the charts. (Figure 4)
7. Click **Export to Word** button to open the charts in Microsoft Word. (Figure 4)

QUICK MONTE CARLO ANALYSIS ⊗

Options	Threats ⌄
Distribution	Triangular
Correlation	No
Iterations	1000
Highlight	50,85 APPLY %
Cumulative S Curve	RUN ANALYSIS EXPORT TO WORD

Bar Width : 10,000 ⌄ (USD)

Cumulative S Curve Chart

COST EXPOSURE	CUMULATIVE PERCENTILE VALUE
681,530.27	0
5,218,410.56	5
6,794,901.49	10
8,024,713.82	15
8,917,867.78	20
9,819,616.44	25
10,781,630.76	30
11,437,376.59	35
12,270,191.48	40
12,921,664.37	45
13,773,518.02	50
14,718,900.92	55
15,727,747.03	60
17,078,723.71	65
18,450,559.08	70
19,914,852.52	75
22,098,234.61	80
23,957,708.11	85
25,972,370.88	90
31,578,113.80	95
53,354,692.92	100

Top	10 ⌄	Risks
P	100 ⌄	

PRC SOFTWARE

Maximum Value Isolated To P100

Upstream Investment
Maximum Value Isolated To P100

THREAT ID	THREAT NAME	COST EXPOSURE
R1	Major HSE incident during drilling	4,816,176.98
R16	Late discovery of offshore quality problems	4,454,657.94
R22	Quality issues may be discovered after installation	4,439,987.72
R7	Dropped or damaged Umbilical	4,367,489.56
R6	Dropped or damaged Manifold	4,197,479.50
R14	Failure - Infant well	3,384,895.75
R10	Hydro-test failure	3,187,422.31
R5	Dropped or damaged flowline	3,166,801.30
R19	Delays due to legal issues	2,291,739.54
R30	Weather contingency is not sufficient	2,196,319.31

Weighted Average Isolated to P100

Upstream Investment
Weighted Average Isolated to P100

THREAT ID	THREAT NAME	PERCENTAGE
R23	There is a chance to remove scope (onshore)	15.67
R16	Late discovery of offshore quality problems	6.16
R4	Design issues or flaws	4.99
R20	New regulations emerge	4.62
R26	Issues with subsea commissioning cause rework	4.48
R8	Equipment may be damaged or lost	4.45
R5	Dropped or damaged flowline	4.06
R10	Hydro-test failure	3.92
R15	Changes to scope after phase 2	3.89
R27	The technology may have some compatibility issues	3.71

PRC SOFTWARE

Figure 4

Recycle Bin:

To go to **Recycle Bin** from **Spreadsheet view (Threats),** click the **Recycle Bin** icon shown on top of the page in Figure 1.

9:Design changes	RESTORE	DELETE

Risk identifier	9
Start Date	10-Dec-14
End Date	12-Nov-15
Status	Open-mitigation working
Risk Owner	Steve Spurrier
Name	Design changes
Description	The design needs to be altered.
Cause	Due to client changing their mind.
Effect	Which would delay the schedule.
Currency	USD

- User Defined Fields
- Risk Notes
- Risk Documents
- Recovery Plan(if risk occurs)
- Closure Section

Qualitative Score   4.0

Probability	Low
Cost	Medium
Schedule	Medium
Multiplier	
(Pre) Highest Impact	4.0
(Pre) Highest Impact & Multiplier	4.0
(Pre) Average Score	4.0
(Pre) Average Score & Multiplier	4.0
(Pre) Average Bucket Value	4.0
(Pre) Average Bucket Value & Multiplier	4.0

Monte Carlo Inputs

Linked Projects	
Cost Minimum(USD)	333,333.34
Cost Most Likely(USD)	416,666.66
Cost Maximum(USD)	500,000.00
Link to Schedule ID(s)	map data
Schedule Minimum	60
Schedule Most Likely	75
Schedule Maximum	90
Simulation Probability	22%
Duration Unit	Days

Data Mapping

Project Work Breakdown Structure	map data
Project Organizational Breakdown Structure	map data
Project Risk Breakdown Structure	map data
Business Work Breakdown Structure	map data
Business Organizational Breakdown Structure	map data
Business Risk Breakdown Structure	map data
Enterprise Work Breakdown Structure	map data
Enterprise Organizational Breakdown Structure	map data
Enterprise Risk Breakdown Structure	map data
Enterprise Risk	map data

Mitigation Plan Information

Plan Name	
Plan Description	
Plan Owner	
Proposed Cost (USD)	
Response Type	
Actual Cost (USD)	

Figure 5

Searching For Threats:

Searching for a Threat in the **Recycle Bin** can be done in two ways. The **Search** function allows you to search for a threat based on a keyword. This method is faster when you are working with a large amount of data. The **Select** function is commonly used for databases with less data or when the search objective is known.

Using the Search Function:

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Recycle Bin** icon to go to **Recycle Bin** page.
3. Click the **Search** button. (Figure 5)
4. Enter the name (which can be either the ID or Name), click the **Search** button and select the required threat. (Figure 6)

Figure 6

The **Show All** button in the search area lists all the threats available. (Figure 6)

Using the Select Function (dropdown list):

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Recycle Bin** icon to go to the Recycle Bin page.
3. Click the **Select** dropdown. (Figure 5)
4. Select the required threat from the list shown.

Restore Threats:

The restored threat is removed from the **Recycle Bin** and is moved back to the pages where threat details are shown (for example **Spreadsheet View (threats)**).

Steps:

1. *Risk Register ---> Risk Spreadsheet --->* **Threats**
2. Click the **Recycle Bin** icon to go to **Recycle Bin** page.
3. Select the threat to restore.
4. Click the **Restore** button to **restore** the selected threat. (Figure 6)

Delete Threat From Recycle Bin:

A threat deleted from the **Recycle Bin** will be removed completely from the system.

Steps:

1. *Risk Register ---> Risk Spreadsheet --->* **Threats**
2. Click the **Recycle Bin** icon to go to **Recycle Bin** page.
3. Select the threat to delete.
4. Click the **Delete** button. (Figure 5)

After you receive the confirmation message (Figure 7), click the **OK** button. The threat will be deleted permanently. To cancel, click the **Cancel** button. (Figure 7)

Are you sure, you want to delete the Risk permanently ?

OK   Cancel

Figure 7

Frozen Column:

This functionality is used to set the number of columns as fixed when the scroll is enabled. For example, in Figure 8 **Frozen Columns** is set to 2 (default value) which implies that the column **ID** and **Name** will be fixed and scrolling will be applicable from the third column onwards.

Frozen Columns : 2

Figure 8

Steps:

1. *Risk Register ---> Risk Spreadsheet --->* **Threats**
2. Enter the number of columns that must be **frozen.**
3. Click the **Set** button shown in Figure 8.

Filter Data:

To **Filter** the data according to a particular value.

Steps:

1. *Risk Register ---> Risk Spreadsheet --->* **Threats**
2. **Select** the required column from the **Select Column** dropdown. (Figure 1)
3. Enter the value in the **textbox** provided based on which filtering is to be done. (Figure 1)
4. Click the **Filter** button (Figure 1). The filtered data will be displayed.

Reset Data:

This functionality is used to reset the filtered spreadsheet to previous values.

Steps:

1. *Risk Register ---> Risk Spreadsheet --->* **Threats**
2. Click the **Reset** button to reset the values. (Figure 1)

Pre-Mitigated Score:

The **Pre-Mitigated Score** is the risk score. The fields (Probability, Cost and Schedule and Additional Impacts) are used to set the pre-mitigated score. (Figure 1) If Probability and Impacts have a value of either **Undefined** or **No Risk,** the **Pre-Mitigated Score** will be zero.

Post-Mitigated Score:

The **Post-Mitigated Score** is the mitigation score. The fields (Probability, Cost and Schedule, and Additional Impacts) are used to set the post-mitigated score. (Figure 1) If probability and impacts have value either **Undefined** or **No Risk** the **Post-Mitigated Score** will be zero.

Creating a new threat:

Creating a new threat in spreadsheet view is quick and easy. The **ID** field is required to save a threat.

Steps:

1. *Risk Register ---> Risk Spreadsheet --->* **Threats**

2. Enter the details on a new line. For fields such as Name, Description, etc., a text box pops up upon clicking the cell. (Figure 9) After entering the details click the **Close** button for text fields (Figure 9). The details will be saved automatically. To Cancel click the **Cancel** button. (Figure 9)

#	ID	NAME	DESCRIP...	PROBABILITY (QUAL)	COST (QUAL)	SCHEDULE (QUAL)
1	#1	Threat1		High(70.0-80.0)	High(21,689,440.80-32,534	High(40.00-60.00)
2	#2			(30.0-40.0)	Very	High(40.00-60.00)
3	#4			High(70.0-80.0)	Low(16,267,080.60-21,689	Very High(60.00-70.00)
4	#6	Save	Cancel	(40.0-70.0)	Low(16,267,080.60-21,689	Very Low(20.00-30.00)
5	#7			Very Low(20.0-30.0)	Low(16,267,080.60-21,689	Very Low(20.00-30.00)
6	#3	Opportunit...	Opportunit...	Very Low(20.0-30.0)	Low(16,267,080.60-21,689	Very Low(20.00-30.00)
7	T_19-Jan-2016_1...			Undefined(0)	Undefined(0)	Undefined(0)

Figure 9

A calendar component pops up for the date fields upon clicking the calendar control. (Figure 10)

Figure 10

If the data is to be selected from a list a drop down appears. (Figure 11)

Figure 11

The other columns may be edited within the cell.

3. Click any other cell to trigger the **auto save**.

Editing a threat:

This functionality is to edit an existing threat.

Steps:

1. *Risk Register ---> Risk Spreadsheet --->* **Threats**
2. Refer to the procedures in the previous section (**Creating a new threat**).
3. Edit the cell as required and click in any other cell to trigger the **auto save**.

User Defined Fields:

The user defined or custom field is shown along with the threat details as the last column. There is no limit to the number of user defined fields.

User Defined Fields can be added in two ways.

1. The user defined fields can be added using the template imported for the project from the page:

   Project settings ---> Assign Templates

   Or

2. It can be also be added from page:

   Project settings ---> Custom Fields

Bulk Email:

This functionality is to send multiple Risks and Mitigations data by email to the users selected. This functionality is applicable only to the users with the user type **Application and Email** and **Email Only** in the Manage Users page.

Two lists can be utilized, **Available Users** and **Selected Users**. **Available Users** (Figure 12) contains all the users who have access to the selected project and portfolio level users. **Selected Users** (Figure 12) displays the users who have been selected. A user can be added to the Selected User list using the **Add** button. All nodes under the Available Users list can be moved to Selected Users using the **Add All** button (Figure 12).A single node from the Selected Users list can be moved back to the Available Users list using the **Remove** button. The **Remove All** button moves all nodes from the Selected Users list to the Available Users list. The Subject by default has the value Project Name: ID/Name of the risk selected, which can be changed if needed.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Threats*
2. Click the **Threats** radio button to **navigate** to the **Risk Spreadsheet (Threats)** page. (Figure 1)
3. Click the **Select Threats** button to select the required threats to be sent. (Figure 1)
4. Select the threats by ticking the **check boxes**. (Figure 3)
5. Click the **Bulk Email** icon to send the email. (Figure 3)It navigates to another page.(Figure 12)
6. Select at least one user to whom mail should be sent.
7. Enter the message in the Message text area.
8. Select the required fields for the email edit that can be edited and saved by the recipient (refer Figure 12).
9. Click the **Send Mail** button. (Figure 12)

Figure 12

Update fields:

This functionality allows the recipient users to view the threats and its mitigations field values that are selected, where the email edit can be done.

Go to Threat Spreadsheet:

This functionality helps the user to navigate to the threat spreadsheet page.

Send Mail:

This functionality is to send the mail to the selected users after selecting the threat and its mitigation details for email edit.

PRC SOFTWARE

You can **download** the attached html file (Please dont open the attachment with in mail), make the changes and click on the Save Changes button to update the changes

OR

Click on the link below for the data from the Risk Register and update the data.

http://192.168.9.62:8080/PRCRiskRegister2.0/views/bulkEmailUpdation.jsf?
SNE1UCISILRMIZ16kOp8a5afaa9594af12e16yIV537bbd8abfc2d160sBn7/XnqcGq=XJB87FSNTMHIIT

The details of the following Risks / Mitigations are included in the attachment

Project Details

Name	: Project
ID	: 2366
Description	:
Start Date	: 03-Feb-16
End Date	: 29-Feb-16
Status	: Open
Project Manager	:
Business Unit	: Business Unit2

Risk and Mitigations

ID	Name	Description
#4	Threat4	Threat Description4

ID	Name	Description
#6	Threat6	Threat description6

Mitigation ID	Mitigation Step Name	Mitigation Step Description
T_#5	Miti threat5	Miti des5

Figure 13

The recipients will receive a mail that contains the project details, the threats and mitigations data and also a link in which the user can do the email edit for the Risk Data. (Figure 13) By clicking the link it navigates to another page where the changes are done. (Figure 14) Submit the changes by clicking the **Save Changes** button that will update the changes done to the database,

and a mail is sent to the user showing the updated fields. (Figure 15) The save changes can be done only once for an email sent.

Figure 14

super123 super123 has successfully updated the Project Cabiúnas Pipeline Project

The Threat fields updated are given below

Risk Id	Field Name	Previous Value	New Value
149	Schedule	Medium	Undefined
149	Threat Window Ends		06/03/2014
149	Status	Open-unmitigated	Open-mitigation working
149	Threat Window Begins		05/03/2014

The Mitigation fields updated are given below

Mitigation Id	Field Name	Previous Value	New Value
M_22-Oct-2013_11:57:05	Environmental	No Risk	High
M_22-Oct-2013_11:57:05	Safety	No Risk	High
M_22-Oct-2013_11:57:05	Mitigation Probability	Possible	Highly Likely
M_22-Oct-2013_11:57:05	Step Responsible Person		owner_1

Figure 15

Spreadsheet View (Opportunities)

The **Spreadsheet View (Opportunities)** page allows the user to add, edit, delete, and export opportunities in a selected project. This page is visible only to those users who have **Read/Write** access or **View** access for the page **Spreadsheet View (Opportunities)**. Users with **Read/Write** access can create new opportunities, edit opportunities, delete opportunities and export to **Excel**. Users designated with **View** access may view the opportunity details and export to **Excel.** The **Spreadsheet View (Opportunity)** does not contain mitigation data. Mitigation information can be viewed using the **Risk Details (Opportunities), Risk Details (Mitigation), Spreadsheet View (Mitigation)**.

This is a special component that has an **Auto Save** feature. When editing or adding new values to a cell the value is automatically saved by clicking in another cell. It is important to always click in another cell to trigger this auto save feature. The values in the spreadsheet can be **sorted** by clicking on the column header. Click again on the column header to reverse the order of sorting. The columns can be **resized** by clicking and dragging between the column headers. Each column has its own minimum width set. A column cannot be dragged narrower than its minimum width.

Figure 1

PRC SOFTWARE

Figure 2

Save All:

The **Save All** button is to save all the changes done in the Opportunity Spreadsheet page when the Auto Save is off. (Figure 2)

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Select the **Auto Update Off** option from the dropdown. (Figure 2)
3. Give the necessary changes in the Threat Spreadsheet page and click **Save All** button to save all the changes done. (Figure 2)

Navigate Page:

To go to the **Spreadsheet View (Opportunity)** page, click the **Opportunities** radio button shown on top of the page. (Figure 1) The option for navigation from one page to another is placed on top of the page and is shown in Figure 1.

Steps:

1. *Risk Register ---> Spreadsheet ---> **Opportunities***
2. Click the **Threats** radio button (Figure 1) to **navigate** to the **Spreadsheet view (Threats)** page.

Or

Click the **Mitigations** radio button (Figure 1) to **navigate** to the **Spreadsheet view (Mitigations)** page.

Export to Excel:

This functionality is used to export the entire page to Excel.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. Click the **Export** button to export the entire page to Excel. (Figure 1)

Undo:

This functionality is used to reset the last saved value.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. Click the **Undo** button to return to the last saved value. (Figure 1)

Status:

This functionality is used to display the project details whose status is open, closed or both.

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Click the **Status** drop down button and select open, close or both to display the project details with particular status. (Figure 1)

Delete Opportunities:

Opportunities can be deleted by clicking the **Delete** button corresponding to each row or multiple opportunities can be deleted simultaneously.

Delete multiple opportunities:

This functionality helps to **delete** multiple opportunities simultaneously. To **delete** multiple opportunities we must first select them. Deleted opportunities will be moved to the **Recycle Bin** from where they can be deleted permanently.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Click the **Select Opportunities** button to select the opportunities to delete. (Figure 1)
3. Select the opportunities by ticking the **check boxes**.   (Figure 3)
4. Click the **Delete Multiple** button to delete the selected opportunities. (Figure 3)

Figure 3

Delete Opportunities Individually:

The deleted opportunities will be moved to the **Recycle Bin**.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. Click the **Close** button to **delete** the required opportunity.

Copy to Monte Carlo:

This functionality helps to copy the **Qualitative details** of selected opportunities to their corresponding **Monte Carlo inputs**.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. Click **Select Opportunities** button to select the opportunities. (Figure 1)
3. Select the opportunities by ticking the **check boxes**. (Figure 3)
4. Click the **Copy to Monte Carlo** button to copy the selected opportunities' Qualitative details to their Monte Carlo inputs. (Figure 3)

Copy to Qualitative:

This functionality helps to copy the **Monte Carlo details** of selected opportunities to their corresponding **Qualitative Score**.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. Click the **Select Opportunities** button to select the opportunities. (Figure 1)

PRC SOFTWARE

3. Select the opportunities by ticking the **check boxes**. (Figure 3)
4. Click the **Copy to Qualitative** button to copy the selected opportunities' Monte Carlo details to their Qualitative Score. (Figure 3)

Reorder Columns:

This functionality is used to reorder the opportunity spreadsheet columns. (Figure 1)

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Click the **Reorder Columns** button to reorder the spreadsheet columns. (Figure 1)

Quick Monte Carlo:

This functionality generates a **Quick Monte Carlo Analysis** that shows the **Cumulative S Curve** report and **Top Risk** reports for Threats / Opportunities / Threat and Opportunities. Top Risk reports are classified into 3 Tornado charts, **Maximum Value isolated, Weighted Average Isolated** and **Correlation Isolated.** The Iteration number and the Highlights are given based on which the Cumulative Frequency iterations and the Cumulative percentage values to be highlighted are shown in the chart and table. The Top Risk reports consider simulated cost exposure values of each Risk up to the Pn iteration value, where 'n' is the percentile value of total number of iterations given.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Click the **Quick Monte Carlo** button. (Figure 1)
3. A pop up appears (Figure 4) where the **Cumulative S Curve** report and **Top Risks** reports are shown.
4. Select Threats/Opportunities/ Threats and Opportunities from **Options** dropdown and give the Iteration number. (Figure 4)
5. Click **Apply** button to apply the given highlights based on which the Pn percentile value for the Top Risks reports can be taken.
6. Click **Run Analysis** button generate the charts. (Figure 4)
7. Click **Export to Word** button to open the charts in Microsoft Word. (Figure 4)

QUICK MONTE CARLO ANALYSIS

Options	Opportunities
Distribution	Triangular
Correlation	No
Iterations	1000
Highlight	50,85	APPLY %
Cumulative S Curve	RUN ANALYSIS	EXPORT TO WORD

Bar Width : 10,000 (USD)

Cumulative S Curve Chart

COST EXPOSURE	CUMULATIVE PERCENTILE VALUE
0.00	0
92,061.11	5
143,671.24	10
159,462.46	15
198,535.45	20
268,301.65	25
300,799.07	30
327,211.25	35
344,657.75	40
361,108.28	45
380,214.33	50
403,194.26	55
464,569.08	60
518,079.65	65
566,263.17	70
617,958.41	75
674,144.22	80
722,297.52	85
764,998.76	90
815,969.25	95
1,035,402.01	100

Top 10 Risks

P 100

Maximum Value Isolated To P100

Upstream Investment
Maximum Value Isolated To P100

OPPORTUNITY ID	OPPORTUNITY NAME	COST EXPOSURE
#4	Opportunity4	401,482.65
#1	Opportunity1	240,417.39
#3	Opportunity3	233,038.41
#2	Opportunity2	80,233.30
#5	Opportunity5	80,232.69

Weighted Average Isolated to P100

OPPORTUNITY ID	OPPORTUNITY NAME	PERCENTAGE
#4	Opportunity4	34.31
#1	Opportunity1	28.95
#2	Opportunity2	15.55
#5	Opportunity5	15.18
#3	Opportunity3	6.01

Correlation Isolated to P100

OPPORTUNITY ID	OPPORTUNITY NAME	PERCENTAGE
#4	Opportunity4	83.80
#1	Opportunity1	40.35
#3	Opportunity3	26.82
#2	Opportunity2	15.43
#5	Opportunity5	9.82

Figure 4

Recycle Bin:

To go to **Recycle Bin** from **Spreadsheet view** (**Opportunities**) click the **Recycle Bin** icon shown on top of the page in Figure 1.

9:Design changes	RESTORE	DELETE	
Risk identifier	9		
Start Date	10-Dec-14		
End Date	12-Nov-15		
Status	Open-mitigation working		
Risk Owner	Steve Spurrier		
Name	Design changes		
Description	The design needs to be altered.		
Cause	Due to client changing their mind.		
Effect	Which would delay the schedule.		
Currency	USD		

▶ User Defined Fields
▶ Risk Notes
▶ Risk Documents
▶ Recovery Plan(if risk occurs)
▶ Closure Section

Qualitative Score		4.0
Probability	Low	
Cost	Medium	
Schedule	Medium	
Multiplier		
(Pre) Highest Impact	4.0	
(Pre) Highest Impact & Multiplier	4.0	
(Pre) Average Score	4.0	
(Pre) Average Score & Multiplier	4.0	
(Pre) Average Bucket Value	4.0	
(Pre) Average Bucket Value & Multiplier	4.0	

Monte Carlo Inputs	
Linked Projects	
Cost Minimum(USD)	333,333.34
Cost Most Likely(USD)	416,666.66
Cost Maximum(USD)	500,000.00
Link to Schedule ID(s)	map data
Schedule Minimum	60
Schedule Most Likely	75
Schedule Maximum	90
Simulation Probability	22%
Duration Unit	Days

Figure 5

Searching For Opportunities:

Searching for opportunity in the **Recycle Bin** can be done in two ways. The **Search** function allows you to search for an opportunity based on a keyword. This method is faster when you are working with large amount of data. The **Select** function is commonly used for databases with less data or when the search objective is known.

Using the search function:

Steps:

1. ***Risk Register ---> Risk Spreadsheet ---> Opportunities***
2. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.
3. Click the **Search** button. (Figure 5)
4. Enter the name (which can be either the ID or Name), click the **Search** button and Select the required opportunity. (Figure 6)

Figure 6

The **Show All** button in the search area lists all the opportunities available. (Figure 6)

Using the select function (dropdown list):

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Click the **Recycle Bin** icon to go to the **Recycle Bin** page.
3. Click the Select dropdown. (Figure 5)
4. Select the required opportunity from the list shown.

Restore Opportunities:

The restored opportunity is removed from the **Recycle Bin** and is moved back to the pages where opportunity details are shown (for example **Spreadsheet View (opportunities)**).

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Click the **Recycle Bin** icon to go to **Recycle Bin** page.
3. Select opportunity to restore.
4. Click the Restore button to **restore** selected opportunity. (Figure 5)

Delete opportunity From Recycle Bin:

An opportunity deleted from the **Recycle Bin** will be removed completely from the system.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Click the **Recycle Bin** icon to go to **Recycle Bin** page.
3. Select the opportunity to delete.
4. Click the Delete button. (Figure 5)

After you receive the confirmation message (Figure 7), click the **OK** button**.** The opportunity will be deleted permanently. To cancel, click the **Cancel** button. (Figure 7)

Figure 7

Frozen column:

This functionality is used to set the number of columns as fixed when the scroll is enabled. For example, in Figure 7 **Frozen Columns** is set to 2 (default value), which implies that the column **ID** and **Name** will be fixed and scrolling will be applicable from the third column onwards.

Frozen Columns : 2

Figure 8

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. Enter the number of columns that must be **frozen.**
3. Click the **Set** button shown in Figure 8.

Filter Data:

To **Filter** the data according to a particular value:

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. **Select** the required column from the **Select Column** dropdown. (Figure 1)
3. Enter the value in the **textbox** based on which filtering is to be done. (Figure 1)
4. Click the **Filter** button (Figure 1). The filtered data will be displayed.

Reset Data:

This functionality is used to set the filtered values to its previous values.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> Opportunities*
2. Click the **Reset** button to **reset** the values. (Figure 1)

Pre-Mitigated Score:

The **Pre-Mitigated Score** is the risk score. The fields (Probability, Cost and Schedule and Additional Impacts) are used to set the pre-mitigated score. (Figure 1) If Probability and Impacts have a value of either **Undefined** or **No Risk,** the **Pre-Mitigated Score** will be zero.

Post-Mitigated Score:

The **Post-Mitigated Score** is the mitigation score. The fields (Probability, Cost and Schedule and Additional Impacts) are used to set the post-mitigated score. (Figure 1) If probability and impacts have value either **Undefined** or **No Risk** the **Post-Mitigated Score** will be zero.

Creating a new opportunity:

Creating a new opportunity in spread sheet view is quick and easy. The **ID** field is required to save an opportunity.

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Opportunities***
2. Enter the details on a new line. For fields such as **Name**, **Description** etc., a text box pops up upon clicking the cell. (Figure 9) After entering the details, click the **Close** button for text fields (Figure 9). The details will be saved automatically. To **Cancel,** click the **Cancel** button. (Figure 9)
3.

Figure 9

A calendar component pops up for date fields upon clicking the calendar control. (Figure 10)

Figure 10

If the data is to be selected from a list a drop down appears. (Figure 11)

Figure 11

The other columns may be edited within the cell.

4. Click any other cell to trigger the **auto save**.

Editing an Opportunity:

To edit an existing opportunity:

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> * **Opportunities**
2. Refer to the procedures in the previous section (**Creating a new opportunity**).
3. Edit the cell as required and click in any other cell to trigger the **auto save**.

User Defined Fields:

User defined or custom field is shown along with the opportunity details as the last column.
There is no limit to the number of user defined fields.

User Defined Fields can be added in two ways.

1. The user defined fields can be added using the template imported for the project from the
page:

   Project settings ---> Assign Templates

   Or

2. It can be also be added from page:

   Project settings ---> Custom Fields

Bulk Email:

This functionality is to send multiple Risks and Mitigations data by email to the users selected. This functionality is applicable only to the users with the user type **Application and Email** and **Email Only** in the Manage Users page.

Two lists can be utilized, **Available Users** and **Selected Users**. **Available Users** (Figure 12) contains all the users who have access to the selected project and portfolio level users. **Selected Users** (Figure 12) displays the users who have been selected. A user can be added to the Selected User list using the **Add** button. All nodes under the Available Users list can be moved to Selected Users using the **Add All** button (Figure 12).A single node from the Selected Users list can be moved back to the Available Users list using the **Remove** button. The **Remove All** button moves all nodes from the Selected Users list to the Available Users list. The Subject by default has the value Project Name: ID/Name of the risk selected, which can be changed if needed.

Steps:

1. *Risk Register ---> Risk Spreadsheet* ---> **Opportunities**
2. Click the **Opportunities** radio button to **navigate** to the **Risk Spreadsheet (Opportunities)** page. (Figure 1)
3. Click the **Select Opportunities** button to select the required opportunities to be sent. (Figure 1)
4. Select the opportunities by ticking the **check boxes**. (Figure 3)
5. Click the **Bulk Email** icon to send the email. (Figure 3)It navigates to another page.(Figure 12)
6. Select at least one user to whom mail should be sent.
7. Enter the message in the Message text area.
8. Select the required fields for the email edit that can be edited and saved by the recipient (refer Figure 12).
9. Click the **Send Mail** button. (Figure 12)

Figure 12

Update fields:

This functionality allows the recipient users to view the opportunities and its mitigations field values that are selected, where the email edit can be done.

Go to Threat Spreadsheet:

This functionality helps the user to navigate to the opportunity spreadsheet page.

Send Mail:

This functionality is to send the mail to the selected users after selecting the opportunity and its mitigation details for email edit.

You can **download** the attached html file (Please dont open the attachment with in mail), make the changes and click on the Save Changes button to update the changes

OR

Click on the link below for the data from the Risk Register and update the data.

http://192.168.9.62:8080/PRCRiskRegister2.0/views/bulkEmailUpdation.jsf?
VZ5KZN3QVALZ6M16kOp1080e35dd03a8c9516yIV3dd1b7c12eacf3d5Fj2Dmx+i8RY=D9XDZLECLLHZNU

The details of the following Risks / Mitigations are included in the attachment

<u>Project Details</u>

Name   : Project
ID   : 2366
Description :
Start Date   : 03-Feb-16
End Date   : 29-Feb-16
Status   : Open
Project Manager :
Business Unit   : Business Unit2

<u>Risk and Mitigations</u>

ID	Name	Description
#1	Opportunity1	Opportunity Description1

Mitigation ID	Mitigation Step Name	Mitigation Step Description
O_#1	Miti opp1	Miti oop des1

ID	Name	Description
#4	Opportunity4	Opprtunity Description4

Mitigation ID	Mitigation Step Name	Mitigation Step Description
O_#3	Miti opp3	Miti opp des3

Figure 13

The recipients will receive a mail that contains the project details, the opportunities and mitigations data and also a link in which the user can do the email edit for the Risk Data. (Figure 13) By clicking the link it navigates to another page where the changes are done. (Figure 14) Submit the changes by clicking the **Save Changes** button that will update the changes done to the database, and a mail is sent to the user showing these updated fields. (Figure 15) The save changes can be done only once for an email sent.

Figure 14

Figure 15

Spreadsheet View (Mitigations)

The **Spreadsheet View (Mitigations)** page allows the user to add, edit, delete, and export mitigations in a selected project. This page is visible only to those users who have **Read/Write** access or **View** access for the page **Spreadsheet View (Mitigations)**. Users with **Read/Write** access can create new mitigations, edit mitigations, delete mitigations and export to **Excel**. Users designated with **View** access can view the mitigation details and export to **Excel**. The mitigation details in the **Spreadsheet View (Mitigations)** page are displayed in ascending order of the **Mitigation Risk Score**.

This is a special component that has an **Auto Save** feature. When editing or adding new values to a cell the value is automatically saved by clicking in another cell. It is important to always click in another cell to trigger this auto save feature. The values in the spreadsheet can be **sorted** by clicking on the column header. Click again on the column header to reverse the order of sorting. The columns can be **resized** by clicking and dragging between the column headers. Each column has its own minimum width set. A column cannot be dragged narrower than its minimum width.

Navigate Page:

To go to the **Spreadsheet View (Mitigations)** page, click the **Mitigations** radio button shown on top of the page. (Figure 1)

The option for navigation from one page to another is placed on top of the page and is shown in Figure 1.

Steps:

1. *Risk Register ---> Spreadsheet View*
2. Click the **Threats** radio button (Figure 1) to **navigate** to the **Spreadsheet view (Threats)** page.

<div align="center">Or</div>

Click the **Opportunities** radio button (Figure 1) to **navigate** to the **Spreadsheet view (Opportunities)** page.

There is also an option to view the mitigation for **Threat/Opportunity**.

To view the **Spreadsheet View (Mitigations)** for threat, select **Threat** from the dropdown. (Figure 1)

To view the **Spreadsheet View (Mitigations)** for opportunity, select **Opportunity** from the dropdown. (Figure 1)

Figure 1

Figure 2

The **Spreadsheet View (Mitigations)** page is divided into two parts, **Mitigation Spreadsheet** (Figure 1) and **Mitigation Mapping** (Figure 3).

Figure 3

In the **Mitigation Mapping** part, the Risk IDs mapped to a corresponding mitigation step is shown in one field separated by commas. The user can click this Risk ID field and get a pop-up similar to that in the risk to activity mapping from the detailed view, where we can map the risks to the mitigation step or unmap the risks from the mitigation. (Figure 4)

Figure 4

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations ---> Mitigation Mapping*
2. Click the link in the Risk ID column for each mitigation step (Figure 3).
3. A pop up appears in which user can select the risks to be mapped by ticking the check boxes or uncheck the selected risks to remove mapping and click the **Map Selected Risks** button. (Figure 4)
4. Click the **Cancel** button to close the pop up. (Figure 4)

Save All:

The **Save All** button is to save all the changes done in the Mitigation Spreadsheet and Mitigation Mapping pages when the Auto Save is off.

Steps:

1. *Risk Register ---> Risk Spreadsheet* ---> **Mitigation Spreadsheet/ Mitigation Mapping**
2. Select the **Auto Update Off** option from the dropdown. (Figure 2)
3. Give the necessary changes in the Mitigation Spreadsheet / Mitigation Mapping pages and click **Save All** button to save all the changes done. (Figure 2 and Figure 3)

In the **Mitigation Spreadsheet** part, each Risk ID is on a separate row so that Mitigation IDs may be repeated. Here the scoring can be viewed in different ways by **Group By** functionality. (Figure 3)

Group by:

This functionality is to view the scoring in different ways based on each fields in the Mitigation Spreadsheet, i.e. Risk ID, Risk Name, Risk Status, Mitigation ID etc. The default view will be *No grouping*.

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations ---> Mitigation Spreadsheet*
2. Click the **Group By** drop down and Select the required one from the list. (Figure 5)

Figure 5

Ungroup to add new:

This functionality is to ungroup the grouped list and allows adding new mitigations.

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations ---> Mitigation Spreadsheet*
2. Click the **Group By** drop down and Select the required one from the list. (Figure 5)
3. Click the **Ungroup To Add New** button to ungroup the list and add the new mitigation. (Figure 5)

Collapse All:

This functionality is to collapse the mitigation score information based on the group selected from the Group By drop down.

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations ---> Mitigation Spreadsheet*
2. Click the **Group By** drop down and Select the required one from the list. (Figure 5)
3. Click the **Collapse All** button to collapse the mitigation information. (Figure 6)

Figure 6

Expand All:

This functionality is to show the collapsed mitigation score information.

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations ---> Mitigation Spreadsheet*
2. Click the **Group By** drop down and Select the required one from the list. (Figure 5)
3. Click the **Collapse All** button to collapse the mitigation information. (Figure 6)
4. Click the **Expand All** button to show the collapsed mitigation score information.

Export to Excel:

This functionality is used to export the entire page to Excel.

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations*
2. Click the **Export** button to export the entire page to Excel. (Figure 1)

Undo:

This functionality is used to reset the last saved value.

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations*
2. Click the **Undo** button to return to the last saved value. (Figure 1)

Risk Status:

This functionality is used to display the risk and its mitigation details based on the risk status whose value is open, closed or both.

Steps:

1. *Risk Register ---> Risk Spreadsheet*
2. Click the **Mitigation** radio button and select threat/opportunity from the drop down.
3. Click the **Mitigation Spreadsheet** radio button.
4. Click the **Risk Status** drop down button and select open, close or both to display the mitigation details with particular risk status. (Figure 2)

Mitigation Status:

This functionality is to display the risks and its mitigation details based on the mitigation status whose value is open, closed, proposed, in progress, rejected, complete, risk closed or approved. (Figure 7)

Steps:

1. *Risk Register ---> Risk Spreadsheet*
2. Click the **Mitigation** radio button and select threat/opportunity from the drop down.
3. Click the **Mitigation Spreadsheet** radio button.
4. Click the **Mitigation Status** drop down button and select open, closed, proposed, in progress, rejected, complete, risk closed or approved to display the mitigation details with particular mitigation status. (Figure 7)

Figure 7

Delete mitigations:

Mitigations can be deleted by clicking the **delete** button corresponding to each row or multiple mitigations can be deleted simultaneously.

Delete multiple Mitigations:

This functionality helps to **delete** multiple mitigations simultaneously. To **delete** multiple mitigations the user must first select them.

Steps:

1. *Risk Register ---> Mitigations Spreadsheet*
2. Click the **Select Mitigations** button to select the mitigation to delete. (Figure 1)
3. Select the mitigation by ticking the **check boxes**. (Figure 8)
4. Click the **Delete Multiple** button to delete the selected mitigations. (Figure 8)

Figure 8

*Delete mitigations individually***:**

To delete mitigations individually follow the steps described below.

Steps:

1. *Risk Register ---> Mitigations Spreadsheet*
2. Click the **Close** button to **delete** the required mitigation.

Reorder Columns:

This functionality is used to reorder the mitigation spreadsheet columns. (Figure 1)

Steps:

1. *Risk Register ---> Risk Spreadsheet ---> **Mitigations***
2. Click the **Reorder Columns** button to reorder the spreadsheet columns. (Figure 1)

Frozen column:

This functionality is used to set the number of columns as fixed when the scroll is enabled. For example, in Figure 6 **Frozen Columns** is set to 2(default value), which implies that the column **Risk ID** and **Risk Name** will be fixed and scrolling will be applicable from the third column onwards.

Figure 9

Steps:

1. *Risk Register ---> **Risk** Spreadsheet---> Mitigations*
2. Enter the number of columns that must be **frozen.**
3. Click the **Set** button shown in Figure 9.

Filter Data:

To **Filter** the data according to a particular value:

Steps:

1. *Risk Register ---> **Risk** Spreadsheet---> Mitigations*
2. Select the required column from the **Select Column** dropdown. (Figure 1)
3. Enter the value in the **textbox** based on which filtering is to be done. (Figure 1)
4. Click the **Filter** button (Figure 1). The filtered data will be displayed.

Reset Data:

This functionality is used to set the filtered values to its previous values.

Steps:

1. *Risk Register ---> **Risk** Spreadsheet---> Mitigations*
2. Click the **Reset** button to **reset/refresh** the values. (Figure 1)

Pre-Mitigated Score:

The **Pre-Mitigated Score** is the risk score. The fields (Probability, Cost and Schedule and Additional Impacts) are used to set the pre-mitigated score. (Figure 1) If Probability and Impacts have a value of either **Undefined** or **No Risk,** the **Pre-Mitigated Score** will be zero.

Mitigated Risk Score:

The fields (Probability, Cost and Schedule and Additional Impacts) are used to set the Mitigated Risk Score. (Figure 1) If probability and impacts have a value of **Undefined** or **No Risk** the **Mitigated Risk Score** will be zero.

Creating New Mitigation:

Creating a new mitigation in **Spreadsheet View** is quick and easy.

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations*
2. Select **Risk ID** from the **Risk ID** dropdown. The **Risk Name** and **Pre-Mitigated Score** are displayed automatically. (Figure 1)
3. Enter the details on a new line. For fields such as Name, Description etc., a text box pops up upon clicking the cell. (Figure 10) After entering the details click the **Close** button for text fields (Figure 10). The details will be saved automatically. To **Cancel** click the **Cancel** button. (Figure 10).

Figure 10

A calendar component pops up for date fields upon clicking the calendar control. (Figure 11)

Figure 11

If the data is to be selected from a list a drop down box appears. (Figure 12)

Figure 12

The other columns may be edited within the cell.

4. Click any other cell to trigger the **auto save**.

Editing mitigation:

To edit an existing mitigation

Steps:

1. *Risk Register ---> Risk Spreadsheet---> Mitigations*
2. Refer to the procedures in the previous section (**Creating new mitigation**)
3. Edit the cell as required and click in any other cell to trigger the **auto save**.

User Defined Fields:

The user defined or custom field is shown along with the mitigation details as the last column. There is no limit to the number of user defined fields.

User Defined Fields can be added by two methods.

1. The user defined fields can be added using the template imported for the project from the page

    Project settings ---> Assign Templates   Or

2. It can be also be added from the page

    Project settings ---> Custom Fields

Search Risks (Threats)

The **Search Risks (Threats)** page allows you to search the company database for past and existing threats. The database consists of data from open and closed projects across multiple business units. This gives you the ability to analyze all risks and see if they apply to your current project. If you find a threat or opportunity that you want to copy, you have the option to include the mitigation plan/step(s) and edit the risk data before copying them over to the selected project. The **Qualitative Score Fields** and **User Defined Fields** will not be copied over since every project is different when it comes to these fields. If the project is not selected the access privileges will correspond to the selected threat's project. Only threats of projects whose **classified** field is set to **No** will be displayed in the Search Risks section.

PRC SOFTWARE

Figure 1

Navigate Page:

There is an option placed at the top of the page to navigate from one page to another. To navigate to **Search Risk (Opportunities)**, click the **Opportunities** radio button shown in Figure 1.

Search:

The **Search** function allows the user to search for a threat based on a keyword. This method is faster when you are working with large amount of data. Threat details can be searched even if the project is not selected. If the project is not selected the fields correspond to the selected threat's project.

Steps:

1. *Risk Register ---> Search Risks ---> Threats*
2. Click the **Search** button. (Figure 1)
3. Enter the search keyword (which can be the ID or name) and click the **Search** button and select the required threat. (Figure 2)

Figure 2

To Filter the search area contents

Steps:

1. **Select** the required column. (Figure 2)
2. Enter the value based on which filtering is to be done. (Figure 2)
3. Click the Filter button. (Figure 2)

To **Sort** the data

1. **Select** the required column. (Figure 2)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 2)
3. Click the **Sort** button to sort the data in the search area. (Figure 2)

To reset the details for filter and sort fields, click the **Reset** button. (Figure 2)

User Defined Fields Section:

Any user defined or custom field will be shown in this section. There is no limit to the number of user defined fields. In **Search Risks (Threats)** even though user defined fields are visible they cannot be copied to the current project.

User Defined Fields are added as follows:

Project settings ---> Custom Fields

Risk Notes Section:

The Risk notes added from **Risk Details (Threats)** or **Spreadsheet View (Threats)** are visible in this section. The user cannot **add** or **edit** risk notes from **Search Risks (Threats).**

Recovery Plan Section:

The **Recovery Plan** section is used to document what will be done if a mitigation is not successful and the risk event does occur. It also documents the steps the team should be prepared to take if the risk becomes a reality. If a **Recovery plan** has been added to the selected threat it will be visible in this section. Users cannot **add** or **edit** the recovery plan from **Search Risks (Threats).**

Closure Section:

The **Closure Section** is used for documenting the actual impact of the risk event on the project.

Qualitative Score Section:

Qualitative Score fields include Probability, Cost, Schedule and Additional Impacts, if any. (Figure 1) These fields are used to set the pre-mitigated score. If Probability and impacts have a value of either **Undefined** or **No Risk**, the risk score will be zero. Even though the risk score of a selected threat is visible it cannot be copied to the selected project.

Data Mapping Section:

The **Data Mapping** section shows which Breakdown structure the selected threat is mapped to, and at what level (Project, Business Unit, or Enterprise). It is not required to map data, but it will be useful when the time comes to report at the portfolio level.

Project Organizational Breakdown Structure, **Project Work Breakdown Structure** and **Project Risk Breakdown structure** details are added from the page:

Project Settings --->Project Breakdown Structure

Business Organizational Breakdown Structure, Business Work Breakdown Structure, **Business Risk Breakdown structure**, **Enterprise Organizational Breakdown Structure**, **Enterprise Risk Breakdown structure, Enterprise Work Breakdown Structure** are added from the page:

Portfolio Management ---> Manage Breakdown Structure

Enterprise Risk details are added from the page:

Portfolio Management ---> Reports ---> Enterprise Risk List

To Map data:

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure1)
2. Select the required data from the select box. (Figure 3)
3. Click the **Select WBS** button (if Work Breakdown Structure), **Select OBS** button (if Organizational Breakdown Structure), **Select RBS** button (if Risk Breakdown Structure) to finish. (Figure 3)

The step described above applies to all Organizational Breakdown Structure, Work Breakdown Structure and Risk Breakdown Structure fields.

Figure 3

To search for a particular value (Figure 3), enter the value and click the **Search** button. To list all the values available click the **Show All** button.

For **Enterprise Risk**

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure 1)
2. **Select** the required enterprise risk from the select box. (Figure 4)
3. Click the **Set Enterprise Risk** button to finish. (Figure 4)

Figure 4

Mitigation Details:

Users can track their **Mitigation Plan** or individual mitigation steps. The mitigation plan is a compilation of the individual steps below it. The mitigation plan cost is rolled up from the cost of each mitigation step. Tracking mitigation steps creates accountability when the step owner and planned dates are tracked. Reports can be generated to identify all mitigation steps that are currently behind schedule.

The qualitative and quantitative scoring fields (Probability, Cost, Schedule, etc.) in the mitigation steps represent the residual risk that remains after a mitigation step is completed. The goal is to

mitigate a risk until it is gone, however often this is not possible. It is important to document any residual risk that cannot be removed for the benefit of the project team and the accuracy of Monte Carlo simulations. Any graph that highlights a post-mitigated score will focus on the residual risk after all mitigation steps have been completed. The status of a mitigation step and the actual dates should be updated as the steps are started and finished. There is an option not to copy both mitigation plan and steps or mitigation steps alone to the selected project.

If you do not want to copy both mitigation plan and steps to the selected project, click **Do not Copy Mitigation Plan & Steps** checkbox shown in Figure 5. If you do not want to copy just the mitigation steps, click the checkbox under the **Do not Copy Step** column in Figure 6.

Figure 5

Figure 6

Copy To Current Project:

This functionality is used to copy a selected threat to the selected project.

Steps:

1. *Risk Register ---> Search Risks ---> Threats*
2. **Select** the required threat.
3. Click the **Copy To Current Project** button to copy the selected threat to the current project. (Figure 1)

Search Risks (Opportunities)

The **Search Risks (Opportunities)** page allows the user to search the company database for past and existing opportunities. The database consists of data from open and closed projects across multiple business units.   This provides the ability to analyze all risks to see if they apply to the current project.   If the user finds an opportunity that fits the requirements of another project, the option is available to include the mitigation plan/step(s) and edit the risk data before copying it over to the selected project. The **Qualitative Score Fields** and **User Defined Fields** will not be copied over since every project is different when it comes to these fields. If the project is not selected the access privileges will correspond to the selected opportunity's project.   Only opportunities of projects whose **classified** field is set to **No** will be displayed in the search risks section.

PRC SOFTWARE

Figure 1

PRC SOFTWARE

Navigate Page:

There is an option placed at the top of the page to navigate from one page to another. To navigate to **Search Risks (Opportunities)**, click the **Opportunities** radio button shown in Figure 1.

To navigate to **Lesson Learned (Threat)**, click the **Threats** radio button shown in Figure 1.

Search:

The **Search** function allows the user to search for an opportunity based on a keyword. This method is faster when you are working with large amount of data. Opportunity details can be searched even if project is not selected. If the project is not selected the fields correspond to the selected opportunity's project.

Steps:

1. *Risk Register ---> Search Risks ---> Opportunities*
2. Click the **Search** button. (Figure 1)
3. Enter the search keyword (which can be the ID or name) and click the **Search** button and select the required opportunity. (Figure 2)

Figure 2

To Filter the search area contents

Steps:

1. **Select** the required column. (Figure 2)
2. Enter the value based on which filtering is to be done. (Figure 2)
3. Click the Filter button. (Figure 2)

To **Sort** the data

1. **Select** the required column. (Figure 2)
2. Select the order (**Ascending/Descending**) in which sorting is to be done. (Figure 2)
3. Click the **Sort** button to **Sort** the data in the search area. (Figure 2)

To reset the details for filter and sort fields, click the **Reset** button. (Figure 2)

User Defined Fields Section:

All user defined or custom fields will be shown in this section. There is no limit to the number of user defined fields. In **Search Risks (Opportunities)** even though user defined fields are visible they cannot be copied to the current project.

User Defined Fields are added as follows:

Project settings ---> Custom Fields

Risk Notes Section:

The Risk notes added from **Risk Details (Opportunities)** or **Spreadsheet View (Opportunities)** are visible in this section. The user cannot **add** or **edit** risk notes from **Search Risks (Opportunities).**

Recovery Plan Section:

The **Recovery Plan** section is designed to document what is to be done if a mitigation is not successful and the risk event does occur. It also documents the steps the team should be prepared to take if the risk becomes a reality. If the **Recovery plan** has been added to the selected opportunity it will be visible in this section. The user cannot **add** or **edit** the recovery plan from **Search Risks (Opportunities)**.

Closure Section:

The **Closure Section** is used for documenting the actual impact of the risk event on the project.

Qualitative Score Section:

The **Qualitative Score** fields include Probability, Cost, Schedule and Additional Impacts, if any. (Figure 1) These fields are used to set the pre-mitigated score. If Probability and impacts have a value of either **Undefined** or **No Risk**, the risk score will be zero. Even though the risk score of a selected opportunity is visible it cannot be copied to the selected project.

Data Mapping Section:

The **Data Mapping** section shows to which Breakdown structure opportunity is mapped to, and at what level (Project, Business Unit, or Enterprise). It is not required to map data, but it will be useful when the time comes to report at the portfolio level.

Project Organizational Breakdown Structure, **Project Work Breakdown Structure** and **Project Risk Breakdown structure** details are added from the page

Project Settings --->Project Breakdown Structure

Business Organizational Breakdown Structure, Business Work Breakdown Structure, **Business Risk Breakdown Structure, Enterprise Organizational Breakdown Structure**, **Enterprise Risk Breakdown Structure,** and **Enterprise Work Breakdown Structure** are added from the page:

Portfolio Management ---> Manage Breakdown Structure

Enterprise Risk details are added from the page:

Portfolio Management ---> Reports ---> Enterprise Risk List

To Map data:

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure1)
2. Select the required data from the select box. (Figure 3)
3. Click the **Select WBS** button (if Work Breakdown Structure), **Select OBS** button (if Organizational Breakdown Structure), **Select RBS** button (if Risk Breakdown Structure) to finish. (Figure 3)

The step described above applies to all Organizational Breakdown Structure, Work Breakdown Structure and Risk Breakdown Structure fields.

Figure 3

To search for a particular value (Figure 3), enter the value and click the **Search** button. To list all the values available, click the **Show All** button.

Data Mapping for Enterprise Risk

Steps:

1. Click the **map data** link to map data for the corresponding field. (Figure 1)
2. **Select** the required enterprise risk from the select box. (Figure 4)
3. Click the **Set Enterprise Risk** button to finish. (Figure 4)

Figure 4

Mitigation Details:

Users can track their **Mitigation Plan** or individual mitigation steps. The mitigation plan is a compilation of the individual steps below it. The mitigation plan cost is rolled up from the cost of each mitigation step. Accountability is created when the step owner and planned dates are tracked. Reports can be generated to identify all mitigation steps that are currently behind the schedule.

The qualitative and quantitative scoring fields (Probability, Cost, Schedule, etc.) in the mitigation steps represent the residual risk that remains after a mitigation step is completed. The goal is to mitigate a risk until it is gone, however often this is not possible. It is important to document any residual risk that cannot be removed for the benefit of the project team and the accuracy of Monte Carlo simulations. Any graph that highlights a post-mitigated score will focus on the residual risk after all mitigation steps have been completed. The status of a mitigation step and the actual dates should be updated as the steps are started and finished. There is an option not to copy both mitigation plan and steps or mitigation steps alone to the selected project.

If you do not want to copy the mitigation plan and steps to the selected project, click the **Do not Copy Mitigation Plan & Steps** checkbox shown in Figure 5. If you do not want to copy just the mitigation steps, click the checkbox under the **Do not Copy this Step** column in Figure 6.

Figure 5

Figure 6

Copy to Current Project:

This functionality is used to copy the selected opportunity to a selected project.

Steps:

1. *Risk Register ---> Search Risks ---> Opportunities*
2. **Select** the required opportunity
3. Click the **Copy to Current Project** button to copy the selected threat to the current project. (Figure 1)

Manager's Dashboard (Project)

The **Manager's Dashboard (Project)** page shows up to 6 graphs which are chosen by the user. The graphs shown on this page must be created on the **Standard Reports (Project)** page. The **Manager's Dashboard** gives you the ability to quickly view critical project information and export them to **MS Word** and **MS Power Point**.

Figure 1

Show Dashboard:

This functionality is used to show the corresponding dashboard selected. The dropdown shown in Figure 1 contains dashboard names. Each dashboard name generates the dashboard associated with it.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard*
2. Select the dashboard name from the **Project Dashboard** dropdown. (Figure 1)
3. Click the **Show** button to navigate to **View the Dashboard.** (Figure 1)

To navigate to **Project Dashboard:**

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard*
2. Select the **Project Dashboard** from the **Project Dashboard** dropdown. (Figure 1)
3. Click the **Show** button to navigate to **Project Dashboard** page. (Figure 1)

Delete Dashboard:

This functionality is used to delete the corresponding dashboard selected.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard*
2. Select the **Dashboard Name** from the **Project Dashboard** dropdown. (Figure 1)
3. Click the **Delete** button to delete the **selected Dashboard**. (Figure 1)

Export to Word:

This functionality is used to **Export** the selected chart to **MS Word**.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Open in Word** icon to **Export** the chart to **MS Word**. (Figure 1)

Export to PowerPoint:

This functionality is used to **Export** the selected chart to **MS PowerPoint**.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **PowerPoint** icon to **Export** the chart to **MS PowerPoint**. (Figure 1)

Compress Files:

This functionality is used to compress the selected images to a **Zip** file.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Compress Files** icon. (Figure 1)

Check All:

This functionality is used to select all the charts. Click the **Check All** icon to select all the charts. (Figure 1)

Uncheck All:

This functionality is used to uncheck the selected charts. Click the **Uncheck All** icon to uncheck the charts selected. (Figure 1)

Reposition Arrows:

This functionality allows the user to move the selected chart to another position on the page. To reposition a selected chart, click the **Reposition** arrows nearby. (Figure 1)

Set as default:

This functionality is used to make the selected dashboard as the default dashboard. (Figure 1)

Filter:

To view the filter applied to the chart, click the **Show Filter** icon. (Figure 1) An example of the screen which appears after the icon is clicked is shown in Figure 2.

Figure 2

If the user changes the business unit on Manage Projects page for the projects in a particular chart which is already added on dashboard in which filter is applied, then on clicking the **Refresh** button those filters will be removed from the chart.

Delete From Dashboard:

This functionality allows you to delete a chart from **Manager's Dashboard (Portfolio)**. To delete a chart click the **Delete** icon above each chart.(Figure 1)

Drill Down:

This functionality allows you to redirect to the particular report page in **Standard reports (Portfolio)** from where the chart is added. To redirect a chart click **Drill Down** icon. (Figure 1)

Copy to Dashboard:

This functionality allows you to copy the particular chart to another dashboard. Click the **Copy to Dashboard** icon.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard.*
2. Click the **Copy to Dashboard** icon. (Figure 1)
3. A pop up appears (Figure 3). Select the name of the dashboard from the **name drop down**, to which the chart has to be copied.
4. Click **Save** button. (Figure 3)

Figure 3

Share Dashboard:

This functionality allows you to share one dashboard charts to a new dashboard. Click **Share Dashboard** icon.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard.*
2. Click the **Share Dashboard** icon. (Figure 1)
3. A pop up appears (Figure 4). Give the name and description of the new dashboard to which the chart has to be shared. The **Global access** option allows the user to share the dashboard globally.
4. Click **Save** button. (Figure 4)

Figure 4

Dashboard (Project)

The Project Dashboard page shows 6 fixed graphs, the **Total Risk Count, Mitigation Steps Past Due, Threat Score Matrix, Opportunity Score Matrix, Overall Risk Score Tornado (Pre-Mitigated)** and **Overall Risk Score Tornado (Post-Mitigated)**. The Project Dashboard is useful because you can quickly view the 6 graphs people most commonly used at the project level. The **Project Dashboard** page is visible to only those users with **Read/Write** or **View** access.

Figure 1

Show Dashboard:

This functionality is used to navigate to the **Manager's Dashboard (Project)** page**.** In Figure 1 the select box contains dashboard names. Each dashboard name generates the dashboard associated in the **Manager's Dashboard (Project)** page.

Steps:

1. *Risk Register ---> Dashboards*
2. Select the dashboard name from the **Dashboard** dropdown. (Figure 1)
3. Click the **Show** button to navigate to **Manager's Dashboard** page. (Figure 1)

Export to Word:

This functionality is used to **export** the selected chart to **MS Word**.

Steps:

1. *Risk Register ---> Dashboards*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Word** icon to **Export** the chart to **MS Word**. (Figure 1)

Export to Power Point:

This functionality is used to **export** the selected chart to **MS Power Point**.

Steps:

1. *Risk Register ---> Dashboards*

2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Power point** icon to **Export** the chart to **MS Power Point**. (Figure 1)

Compress Files:

This functionality is used to compress the selected images to a **Zip** file.

Steps:

1. *Risk Register ---> Dashboards*
2. Select the chart using the provided **checkbox** in the corner of each chart. (Figure 1)
3. Click the **Compress Files** icon. (Figure 1)

Check All:

This functionality is used to select all the charts in **Project Dashboard** page. Click the **Check All** icon to select all the charts. (Figure 1)

Uncheck All:

This functionality is used to uncheck the selected charts. Click the **Uncheck All** icon to uncheck the charts selected.

Set as default:

This functionality is used to make the selected dashboard as the default dashboard. Click the **Set as Default** icon to set a dashboard as default. (Figure 1)

Drill Down:

This functionality allows you to redirect to the particular report page in **Standard reports (Portfolio)** from where the chart is added. To redirect a chart click **Drill Down** icon. (Figure 1)

Copy to Dashboard:

This functionality allows you to copy the particular chart to another dashboard. Click the **Copy to Dashboard** icon.

Steps:

1. *Risk Register --->Dashboards --->Manager's Dashboard.*
2. Click the **Copy to Dashboard** icon. (Figure 1)
3. A pop up appears (Figure 2). Select the name of the dashboard from the **name drop down**, to which the chart has to be copied.
4. Click **Save** button. (Figure 2)

Figure 2

Import Mitigations

The **Import Mitigations** page allows the user to import mitigations. This functionality is important when you need to download a large amount of data from an existing file to the risk register.

PRC SOFTWARE

Figure 1

Navigate Page:

To go to the **Import Mitigations** page, navigate from the **Import Risk Register** page. The option for navigation from one page to another is located at the top of the page and is shown in Figure 1.

Steps:

1. *Risk Register ---> Imports*
2. Select **Mitigations** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Mitigation** page.

To navigate to the **Import Risk Register** page or the **Import Opportunity Register** page from the **Import Mitigation** page check the steps below.

Steps:

Select **Opportunities** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Opportunity Register** page.

<div align="center">Or</div>

Select **Threats** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Risk Register** page.

Upload File:

Files of type csv, xls which contain mitigation details can be uploaded. The **Clear All** button (figure 3) is used to clear uploaded files. The **Clear** link (Figure 3) also clears the uploaded file. After the file is uploaded it must be mapped with the correct fields before saving.

Steps:

1. *Risk Register ---> Imports*
2. Select **Mitigations (Threats)/Mitigations (Opportunities)** from the dropdown. (Figure 1)
3. Click the **Browse** button. Select the required file. (Figure 2)
4. Click the **Upload File** button to finish. (Figure 3)

Figure 2

Figure 3

Select Sheet:

If the uploaded file contains more than one sheet, the user must select the sheet required.

Steps:

1. *Risk Register ---> Imports*

2. Select the sheet required; and click the **Change Sheet** button to change the sheet. (Figure 1)

Map Data:

The **Risk ID field** and **Mitigation Step Name** must be mapped; otherwise the file will not be imported. The mapped Risk ID should correspond to the Threat/Opportunity (depends on the risk type selected). If the Threat/Opportunity does not match the risk ID, the file cannot be imported and a validation message will be shown indicating that the risk ID does not match.

Proposed Mitigation Start, Proposed Mitigation Finish, Actual Mitigation Start and Actual Mitigation Finish each have a date format displayed next to its field. (Figure 4) The date format is set during user creation in the **Administration ---> Manage Users** page under the **Date Format section**. Imported mitigation fields should have the same date format shown in the page. All other formats will generate an invalid date format message.

Figure 4

There are four possible values for Field Mitigation Status. The user must map the value as **Proposed**, **In-progress**, **Rejected** or **Complete** in order to import the Mitigation Status field. In Figure 5 we have mapped the mitigation status value as **In Progress**.

Figure 5

For the **Qualitative score fields:** Probability, Cost, schedule and additional impacts, (Figure 6) the user should map the corresponding fields if the score must also be imported.

Figure 6

In the **Simulation Probability** field, the box for **Percentage Formatted** (Figure 7) should be checked if the simulation probability data is represented in percentage form.

Figure 7

Import Mitigation Details:

Once the required fields have been mapped, **save** the data to make it available in other pages.

Steps:

1. *Risk Register ---> Imports*
2. Select the **Mitigations (Threats)/Mitigations (Opportunities)** from the dropdown. (Figure 1)
3. Click the **Import Mitigation Data** button to save the imported file. (Figure 1)

If the Imported file contains a duplicated mitigation, a validation message (Figure 8) will be generated. Click the **OK** button (Figure 8) to confirm, and on confirmation the mapped data is overwritten. If you do not want to overwrite the data, click the **Cancel** button. (Figure 8)

Imported data contains duplicate Mitigation Id, Save will override the existing data.Do you want to continue ?

OK   Cancel

Figure 8

Import Opportunity Register

The **Import Opportunity Register** page allows the user to import opportunities. This functionality is helpful when downloading a large amount of data to the PRC Enterprise Risk Register from an existing file.

PRC SOFTWARE

Figure 1

Navigate Page:

To go to the **Import Opportunity Register** page, navigate from the **Import Risk Register** page. The option for navigation from one page to another is placed on top of the page and is shown in Figure 1.

Steps:

1. *Risk Register ---> Imports*
2. Select **Opportunities** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Opportunity Register** page.

To navigate to the **Import Risk Register** page or the **Import Mitigations** page from the **Import Opportunity Register** page , check the following steps.

Steps:

Select **Mitigations** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Mitigation** page.

Or

Select **Threats** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Risk Register** page.

Upload File:

Files of type csv, xls which contain opportunity details can be uploaded. The **Clear All** button (Figure 3) is used to clear uploaded files. The **Clear** link (Figure 3) also clears the uploaded file. After the file is uploaded it must be mapped with the correct fields before saving.

Steps:

1. *Risk Register ---> Imports*
2. Select **Opportunities** from dropdown. (Figure 1)
3. Click the **Browse** button. Select the required file. (Figure 2)
4. Click the **Upload File** button to finish. (Figure 2)

Figure 2

Figure 3

Select Sheet:

If the uploaded file contains more than one sheet, the user should select the required sheet.

Steps:

1. *Risk Register ---> Imports*
2. Select the sheet required; and click the **Change Sheet** button to change the sheet. (Figure 1)

Map Data:

The ID field must be mapped or the file will not be imported. The five values available for field status are: **Open-mitigated, Open-unmitigated, Closed-no impact, Closed-rejected, and Closed-occurred**. If the status field needs to be imported, the user must map the value required. In Figure 4, the value **open-unmitigated** has been mapped as the field status for all opportunities in   the   file.

Figure 4

Start date and **End date** have a date format displayed next to its field. (Figure 5) This date format is set during user creation in **Administration ---> Manage Users** page under the **Date Format** section. The Imported Opportunity fields should also have the same date format shown in the page; otherwise a message will be generated indicating that the date format is invalid.

Figure 5

For the Qualitative score fields (Probability, Cost, Schedule and Additional Impacts), the corresponding fields must be mapped if the score must also be imported.

Figure 6

The check box **Percentage Formatted** is located near the **Simulation Probability** field. (Figure 7) It should be checked if the simulation probability data is represented in percentage form.

Figure 7

Import Opportunity Details:

Once the required fields have been mapped; save the data to make it available in other pages.

Steps:

1. *Risk Register ---> Imports*
2. Select **Opportunities** from dropdown. (Figure 1)
3. Click the **Import Opportunity Data** button (Figure 1) to save the imported file.

If the Imported file contains duplicated opportunities, validation message (Figure 8) will be shown. Click the **OK** button (Figure 8) to confirm. Upon confirmation, the mapped data is overwritten. If the user does not want to overwrite the data, click the **Cancel** button (Figure 8).

Imported data contains duplicate Risks, Save will override the existing data.Do you want to continue ?

OK   Cancel

Figure 8

Import Risk Register

The **Import Risk Register** page allows you to import threats. This functionality is helpful when user needs a large amount of data to be added and user has the file which contains the threat details which can be imported. The accepted file types are .csv and .xls.

Qualitative Score

		DATABASE LIST	VALUES IN EXCEL FILE
Probability	Probability	High	High
		Medium	Medium
		Low	Low
		Very High	Very High
		Undefined	Undefined
Cost	Cost(USD)	Medium	Medium
		High	High
		Very High	Very High
		Very Low	Very Low
		Undefined	Undefined
		Low	Low
Schedule	Schedule	High	High
		Low	Low
		Very Low	Very Low
		Medium	Medium
		Undefined	Undefined
New Impact Type0	Select Column		
Multiplier	Multiplier	DATABASE LIST	VALUES IN EXCEL FILE

Monte Carlo Inputs

Simulation Probability	Simulation Probability
Schedule Minimum	Schedule Minimum
Schedule Most Likely	Schedule Most Likely
Schedule Maximum	Schedule Maximum

		DATABASE LIST	VALUES IN EXCEL FILE
Duration Unit	Duration Unit	Hours	Hours
		Days	Days
Cost Minimum	Cost Minimum		
Cost Most Likely	Cost Most Likely		
Cost Maximum	Cost Maximum		

Data Mapping

Project Work Breakdown Structure	Select Column
Project Organizational Breakdown Structure	Select Column
Project Risk Breakdown Structure	Select Column
Business Work Breakdown Structure	Select Column
Business Organizational Breakdown Structure	Select Column
Business Risk Breakdown Structure	Select Column
Enterprise Work Breakdown Structure	Select Column
Enterprise Organizational Breakdown Structure	Select Column
Enterprise Risk Breakdown Structure	Select Column

Mitigation Plan Information   IMPORT

Plan Name	Select Column
Plan Description	Select Column
Plan Owner	Select Column
Response Type	Select Column

© PRC SOFTWARE 2016

Figure 1

PRC SOFTWARE

Navigate Page:

This functionality is used to navigate from the **Import Risk Register** page to the **Import Page** for opportunities or mitigation. To navigate to the **Opportunity** or **Mitigation** page, click on the corresponding radio button shown in Figure 1.

Steps:

1. *Risk Register ---> Imports*
2. Select **Opportunities** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Opportunity Register** page.

<div align="center">Or</div>

   Select **Mitigations** from **Select Import type** dropdown (Figure 1) to navigate to the **Import Mitigations** page.

Upload File:

Files of type csv, xls which contain threat details can be uploaded. The **Clear All** button (Figure 3) is used to clear uploaded files. The **Clear** link (Figure 3) also clears the uploaded file. After the file is uploaded, it must be mapped with the correct fields before saving.

Steps:

1. *Risk Register ---> Imports*
2. Click the **Browse** button. Select the required file. (Figure 2)
3. Click the **Upload File** button to finish. (Figure 3)

<div align="center">Figure 2</div>

<div align="center">Figure 3</div>

Select Sheet:

If the uploaded file contains more than one sheet, the user should select the sheet required.

Steps:

1. *Risk Register ---> Imports*
2. Select the sheet required; and click the **Change Sheet** button to change the sheet. (Figure 1)

Map Data:

The **Id field** must be mapped for the file to be imported. There are five available values: **Open-mitigated**, **Open-unmitigated**, **Closed-no impact**, **Closed-rejected**, and **Closed-occurred**. The field status requires the value to be mapped if the status field needs to be imported. In Figure 4, the value **Open-unmitigated** is being mapped for the field status for all the threats in the file.

Figure 4

Start date and **End date** has a date format displayed next to its field. (Figure 5) This date format is set during user creation in **Administration ---> Manage Users** page under the **Date Format** section. The Imported Threat fields should also have the same date format shown in the page or a validation message will appear indicating the date format is invalid.

Figure 5

For the Qualitative score fields such as **Probability**, **Cost**, **Schedule** and **Additional Impacts**, the user should map the corresponding fields if the score must also be imported.

PRC SOFTWARE

Figure 6

The **Simulation Probability** field (Figure 7) includes a check box for **Percentage Formatted**. When the simulation probability data is represented as a percentage, this box should be checked.

Figure 7

Import Threat Details:

Once the required fields have been mapped, **Save** the data to make it available in other pages.

Steps:

1. ***Risk Register ---> Imports***
2. Click the **Import Risk Data** button to save the imported file. (Figure 1)

If the Imported file contains duplicated threats, a validation message (Figure 8) will be shown. Click the **OK** button (Figure 8) to confirm. Upon confirmation, the mapped data is overwritten. If you don't want to overwrite the data you can click the **Cancel** button (Figure 8).

Imported data contains duplicate Risks, Save will override the existing data.Do you want to continue ?

OK   Cancel

Figure 8

Automation Rules

ORIGINAL SETTING	NEW SETTING	OUTPUT
Mitigation Status = proposed	In Progress	Mark the actual start date with today's date.
Mitigation Status = proposed	Complete	Mark the actual start date with today's date and the actual finish with today's date.
Mitigation Status = In Progress	Proposed	Remove the actual start date.
Mitigation Status = In Progress	Rejected	Remove the actual start date.
Mitigation Status = In Progress	Complete	Mark the actual finish with today's date.
Mitigation Status = In Progress	Approved	Remove the actual start date.
Mitigation Status = Rejected	In Progress	Mark the actual start with today's date.
Mitigation Status = Rejected	Complete	Mark the actual start date with today's date and the actual finish with today's date.
Mitigation Status = Complete	Proposed	Remove the actual start and finish dates.
Mitigation Status = Complete	In Progress	Remove the actual finish date.
Mitigation Status = Complete	Approved	Remove the actual start and finish dates.
Mitigation Status = Complete	Rejected	Remove the actual start and finish dates.
Mitigation Status = Approved	In Progress	Mark the actual start with today's date.
Mitigation Status = Approved	Complete	Mark the actual start date with today's date and the actual finish with today's date.
Mitigation Status = Risk Closed	Proposed	Remove the actual start and finish dates.
Mitigation Status = Risk Closed	In Progress	Mark the actual start with today's date unless it is already marked and remove the actual finish if there is one.
Mitigation Status = Risk	Rejected	Remove the actual start and finish

Closed		dates if they exist.
Mitigation Status = Risk Closed	Approved	Remove the actual start and finish dates if they exist.
Risk Status = Open (Any) or Impacting	Closed (Any)	Set all mitigation status to "Risk Closed." Do not change the actual dates.
User sets an actual start on mitigation		Set mitigation status to In Progress unless it is already in In Progress or Complete status.
User sets an actual finish on a mitigation		Set mitigation status to Complete if not already in Complete status.
Create new risk	Set risk ID based on a timestamp	Set the risk ID based on a timestamp if the user did not type in the ID column to create the risk. ID = T + timestamp for threats. O + timestamp for opportunities. User can overwrite.
Create new mitigation step	Set mitigation ID based on a timestamp	Set the risk ID based on a timestamp if the user did not type in the ID column to create the mitigation. ID = M + timestamp. User can overwrite.

FIELD DESCRIPTION

Administration

1. Manage Users

Field Name	Data Type	Width
First Name	Text	200
Last Name	Text	200
Email	Text	200
Address1	Text	250
Address2	Text	250
City	Text	50
State	Text	50
Phone	Text	15
Country	Text	50
User Name	Text	200
Password	Text	50

2. Manage Projects

Field Name	Data Type	Width
Project Name	Text	250
Project Id	Text	200
Description	Text	8000
Project Cost	Float	
Project Manager	Text	50
Start Date	Date	
End Date	Date	
Project Status	Text	50
Currency	Text	50
Classified(Uncheck for 'No')	Yes / No	

Scope Category	Text	50	
Scope Document	Text	50	

3.Currency Settings

Field Name	Data Type	Width
Exchange Rate	Float	

4.Enterprise Project Structure

Field Name	Data Type	Width
Name	Text	150
Description	Text	8000

5.Access Manager

Field Name	Data Type	Width
Role Name	Text	500

Portfolio Management

1.Scoring System Template

Field Name	Data Type	Width
Template Name	Text	200
Template Description	Text	8000
Probability		
Short Name	Text	50
Full Name	Text	100
Lower Threshold	Float	
Upper Threshold	Float	
Tolerance		

Short Name	Text	50
Full Name	Text	100
Lower Threshold	Float	
Upper Threshold	Float	
Impact		
Short Name	Text	50
Full Name	Text	50
Additional Impact		
Impact Type	Text	350
Description	Text	2000

2.Field Settings

Field Name	Data Type	Width
Template Name	Text	200
Template Description	Text	8000
ID	Text	250
Name	Text	250
Description	Text	250
Cause	Text	250
Effect	Text	250
Status	Text	250
Start Date	Text	250
End Date	Text	250
Risk Owner	Text	250
Currency	Text	250
Plan Name	Text	250
Plan Description	Text	250
Plan Owner	Text	250
Response Type	Text	250
Total Cost	Text	250
Proposed Cost	Text	250
Actual Cost	Text	250
Mitigation Step Name	Text	250
Mitigation Step Description	Text	250

Mitigation Owner	Text	250
Response Type	Text	250
Proposed Mitigation Start	Text	250
Proposed Mitigation Finish	Text	250
Actual Mitigation Start	Text	250
Actual Mitigation Finish	Text	250
Actual Mitigation Cost	Text	250
Mitigated Probability	Text	250
Mitigated Schedule Score	Text	250
Mitigated Cost Score	Text	250
Mitigated Risk Score	Text	250
Proposed Mitigation Cost	Text	250
Mitigation Status	Text	250
Cost Incurred	Text	250
Date Risk Occurred	Text	250
Schedule Impact Incurred	Text	250
Closure Note	Text	250
Lessons Learned	Text	250
Probability	Text	250
Cost	Text	250
Schedule	Text	250
Multiplier	Text	250
(Pre)Highest Impact	Text	250
(Pre) Highest Impact & Multiplier	Text	250
(Pre) Average Score	Text	250
(Pre) Average Score & Multiplier	Text	250
(Pre)Average Bucket Value	Text	250
(Pre)Average Bucket Value & Multiplier	Text	250
(Post)Highest Impact	Text	250
(Post) Highest Impact & Multiplier	Text	250
(Post)Average Score	Text	250
(Post)Average Score &Multiplier	Text	250
(Post)Average Bucket Value	Text	250
(Post)Average Bucket Value & Multiplier	Text	250
Project Name	Text	250

Link To Schedule Id(s)	Text	250
Simulation Probability	Text	250
Cost	Text	250
Schedule	Text	250
Duration Unit	Text	250
Project Work Breakdown Structure	Text	250
Project Organizational Breakdown Structure	Text	250
Project Risk Breakdown Structure	Text	250
Business Work Breakdown Structure	Text	250
Business Organizational Breakdown Structure	Text	250
Business Risk Breakdown Structure	Text	250
Enterprise Work Breakdown Structure	Text	250
Enterprise Organizational Breakdown Structure	Text	250
Enterprise Risk Breakdown Structure	Text	250
Enterprise Risk	Text	250
Date	Text	250
User	Text	250
Notes	Text	250
Recovery Plan Name	Text	250
Recovery Plan Description	Text	250
Recovery Plan Notes	Text	250

3.Custom Fields

Field Name	Data Type	Width
Template Name	Text	200
Template Description	Text	8000
Name	Text	250
List	Text	200

4.Breakdown Structures

Field Name	Data Type	Width
Enterprise level Breakdown Structure		
Code	Text	250
Name	Text	250
Business unit Breakdown Structure		
Business Unit Name	Text	250
Code	Text	250
Name	Text	250

5.Reports

Field Name	Data Type	Width
Filter		
Logic	Text	500
Field	Text	250
Operator	Text	
Value(text)	Text	
Value(date)	Date	
Value(number)	Text	250
Chart Manager		
Chart Name	Text	250
Background Color	Text	250
Pre-Mitigated	Text	250
Post-Mitigated	Text	250
Open-Mitigated-Working	Text	250
Open-Mitigated-Planned	Text	250
Closed-No impact	Text	250
Closed-Occurred	Text	250
Text Color	Text	250
Plot Background Color	Text	250
Threat Color	Text	250
Opportunity Color	Text	250
Legend1	Text	350

Legend2	Text	350
Title	Text	350
Color1	Text	250
Color2	Text	250
Color3	Text	250
Color4	Text	250
Color5	Text	250
Color6	Text	250
Color7	Text	250
Color8	Text	250
x-axis	Text	350
y -axis	Text	350
Rejected	Text	250

6.Dashboard

Field Name	Data Type	Width
Name(**In Report)**	Text	300
Description(**In Report**)	Text	8000
Chart1	Text	Max
Chart2	Text	Max
Chart3	Text	Max
Chart4	Text	Max
Chart5	Text	Max
Chart6	Text	Max
Chart1 details	Text	Max
Chart2 details	Text	Max
Chart3 details	Text	Max
Chart4 details	Text	Max
Chart5 details	Text	Max
Chart6 details	Text	Max

Project Settings

1.Scoring System

Field Name	Data Type	Width
Probability		
Short Name	Text	50
Full Name	Text	100
Lower Threshold	Float	
Upper threshold	Float	
Tolerance		
Short Name	Text	50
Full Name	Text	100
Lower Threshold	Float	
Upper Threshold	Float	
Multiplier Settings		
Name	Text	255
Value	Float	
Impact		
Short Name	Text	50
Full Name	Text	500
Additional Impact		
Impact Type	Text	100
Description	Text	2000

2.Field Settings

Field Name	Data Type	Width
ID	Text	50
Name	Text	500
Description	Text	8000
Cause	Text	8000
Effect	Text	200
Status	Text	200

Start Date	Text	200
End Date	Text	200
Risk Owner	Text	250
Currency	Text	250
Plan Name	Text	200
Plan Description	Text	200
Plan Owner	Text	200
Response Type	Text	200
Total Cost	Text	200
Proposed Cost	Text	200
Actual Cost	Text	200
Mitigation Step Name	Text	200
Mitigation Step Description	Text	200
Mitigation Owner	Text	200
Response Type	Text	200
Proposed Mitigation Start	Text	200
Proposed Mitigation Finish	Text	200
Actual Mitigation Start	Text	200
Actual Mitigation Finish	Text	200
Actual Mitigation Cost	Text	200
Mitigated Probability	Text	200
Mitigated Schedule Score	Text	200
Mitigated Cost Score	Text	200
Mitigated Risk Score	Text	200
Proposed Mitigation Cost	Text	200
Mitigation Status	Text	200
Cost Incurred	Text	250
Date Risk Occurred	Text	250
Schedule Impact Incurred	Text	250
Closure Note	Text	250
Lessons Learned	Text	250
Probability	Text	250
Cost	Text	250
Schedule	Text	250
Multiplier	Text	250

(Pre)Highest Impact	Text	250
(Pre) Highest Impact & Multiplier	Text	250
(Pre) Average Score	Text	250
(Pre) Average Score & Multiplier	Text	250
(Pre)Average Bucket Value	Text	250
(Pre)Average Bucket Value & Multiplier	Text	250
(Post)Highest Impact	Text	250
(Post) Highest Impact & Multiplier	Text	250
(Post)Average Score	Text	250
(Post)Average Score &Multiplier	Text	250
(Post)Average Bucket Value	Text	250
(Post)Average Bucket Value & Multiplier	Text	250
Project Name	Text	250
Link To Schedule Id(s)	Text	250
Simulation Probability	Text	250
Cost	Text	250
Schedule	Text	250
Duration Unit	Text	250
Project Work Breakdown Structure	Text	250
Project Organizational Breakdown Structure	Text	250
Project Risk Breakdown Structure	Text	250
Business Work Breakdown Structure	Text	250
Business Organizational Breakdown Structure	Text	250
Business Risk Breakdown Structure	Text	250
Enterprise Work Breakdown Structure	Text	250
Enterprise Organizational Breakdown Structure	Text	250
Enterprise Risk Breakdown Structure	Text	250
Enterprise Risk	Text	250
Date	Text	250
User	Text	250
Notes	Text	250
Recovery Plan Name	Text	250

Field Name	Data Type	Width
Recovery Plan Description	Text	250
Recovery Plan Notes	Text	250

3.Custom Fields

Field Name	Data Type	Width
Name	Text	250
List	Text	200
Values	Text	2000

4.Assign Templates

Field Name	Data Type	Width
Template Type(Custom Field)		
Template Name	Text	200
Template Description	Text	8000
Template Type(Threat-Opportunity-Mitigation)		
Template Name	Text	200
Template Description	Text	8000
Template Type(Scoring System)		
Template Name(Select Template)	Text	200
Template Description	Text	8000

5.Breakdown Structures

Field Name	Data Type	Width
Code	Text	250
Name	Text	250

Risk Register

1.Risk Details, Risk Spreadsheet, Search Risks

Field Name	Data Type	Width
ID	Text	500
Start Date	Date	
End Date	Date	
Status	Text	2000
Risk Owner	Text	200
Name	Text	2000
Description	Text	8000
Cause	Text	8000
Effect	Text	8000
Currency	Text	5
Date	Text	2000
Notes	Text	8000
Recovery Plan Name	Text	2000
Recovery Plan Description	Text	8000
Recovery Plan Notes	Text	8000
Cost Incurred	Float	
Date Risk Occurred	Date	
Schedule Impact Incurred	Text	200
Closure Note	Text	8000
Lessons Learned	Text	8000
Qualitative Score	Text	10
(Pre) Highest Impact	Text	10
(Pre) Average Score	Text	10
(Pre) Average Bucket Value	Text	10
Cost Minimum(USD)	Float	
Cost Most Likely(USD)	Float	
Cost Maximum(USD)	Float	
Link to Schedule ID(Name)	Text	8000
Link to Schedule ID(Code)	Text	250
Schedule Minimum	Text	10

Schedule Most Likely	Text	10
Schedule Maximum	Text	10
Plan Name	Text	2000
Plan Description	Text	8000
Plan Owner	Text	200
Proposed Cost (USD)	Text	30
Actual Cost (USD)	Text	30
Mitigation Id	Text	500
Mitigation Step Name	Text	2000
Mitigation Step Description	Text	8000
Mitigation Owner	Text	200
Proposed Mitigation Start	Text	500
Proposed Mitigation Finish	Text	500
Proposed Mitigation Cost (USD)	Text	500
Actual Mitigation Start	Text	500
Actual Mitigation Finish	Text	500
Actual Mitigation Cost (USD)	Text	500
Response Type	Text	200
Mitigation Status	Text	200
Simulation Probability	Text	10
Schedule Minimum	Text	2000
Schedule Most Likely	Text	2000
Schedule Maximum	Text	2000
Cost Minimum(USD)	Text	30
Cost Most Likely(USD)	Text	30
Cost Maximum(USD)	Text	30

2.Dashboard

Field Name	Data Type	Width
Name(**In Report**)	Text	300
Description(**In Report**)	Text	8000

3.Reports

Field Name	Data Type	Width
Filter		
Logic	Text	500
Field	Text	250
Operator	Text	
Value(text)	Text	
Value(date)	Date	
Value(number)	Text	250
Chart Manager		
Chart Name	Text	250
Background Color	Text	250
Pre-mitigated	Text	250
Post-mitigated	Text	250
Open-Mitigated-Working	Text	250
Open-Mitigated-Planned	Text	250
Closed-No impact	Text	250
Closed-Occured	Text	250
Rejected	Text	250
Text Color	Text	250
Plot Background Color	Text	250
Threat Color	Text	250
Opportunity Color	Text	250
Legend1	Text	350
Legend2	Text	350
Title	Text	350
Color1	Text	250
Color2	Text	250
Color3	Text	250
Color4	Text	250
Color5	Text	250
Color6	Text	250
Color7	Text	250
Color8	Text	250

x-axis	Text	350
y -axis	Text	350

Last Updated on Tuesday, 02 April 2013 06:08