

Resources Allocation in PSNext 3.0

02/15/09 – Revision 1.0

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A - Introduction

Matrix organizations put together two essential manager roles for the execution of a project: Project and Resource managers.

Project Managers are a key actor for project planning, resource estimation and project follow-up. Resource Managers are responsible for a resource pool and provide resources to a Project Manager for project execution.

Both roles can now collaborate in PSNext 3.0, each of them gets a fully adapted component (Resources or Planner) to get the required tools to undertake their own responsibilities.

Project Managers can estimate resource needs based on resource profiles (job classifications and skills) by using project plans, rough estimations, or by using estimates coming from the Portfolio.

Resource Managers will find a large set of tools to study resource's activity at a glance for an easy choice of the best resource(s) to fulfill requests submitted by project managers.

This paper starts with an overview of the Resources component which has been considerably enhanced in PSNext 3.0 and then gets into deep detail of the new Resource Allocation feature.

B - Resources component overview

The Resources component in PSNext 3.0 has been greatly enhanced to provide Resource Managers with a complete set of features and new tools for an easy resource management.

Within a single component they are able to manage their Resource's capacity, allocation, availability, and profiles.

1 - Toolbars and menus

As in the Planner and Portfolio Control components, the Resources component now features three toolbar sections that can be fully customized by using preferences: the Main bar, the Navigation bar and the Info bar.

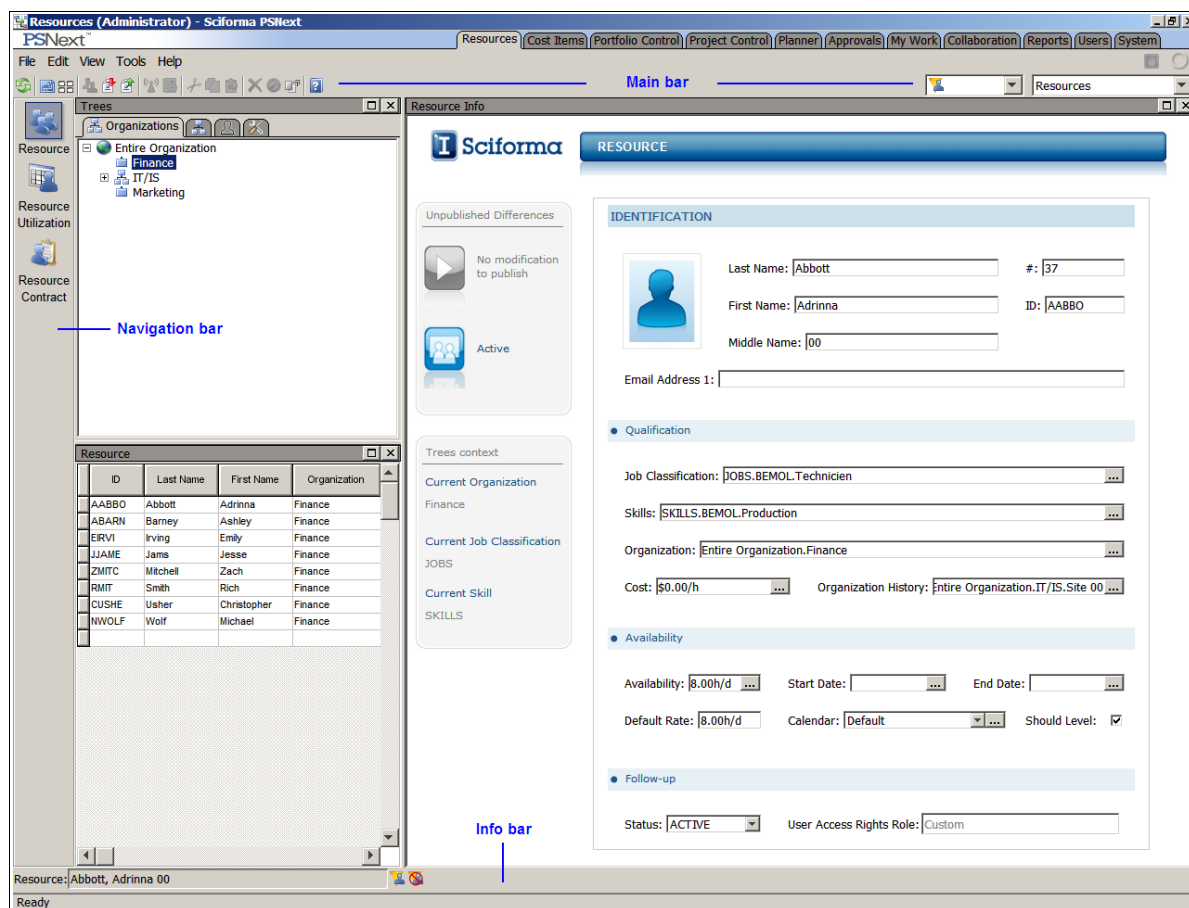


Fig 1. The toolbars and the menu bar of the Resources component can be customized.

The preferences and settings of these items are managed in the Tools/options dialog and can be defined as corporate preferences to implement company standards.

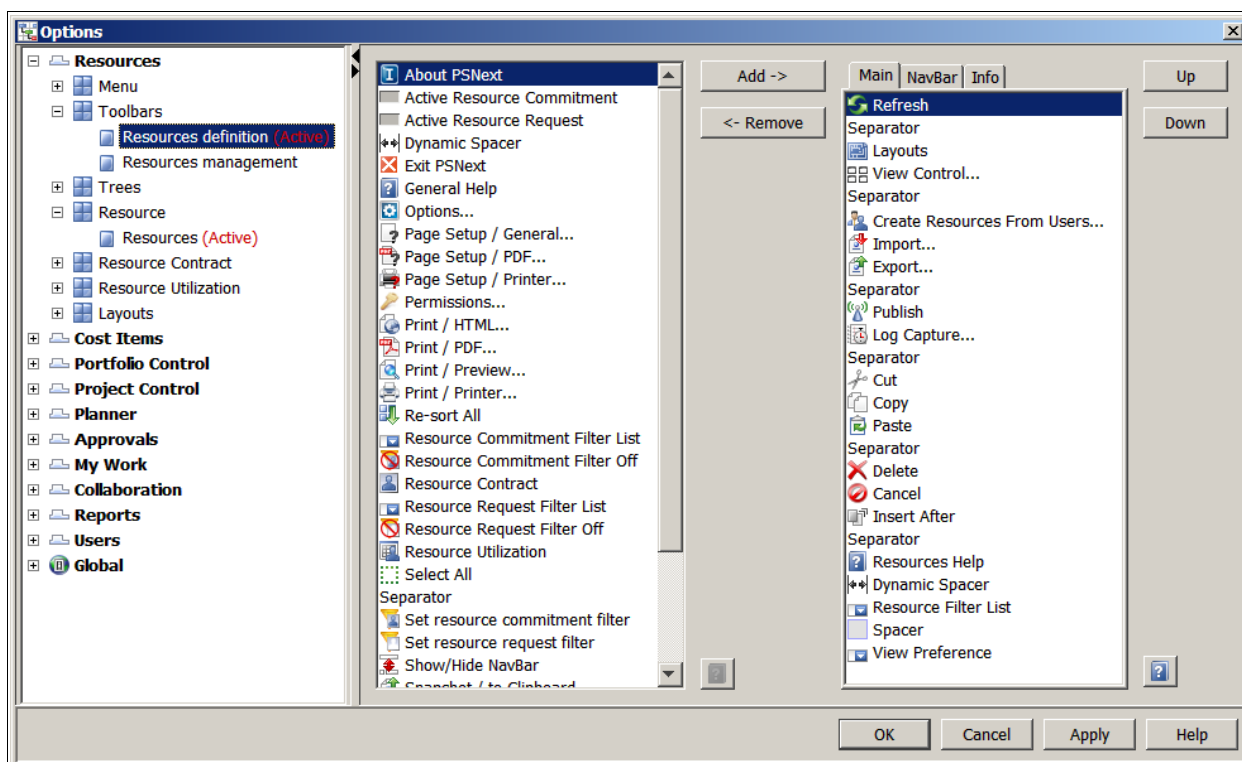



Fig 2. The Menu and tool bars are defined in the Tools/options dialog

2 - Views

The Resource component provides four different views for resource management. As in any PSNext view, each of them has a related set of preferences that defines the view's display. These preferences are available in the preferences drop down list and can be created either by administrators (as corporate preferences) or by each user to create a customized personal display.

Additionally, the Resources component views are dockable, this means that each view is managed as an independent window that can be resized, moved, maximized or displayed as a tab.

The NavBar displays the icons of each available view. In order to display more than one view at a time you can use the View control (View/View control...) .

2.1 - RESOURCE VIEW



This view lists all the resources the users can read (read permission on an organization branch) and allows the user to create, update and manage resource profiles.

Each row represents a different resource, and each column represents a different Resource field.

ID	Last Name	First Name	Organization	Default Rate	Status	Availability	Cos
AABBO	Abbott	Adrinna	Finance	8.00h/d	ACTIVE	8.00h/d	
ABARN	Barney	Ashley	Finance	8.00h/d	ACTIVE	8.00h/d	
EIRVI	Irving	Emily	Finance	8.00h/d	ACTIVE	8.00h/d	
JJAME	Jams	Jesse	Finance	8.00h/d	ACTIVE	8.00h/d	
ZMITC	Mitchell	Zach	Finance	8.00h/d	ACTIVE	8.00h/d	
RMIT	Smith	Rich	Finance	8.00h/d	ACTIVE	8.00h/d	
CUSHE	Usher	Christopher	Finance	8.00h/d	ACTIVE	8.00h/d	
NWOLF	Wolf	Michael	Finance	8.00h/d	ACTIVE	8.00h/d	

Fig 3. The Resource view lists the existing resources and their attributes


The Resource view displays the resource's spreadsheet that users of previous versions were used to work with. Some controls of the Resource spreadsheet have been removed from the spreadsheet itself such as the Status filter (active, inactive, pending) or the Job classification and Skills filtering options.

These controls have been augmented by more powerful features which are available to other views in the component.

View's preferences

The preferences of the Resources view can be defined from the Tools/Options... menu. Three tabs allow to define the settings of the selected preference.

- **Spreadsheet tab:** The columns (resource fields) to be displayed in the spreadsheet are defined in this tab.
- **Filters and sorting tab:** The preference of the resource spreadsheet can have a set of filters included in its definition.

 *These filters will be applied as soon as the preference is selected from the preference list.*

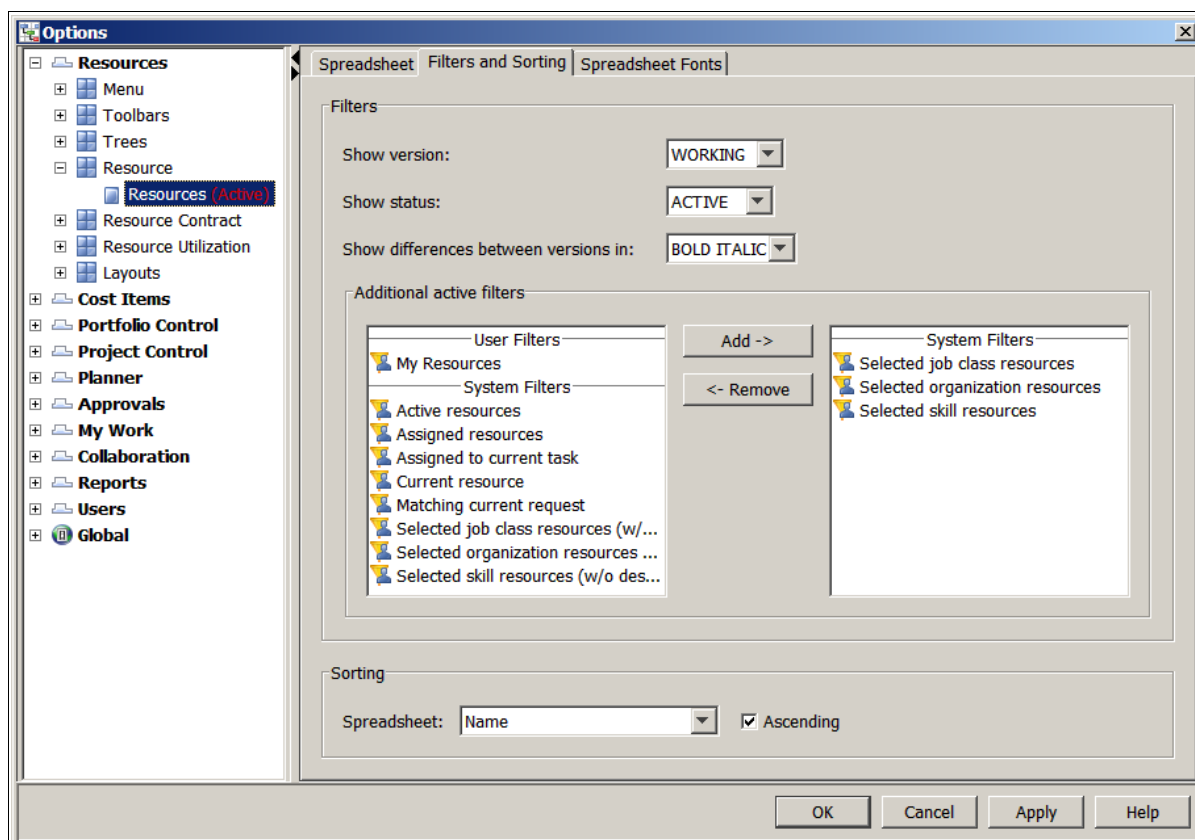


Fig 4. Filtering options can be included in the Resource's spreadsheet preference.

Note that if you are migrating from a previous version of PSNext, the preferences of the Resources' spreadsheet will not by default have any additional filters specified. Users might be used to having the Resource spreadsheet filtered according to the selected organization branch. To preserve this behavior, administrators must first create the related resource filters and update the Resource spreadsheet corporate preferences to include them. The Trees view (see below) provides users with the organization tree for selection purposes.

- Spreadsheet fonts tab: Displays font settings for the spreadsheet's content and headers.

2.2 - TREES VIEW



The trees view contains four tabs, each of them displaying one of the main outlined built-in structures a resource can be related with:

- Organization
- Pending organization
- Job classifications
- Skills

This view is intended to provide an easy way to make a selection for filtering purposes.

Each tab of the Trees view updates a reference field of the [Global] category so that the currently selected value can be referred when creating a filter.

SELECTED ITEM	UPDATED REFERENCE FIELD
Organization	[Global].[Current Organization]
Pending Organization	[Global].[Current Pending Organization]
Job classification	[Global].[Current Job Classification]
Skill	[Global].[Current Skill]

Suppose, for instance, a Resource Manager would like to filter the resource's spreadsheet according to the selected organization. One way to do this is to create and activate a filter which compares a Resource's organization to [Global].[Current Organization].

View's preferences

The preferences of the trees view provides sibling sorting options for each tree. Tree items which share the same direct parent will be sorted by the field specified in these options.

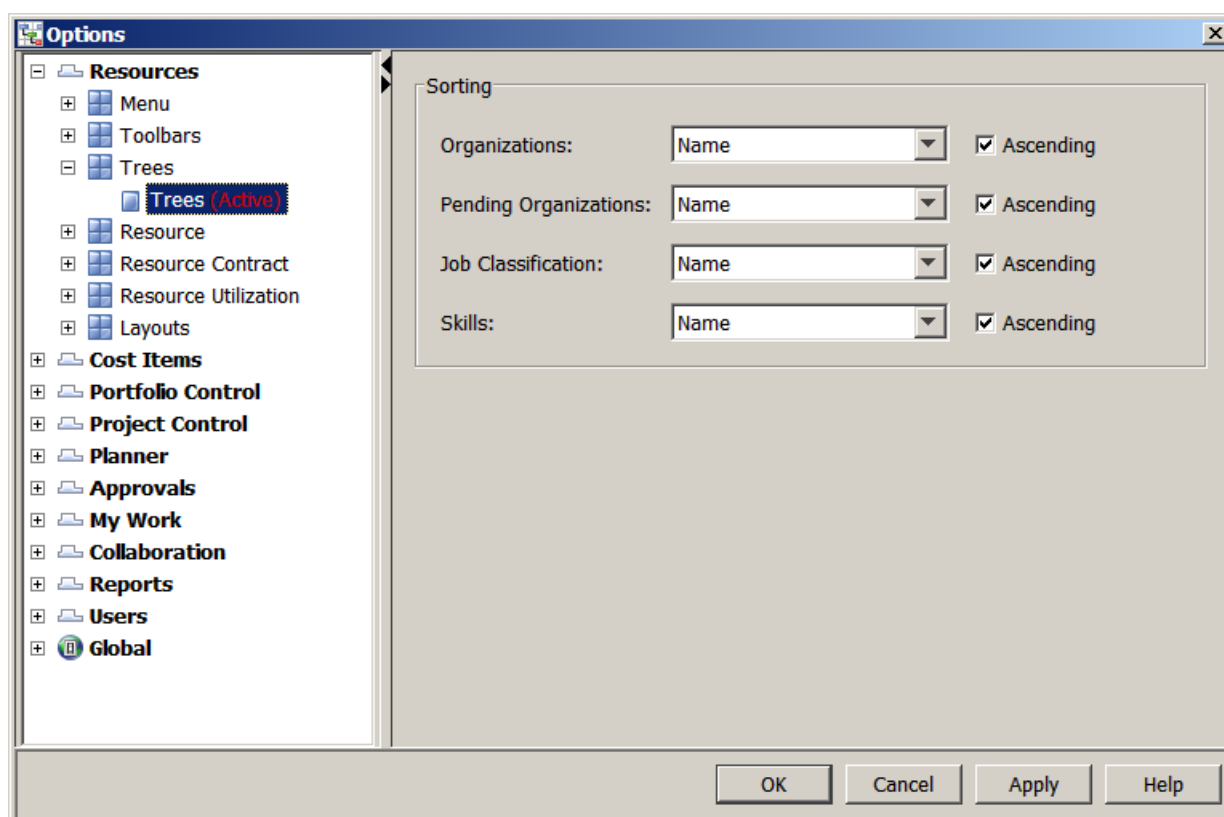




Fig 5. Preferences of the Trees view.

2.3 - RESOURCE UTILIZATION VIEW

The Resource utilization view is available for resource managers to provide them with a view of their resource's activity at a glance.

Additionally, each resource line can be expanded to get detailed information on the projects and tasks the resource is working on. The right pane of the window is a distributed section that can be zoomed in  and out  to consult the resource's assignments effort by using numbers, graphs or color indicators.

Knowing what resources are doing and if they are under or over allocated is easily done within this view.

Resource Utilization												
Name	5	6	7	8	9	10	11	12	13	14	15	16
Irving, Emily												
Tulay project		8.00h			8.00h	8.00h	8.00h	8.00h	16.00h			9.00h
Design stage									8.00h			8.00h
Drafts									8.00h			8.00h
Jenner project		8.00h			8.00h	8.00h	8.00h	8.00h	8.00h			1.00h
Prepare structure		8.00h			8.00h	8.00h						
Build forms							8.00h	8.00h	8.00h			1.00h


Fig 6. Resource Managers get a quick overview of the activity of their resources.

Only the assignments on published and active projects are displayed. Also, there is no need for the resource manager to have read permissions on each Project. The read permissions on the resources themselves is sufficient to allow access to view the resource's activity.

View's preferences

The preferences of the Resource Utilization view can be defined from the Tools/Options... menu. Five tabs define the settings of the each preference.

- **Spreadsheet tab:** The columns to be displayed in the left windowpane of the spreadsheet. Fields of the Resource, Project, Task or Timesheet categories can be displayed in the spreadsheet.
- **Distribution tab:** The right widow pane can be customized in this tab; the fields to display are specified, along with their formatting options, including graphing options and colors.
- **Spreadsheet fonts:** Displays font settings for the spreadsheet's content and headers.
- **Project/tasks:** An additional option of the view's preference provides control on whether the Project and Task information should be displayed or not when the preference is selected (are the resource lines expandable or not). The data to download depends on the number of resources listed in the view and the number of assignments each resource has got.

 *Resource Managers may not be impacted by performance issues, since the resource scope will generally be limited to their own teams. However administrators, who may well have access to a much larger number of resources, could experience serious performance degradation. It is strongly recommended to keep this option off when setting an administrator's preferences..*

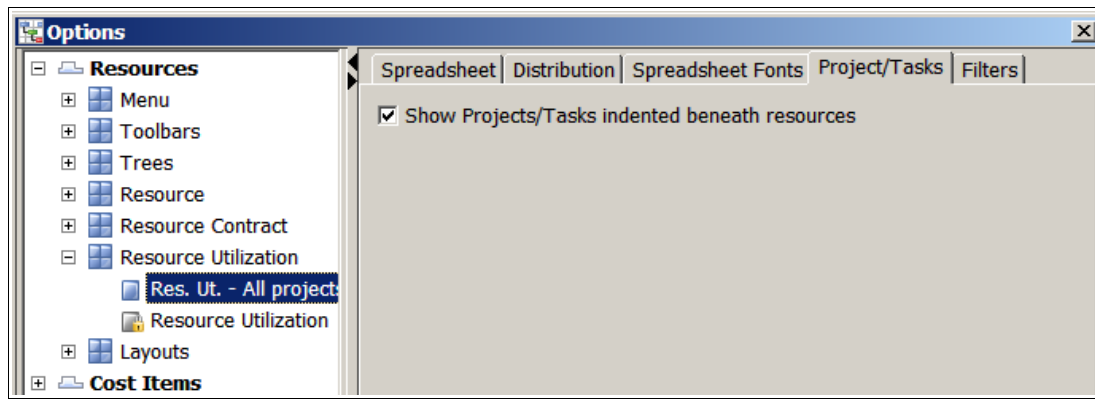


Fig 7. Enabling/disabling project and task details to be displayed

- **Filters tab:** The listed resources in the view can be filtered by the preference itself when the preference becomes active. System-level and User-level Resource filters are available and can be added to the preference's definition.

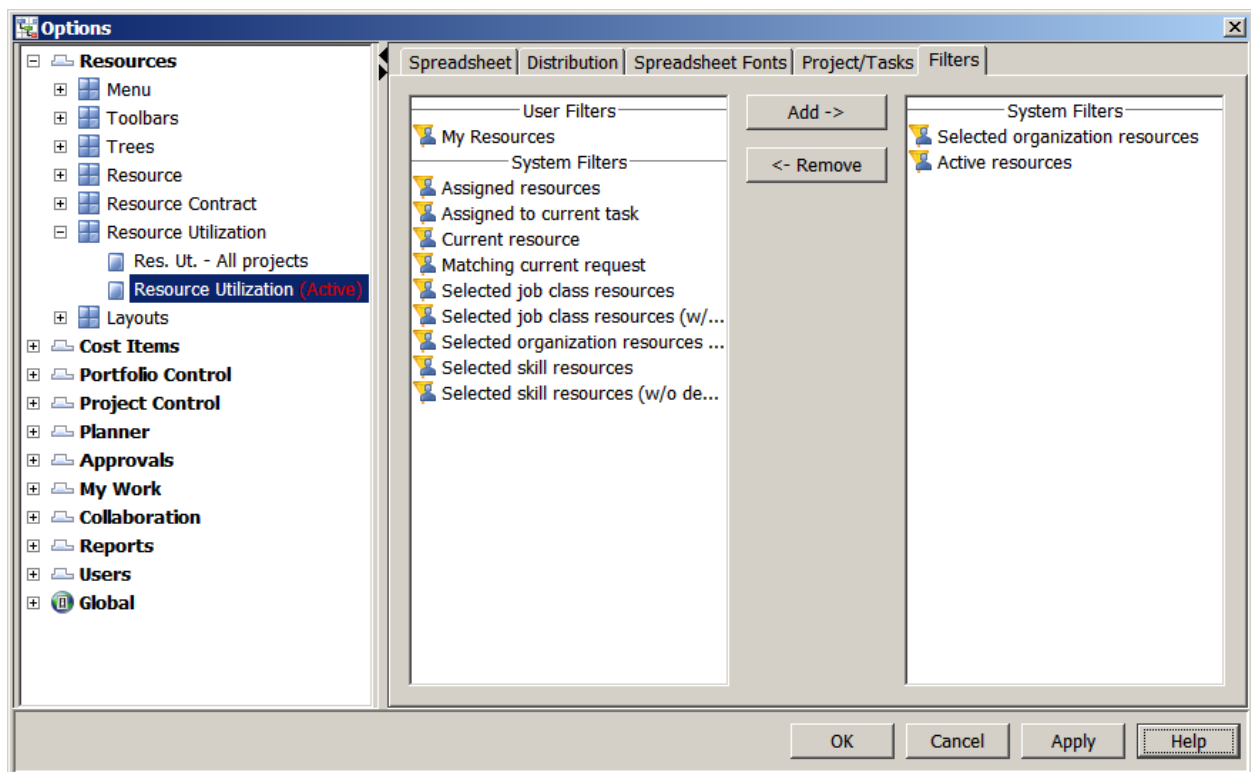


Fig 8. The Resource Utilization preference can contain a set of filters to activate.

2.4 - RESOURCE CONTRACT VIEW

This view has been introduced in PSNext 3.0 to allow management of resource contracts between Project Managers and Resource Managers. Access to this view is controlled by the User's access rights, and token usage is required.

The contract view is explained in detail later in this document.

3 - Filtering

In addition to the filtering options of each view's preference, an additional resource filter can be specified that will be applied to displayed resources throughout the Resources component.

3.1 - THE "RESOURCE FILTER LIST"

All of the available Resource filters (system wide and user defined) are listed and can be activated by choosing them from the list.

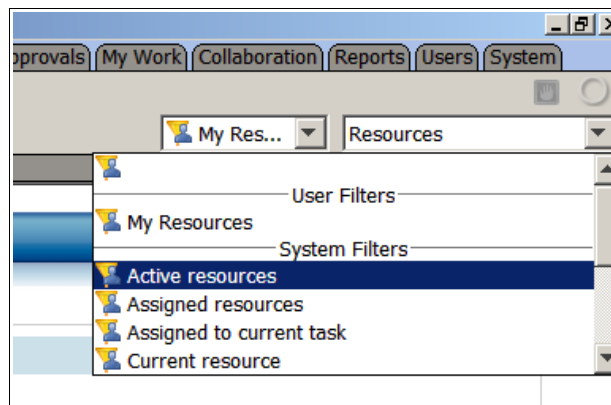



Fig 9. A resource filter can be activated with a single click

The filter can be deactivated by choosing the empty line at the beginning of the list.

3.2 - THE “SET RESOURCE FILTER” CONTROL

Resource filters may also be applied by using the resource filter icon , which can be made available in the Info toolbar.

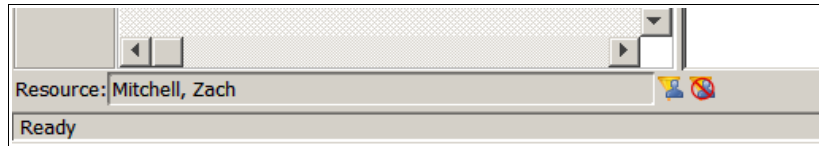


Fig 10. The resource filter is normally available in the Info bar.

The displayed dialog will allow Resource Managers to create and manage their own user filters that will be available each time they log in.

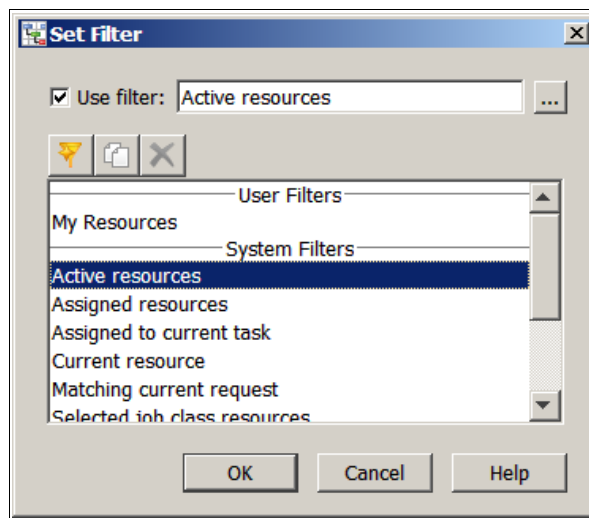



Fig 11. users can create their own resource filters

3.3 - LAYOUTS

The Layouts feature is available in the Resources component and can include in its definition a set of views and filters to be activated when the Layout is applied.

For further information on Layouts please read “User Interface enhancements in PSNext 3.0”.

4 - Forms

PSNext 3.0 enhances forms to provide more user-friendly data entry for Resource fields. Resource forms can be designed by administrators under System/Forms and displayed by resource managers in the Resource component by using the View control  (View/View control...)

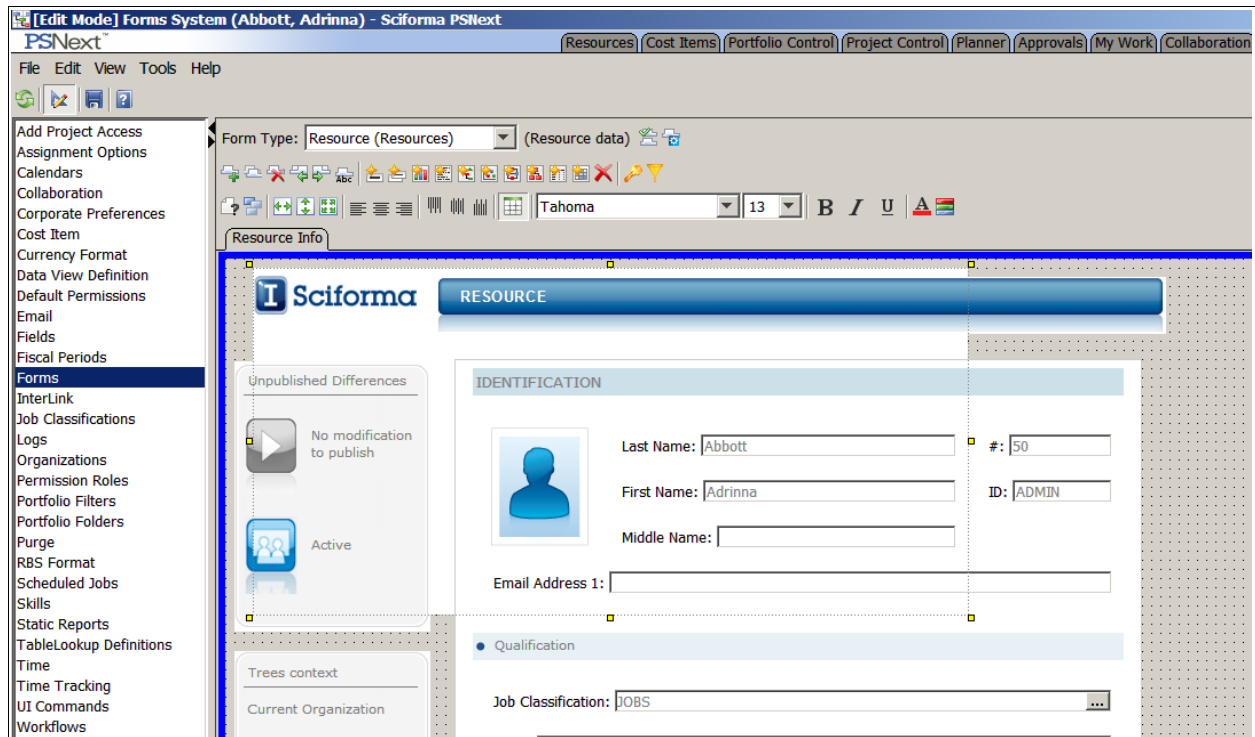


Fig 12. Administrators can design resource form for data entry and display.

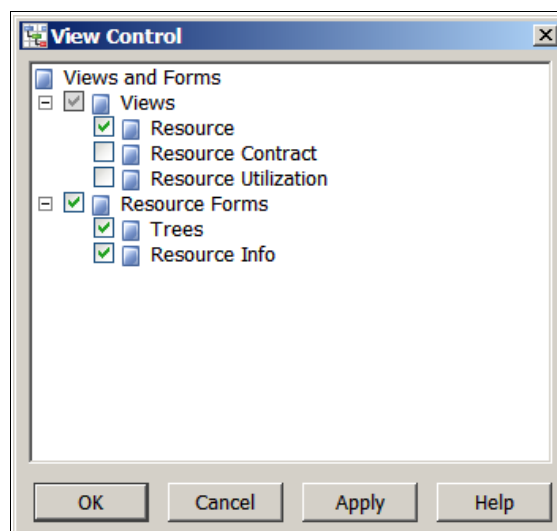


Fig 13. Resource forms can be displayed through the view control

For further information on forms design and display, consult "User Interface enhancements in PSNext 3.0".

C - Team building concepts

Team building consists of identifying the names of the resources that will comprise the project's team.

The end result of the team building process is that each such resource has an authorized time frame of availability to work on a given project or work package.

PSNext 3.0 provides a set of tools to establish a dialog between the Project Manager and all the involved Resource Managers to obtain a resource contract that is agreed to by both the Project and the Resource Manager.

1 - Team building workflow

Here is a general overview of the workflow involving the Project Manager that submits a resource request and a Resource Manager committing resources to that request.

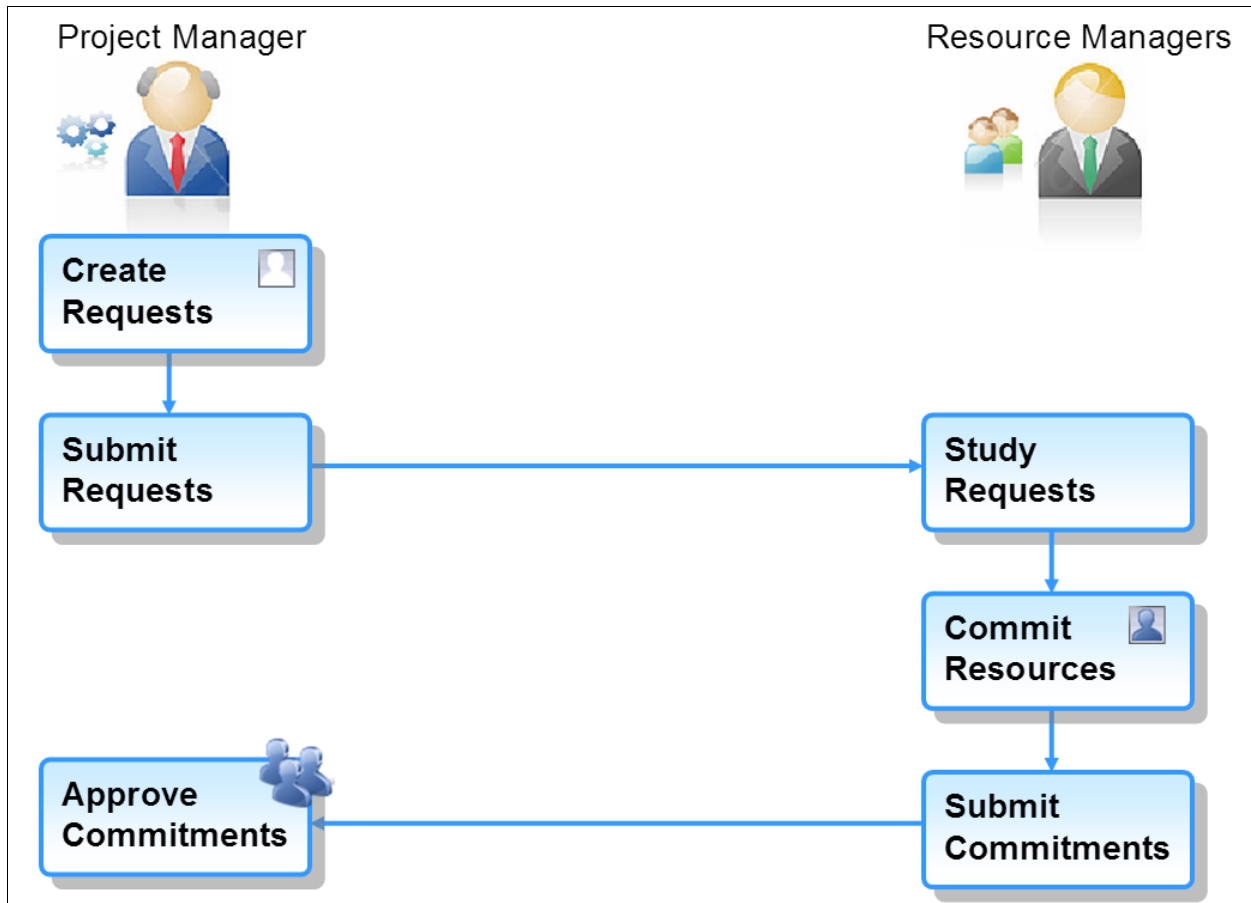


Fig 14. The Resource Request and Commitment workflow

2 - Requesting Resources

2.1 - ENABLING THE PROJECT

Resource Requests are created in the Planner component by Project or Work package managers. An attribute of the project determines whether teams are to be built for the whole project or individually for each work package.

This project attribute is specified in the “Request Mode” Project field.

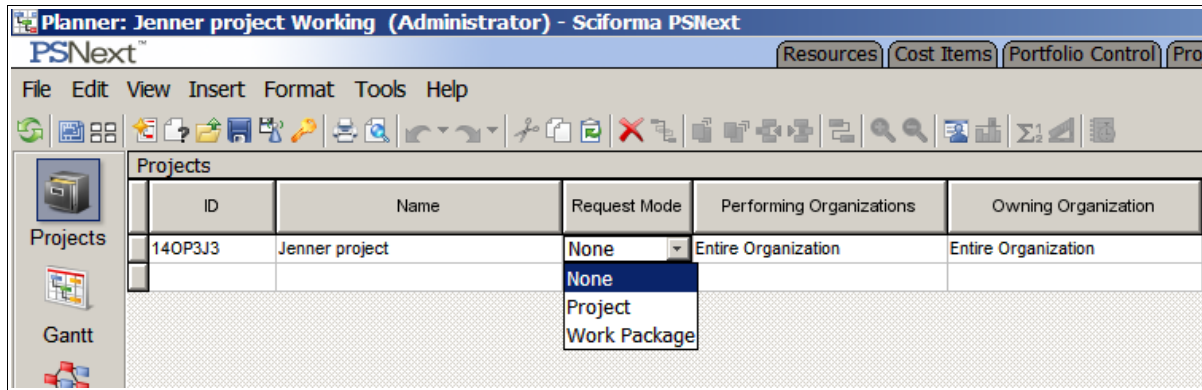


Fig 15. The Request Mode of the project determines the level of the teams to be built.

2.2 - CREATE REQUESTS

When a project has a request mode defined, associated resource requests can be created. The Task utilization view provides a new Approval mode that facilitates management of Resource requests.

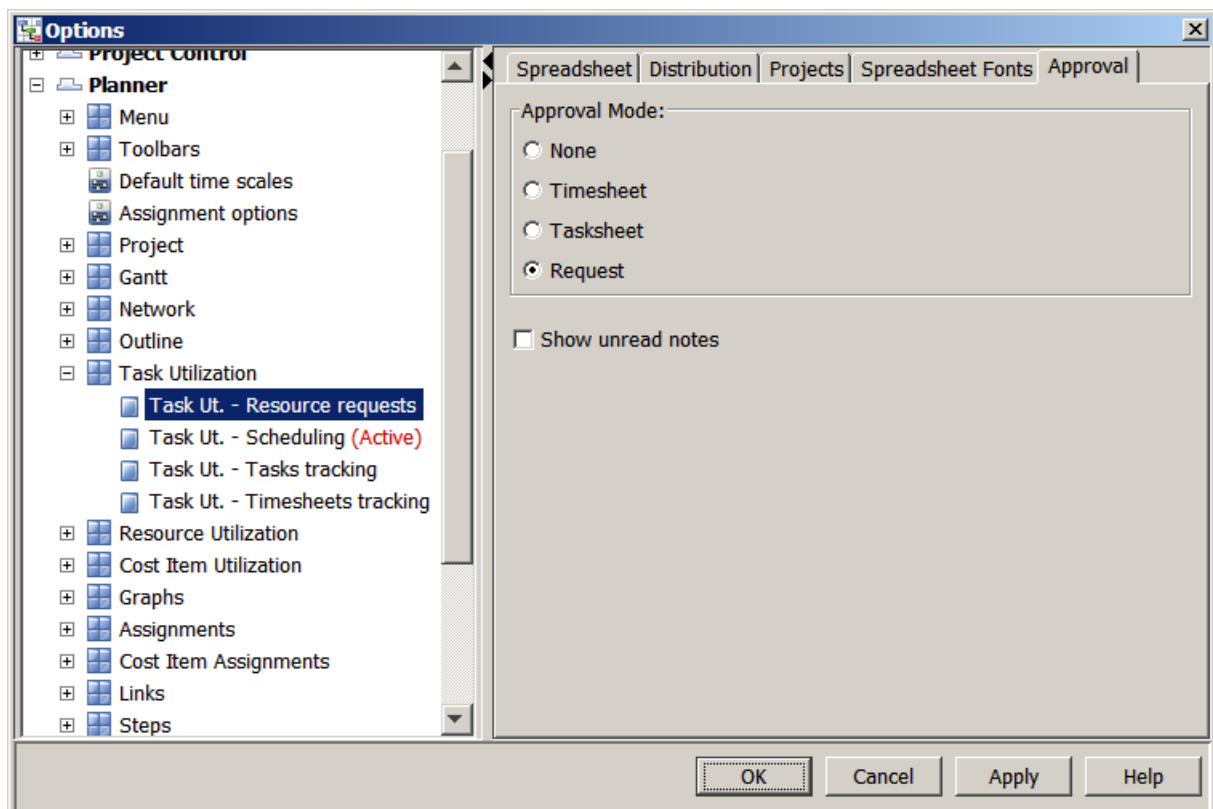



Fig 16. Enabling the Task Utilization view to work with resource requests.

The task utilization view will display a dedicated toolbar to manage resource requests when the “Request” approval mode is enabled.

Project Managers can create a new request by using the Insert After toolbar icon  or menu command to insert a new row in the spreadsheet.

Task Utilization							
Name	Job Classification	Skills	Status	Field	Feb	Mar	Apr
Jenner project							
Finance	Accountant		PM Working	Request Effort	20.00d		10.00d
Marketing	Designer		PM Working	Request Effort		30.00d	
IT/IS	Developer		PM Working	Request Effort	10.00d	10.00d	10.00d

Fig 17. Resource requests created in the task utilization view

Each inserted line represents a single resource request.

Resource requests can be created within a work package if the “Request mode” of the project allows it. Every existing work package will be listed in the task utilization view so that requests can be created within them.

Task Utilization							
Name	Job Classification	Skills	Status	Field	Feb	Mar	Apr
Jenner project							
Finance	Accountant		PM Working	Request Effort	20.00d		10.00d
Design							
Marketing	Designer	MAC design	PM Working	Request Effort		20.00d	
Marketing	Designer	PC design	PM Working	Request Effort			10.00d
Build							
IT/IS	Developer		PM Working	Request Effort			

Fig 18. Requests can be created within existing work packages.

2.2.α - RESOURCE REQUEST ATTRIBUTES

A resource request is identified by the following attributes:

Mandatory fields

- Organization



Organization branch that is being requested. This value is essential since it will be used by PSNext to identify which Resource Managers have access to the request.

The resource request can be created for any organization existing in PSNext, regardless of the project's performing organization. An additional project field can restrict resource requests to the performing organizations scope.


Projects						
ID	Name	Restrict Assignment/Request Organizations	Start	Finish	Duration	
14OP3J3	Jenner project	<input type="checkbox"/>	2/6/09	3/27/09	35.50d	

Fig 19. Requested organizations can be restricted to the performing organizations scope.

-  Request effort

Amount of effort that is requested. The requested effort can be freely entered in the distributed pane of the window. Zoom in  and out  controls can be used to change the time scale of the distributed pane. Note that there is no restriction on the time frames or amounts that can be entered.

Optional fields

-  Job classification

Within an organization branch, resources might have different jobs. The project manager can detail the specific job that is requested.

-  Skills

Skills can provide additional detail about the requested resource profile needed to build the team up.

-  Resource Name

The Project Manager can request for a specific resource name directly in the request.

- Comments

This field allows the Project and Resource Managers to keep record of comments and notes related to the request.

- Request Name

Each request can have a name to easily identify the content and reason of the request.

The Resource Request is available as a built-in category, additional user defined fields can be added to its data structure to better fit any corporate needs and communication workflows (under System/Fields).

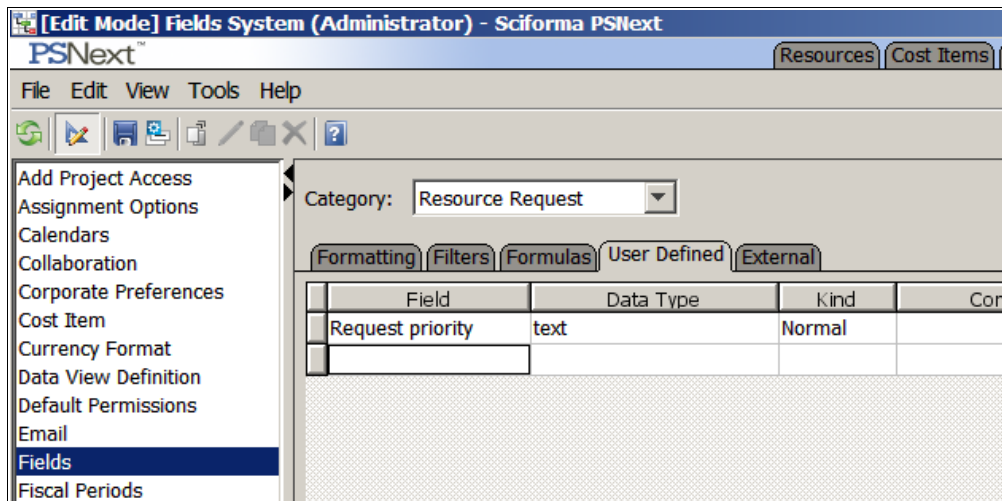


Fig 20. User defined fields can be created to the “Resource request” category.

2.3 - BUILDING REQUESTS

The ease of creating a request by simply inserting a new line in the spreadsheet will be appreciated by many Project Managers that would like to build the project's team before getting into the project scheduling phase.

Nevertheless some Project Managers would prefer to proceed by preparing a rough schedule first to estimate the project's resource needs.

PSNext 3.0 provides a build request tool that can build resource requests based on the project's current schedule.

This procedure is helpful when project managers regularly use project templates that already contain resource estimations within them. Furthermore, if the project was launched by a Portfolio Manager from the Portfolio Control component, it might have been initiated with a rough task schedule with resource estimates as soft assignments (set by the objective project). These estimations can be directly used by the Project Manager to build the required resource requests.

The build request button is enabled after selecting a project or work package line in the task utilization view.

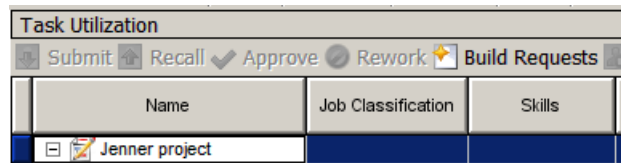


Fig 21. The build request button

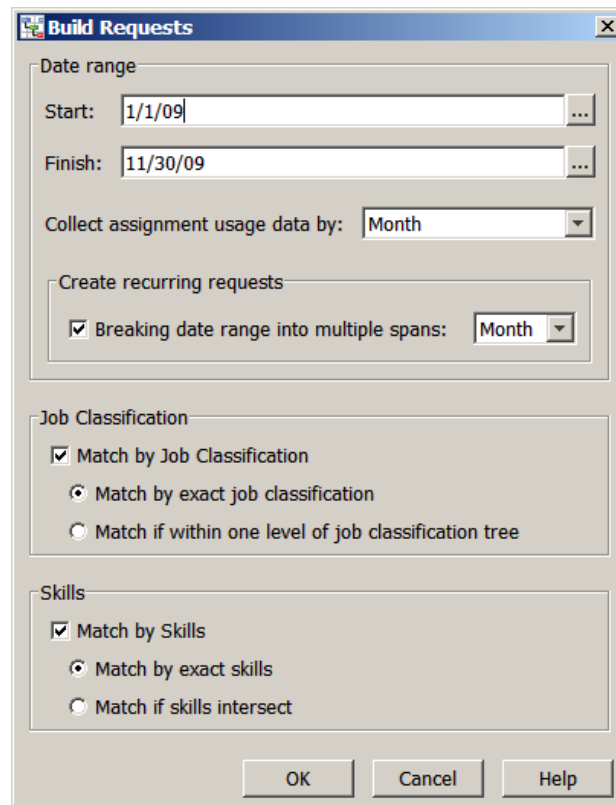


Fig 22. The Build Requests options

- Date range

Setting a date range will enable a project manager to consider only a time period within the project and generate requests for that specific period (using the assignments of that time frame only). The first time the project will request resources, the project manager might like to build requests for the near-term stages or phases and stop at a date when the resource estimates are less certain.

Once the project starts and the project is getting closer to the next stage or phase, requests can be created beginning with the next stage's start date.

- Collect assignment usage

Assignment usage data can be collected at various levels of detail. Collecting data with a smaller time scale (like Hour or Day) provides more detail than collecting data with a larger time scale (like Year). Unless the assignment data spans a very large amount of time, it is probably best to collect the data at a fairly high level of detail (like Day) in order to maintain accuracy.

The main grouping criteria for each request that will be built is the effective organization of the assignments to be considered. This means that all the assignments of the same organization will be grouped within a single request. The following options of the build request dialog can define additional grouping criteria which will be considered when building the requests:

- Break requests into multiple spans

A resource manager will reply to each resource request submitted by the Project Manager. Instead of building a single request for a given resource profile for the whole period, PSNext can break it down into time slots.

For instance if a Designer is required from the beginning to the end of the period, the Project Manager would prefer to create one request per month so that the Resource Manager replies to each request monthly. This option gives flexibility on requesting and committing resources as project progresses.

- Job classification matching

You can decide whether to include the job classifications of the assignments when requests are built. Additionally, the tool can either build requests upon an exact job classification matching or only if within one level of the job classification tree.

- Skills matching

Skills used in the assignments can be optionally considered when building the requests. You can either ask for an exact matching or group into a single request those assignments that share at least one skill.

Even though the project schedule can be used to initially build resource requests, note that requests are totally independent of the project's schedule. The Project Manager can edit or delete any of the requests created by the build requests tool. The build requests tool is a handy feature for Project Managers to initialize the resource requests based on the existing assignments.

If, when the build requests tool is used, the project or work package already contains resource requests, the build requests tool will try to group the existing requests with the requests that are going to be built.

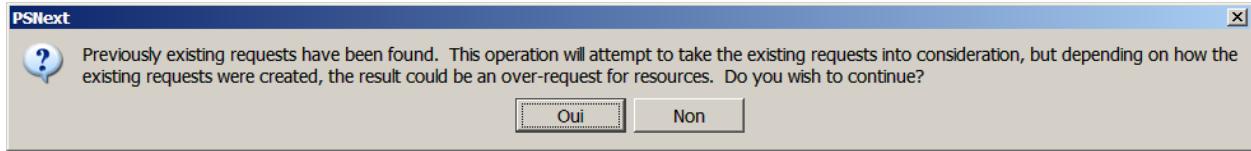




Fig 23. The build requests tool will try to group existing requests with the requests to be built

2.4 - SUBMITTING REQUESTS

The requests that have been created by the Project Manager, either manually or by using the Build requests tool, have a status set to “PM Working”. These requests are not visible to any Resource Manager yet.

The “Submit requests” button  is used to submit the selected requests to the corresponding Resource Managers. Once the requests have been submitted they will have the status “PM Submitted” and can no longer be modified by the Project Manager. The requests are not actually sent to the Resource Managers until the project is saved.

2.5 - RECALLING REQUESTS

A submitted request can be retrieved by the Project Manager by using the “Recall” button . Only those requests that are still in the “PM Submitted” status can be recalled. When a request is recalled its status will reset to “PM Working”

3 - Committing Resources

As previously presented in this paper, the Resources component provides an important set of tools for Resource Management. In this component Resource Managers can also consult the requests that have been submitted by Project Managers and commit the resources that will fulfill them.

3.1 - THE RESOURCE CONTRACT VIEW

The Resource Contract view displays the resource requests that have been sent to the Resource Manager and allows him to commit the resources that will fulfill the requests. Access to this view is controlled by a user's rights, and token usage is required. .

Each line in the spreadsheet followed by the request icon  represents a resource request.









Resource Contract			
Submit 		Rework 	Recall 
Start:	2/2/09 	End:	
Name	Project Name	Status	
	Jenner project	PM Submitted	Fina
	Tulay project	PM Submitted	Fina
	Dulles project	PM Submitted	Fina
	Dulles project	PM Submitted	Fina

Fig 24. Requests in the resource contract view

Requests that have been submitted by the project manager and are waiting for a commitment are marked as “PM Submitted”.

Permissions

The organization permissions now include two additional permissions to control access to the resource requests and commitments related to the organization. These permissions are available in the organization's permissions than can either be set under System/Organizations or in the Resources/Trees view.

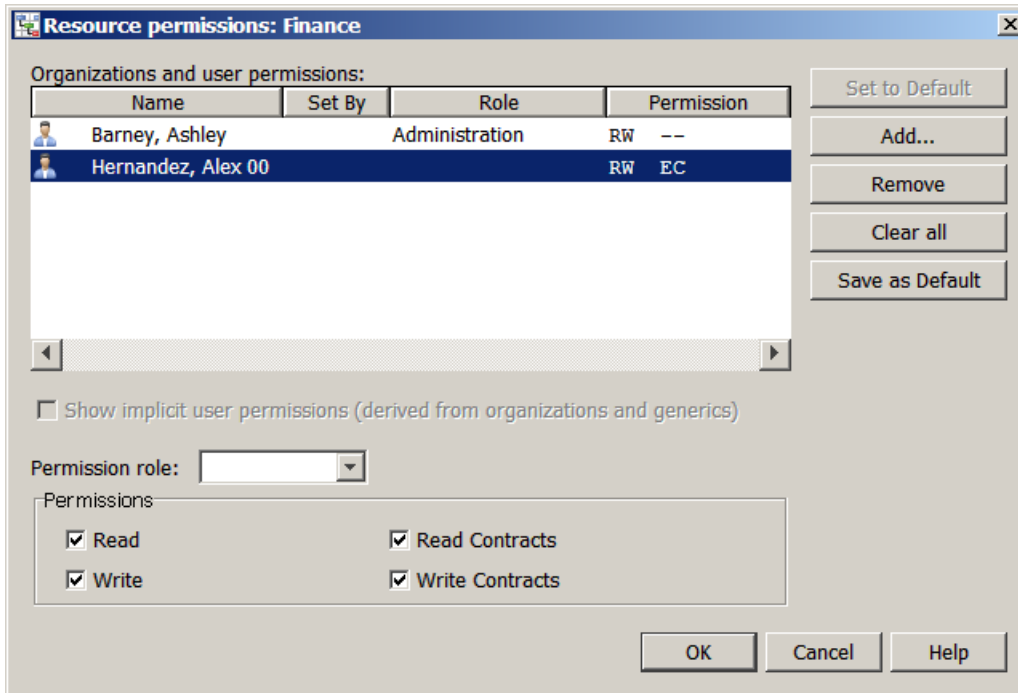


Fig 25. Two permissions control access to contracts of each organization branch

3.2 - FILTERING

The content of the view can be filtered by using the date filtering controls in the view's toolbar. Only requests containing a requested effort within the selected period are displayed.



In a more general way Resource Requests can be filtered by using the “Resource request filter list” or by using the “Set resource request filter” button  in the Info bar.

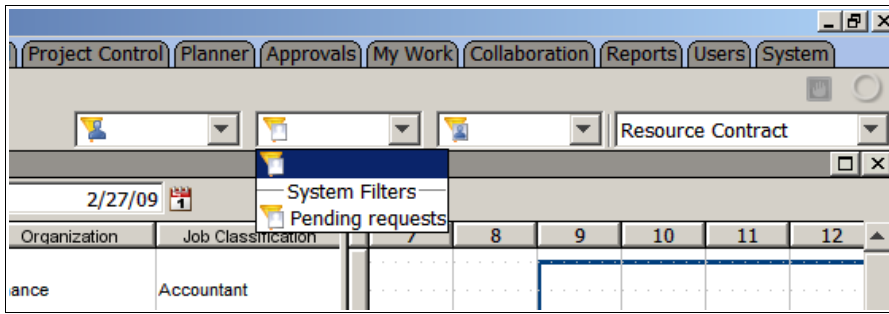


Fig 26. The Resource request filter list

For instance a Resource Manager might like to display those Resource Requests that are waiting for a reply or that have not been fully fulfilled yet.

3.3 - FULFILL A REQUEST

With the help of the Resource utilization view, Resource Managers can get an overview of the availability and activity of each resource.

Additional filters and indicators can help Resource Managers to identify the resources that could potentially fulfill a given request. For instance a resource filter could be activated to display only the Resources that fulfill the request's needs in terms of organization, job and skills.

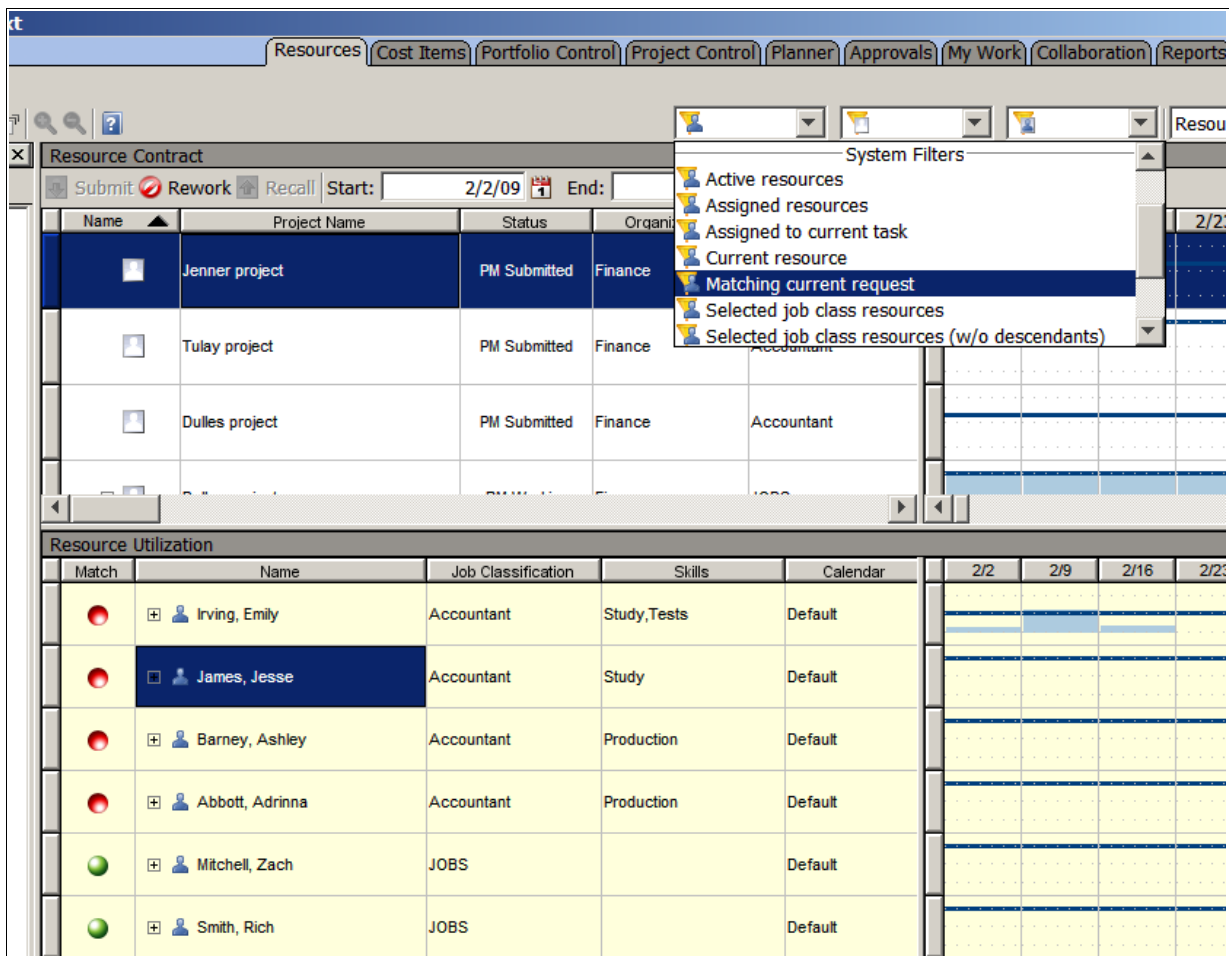



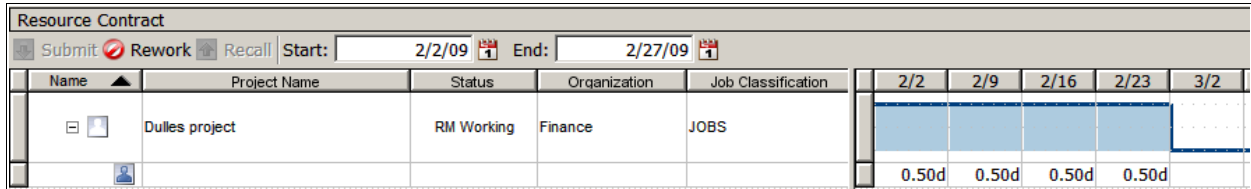
Fig 27. Resource filters and color indicators help Resource Managers identify the resources to commit.

Requests are fulfilled by one or more “Resource Commitments”. Commitments can be done to a request in two different ways:

3.3.α - INSERT A NEW LINE IN THE SPREADSHEET

In the resource contract view select a resource request line and use the Insert after  toolbar icon to create a new commitment line within the request.

Resource commitment lines are represented by the a fully colored portrait  .




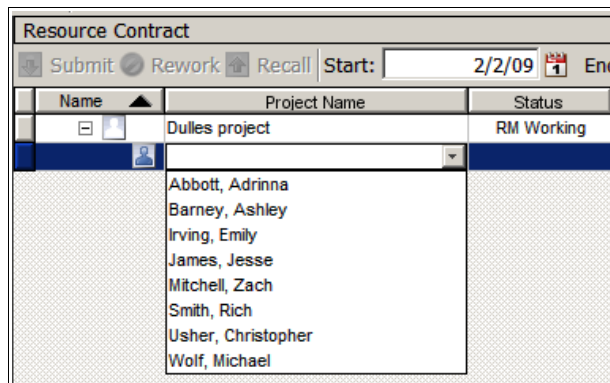

Name	Project Name	Status	Organization	Job Classification	2/2	2/9	2/16	2/23	3/2
	Dulles project	RM Working	Finance	JOBS	0.50d	0.50d	0.50d	0.50d	

Fig 28. A new commitment line is created within a request.

The Resource Manager must then enter the attributes of the commitment such as the resource name, and the committed effort of the resource on that specific request.

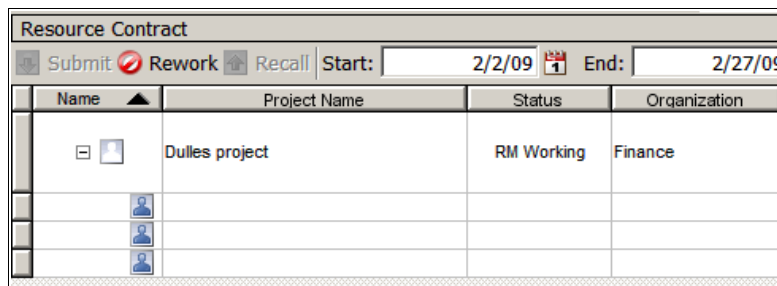


Name	Project Name	Status
	Dulles project	RM Working

- Abbott, Adrinna
- Barney, Ashley
- Irving, Emily
- James, Jesse
- Mitchell, Zach
- Smith, Rich
- Usher, Christopher
- Wolf, Michael

Fig 29. Resource names are displayed in a drop down list.

Only active resources are listed in the drop down list. Additionally, the list honors any filter that might be currently active in the component. Note that the Resource Manager can only commit resources of the organizations she can read (“read” permission granted at the organization level).






Name	Project Name	Status	Organization
	Dulles project	RM Working	Finance
			
			

Fig 30. Additional commitment lines can be inserted within the request.

3.3.b - USE DRAG AND DROP

Alternatively, Resource Commitments can be created by dragging and dropping resources from either the Resource Utilization or the Resource view.

Select a resource line (or lines) in either view, hold the Alt key down, and then click and drag the Resource(s) to the Resource Contract view and drop it onto the desired Request. This will cause a new Commitment to be created for each dropped resource.

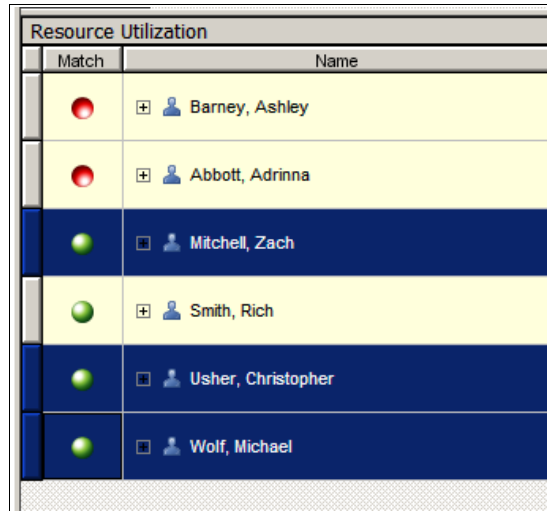


Fig 31. Multiple resource lines selected to commit them on a request.

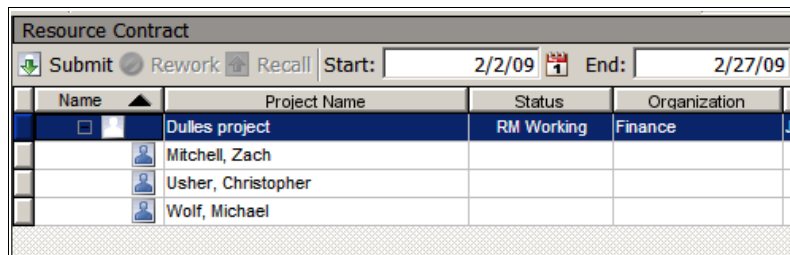



Fig 32. All the “dropped” resources are committed to the selected request.


The Commitment Effort will be filled by default with the lesser of the unfulfilled effort of the request and the resource’s uncommitted effort (available effort – total committed effort)

 *Note that as soon as a commitment is created under a request, its status changes to “RM Working”. Project Managers can no longer recall a commitment once it is being modified by a Resource Manager.*



3.3.c - RESOURCE COMMITMENT ATTRIBUTES

A resource commitment is identified by the following attributes:

Mandatory fields

-  Resource Name
Name of the resource that is being committed.

-  Commitment effort

Amount of effort that the resource is committed to provide to the request. The commitment effort can be freely entered in the distributed pane of the window. Zoom in  and out  controls can be used to change the time scale of the distributed pane. Note that there is no restriction on the time frames or amounts that can be entered. Commitment effort can be out of the time and effort boundaries of the request. This is useful when a Resource Manager cannot commit a resource on the requested date range or rate and prefers to “answer” at a different date or rate.

The Resource Request is available as a built-in category, additional user defined fields can be added to its data structure to better fit any corporate needs and communication workflows (under System/Fields).


3.4 - REPLYING TO A NOMINATIVE REQUEST

A resource request can have a resource name specified, indicating that the Project Manager would like a specific resource to be provided (see Resource Requests attributes).

A Resource Commitment must be created and the Resource Manager must specify the requested resource in the commitment in order for the nominative request to be fulfilled. No automatic fulfillment of nominative requests is provided. The Resource Manager is free to commit the requested resource or a different one.

Each committed resource's profile is updated when they are committed on a request. The Resource “Total commitment effort” field is the sum of all the *commitment effort* of all the requests the Resource is committed to (regardless the status of the request). This field is useful to manage resource booking since it will consider the committed effort no matter the request status.


3.5 - SUBMITTING A REPLIED REQUEST

Resource Managers can submit the request back to the related Project Manager by clicking on the submit button . The button is only enabled when a request line is selected. Commitments can not be submitted individually, as the request holds all the related commitments within it and is managed as a single object in the dialog between the Project Manager and the Resource Manager.

When a request is submitted back to the Project Manager its status changes to “RM Submitted” and can no longer be modified by the Resource Manager.

The profile of each resource is updated when they have been committed on a request that is submitted to the Project Manager. The Resource “Submitted commitment effort” field is the sum of all the commitment effort of all the submitted requests a resource is committed to.

3.6 - RECALLING REQUESTS

A submitted request by the Resource Manager can be retrieved by using the “Recall” button . Only those requests that are still in the “RM Submitted” status can be recalled. When a request is recalled by a Resource Manager its status will be reset to “RM Working”

4 - Signing the Resource Contract

The resource contract is finalized when the Project Manager approves the replied resource requests. The Task Utilization view in the Planner component will detail the commitments done in each request.

4.1 - STUDY A RM SUBMITTED REQUEST

Color indicators and graphs can help Project Managers identify those requests that have been fully fulfilled and those that are not.

Name	Job Classification	Jan	Feb	Mar
Dulles project				
Finance	Accountant		10.00d	
Mitchell, Zach			2.00d	
Abbott, Adrinna			2.00d	
Finance	JOBS		2.00d	
Barney, Ashley			2.00d	

Fig 33. Studying RM submitted requests

The preference of the Task Utilization view can be configured to display data of both the Resource Requests and Commitments.

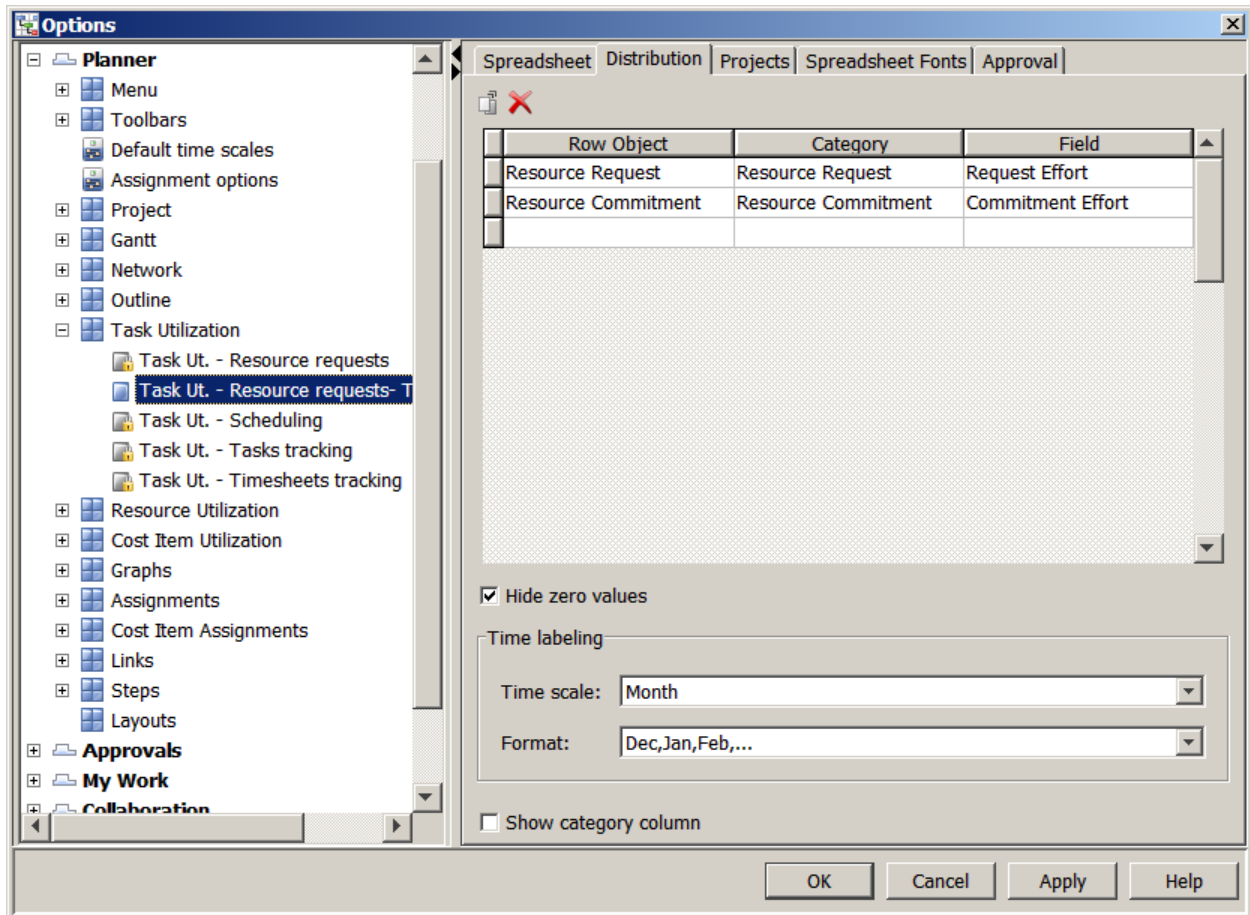




Fig 34. Fields can be customized according to the displayed row object

4.2 - APPROVE A RM SUBMITTED REQUEST

A request in the “RM Submitted” status can be approved by the Project Manager with the Approve button  or sent back to rework (showing a disagreement of the Project Manager) by using the Rework button . In order for the status change to become effective the project must be saved.

When a request is approved, the status of the request becomes “PM Approved” and will be used to define (or update) each resource's availability on the project or work package.

The project or work package team is finally built when the resource requests are approved.

4.3 - IMPACT ON PERFORMING ORGANIZATIONS

Performing organizations is a project (or work package) field that defines the scope of the resources that can be assigned within a Project (or work package).

The resource request and commitment process' main purpose is to build a team by defining the availability of a resource within a project (or work package) for a given time period.

Therefore there is no concrete assignment created when a request is approved. Resources are allocated to the project but not assigned to it. Remember that requests and commitments can be created on a “task-less” project.

The performing organization fields are still honored and will not allow a resource assignment out of their scope.

As described above, when a Project Manager requests a resource from a given organization, a restriction on the organization scope can be enabled (see Resource Request attributes). Nevertheless it is possible that a Resource Manager commits a resource that belongs to an organization that is out of the performing organization set of the project associated with the request.

When approving a request, PSNext will make sure that all of its committed resources are included in the performing organization's scope (so that project managers can later assign them) and will individually include the missing resources into the project's set of performing organizations.


4.3.α - NOTE ON PERFORMANCES


This behavior will considerably ease the way performing organizations are set. Users of previous versions might be accustomed to setting the “Entire organization” as the performing organizations scope to avoid issues when looking for the resource they wanted to assign.

Choosing the “Entire organization” or a large set of resources in the performing organization scope **could lead to huge performance issues** because PSNext downloads all the Resource profiles that a Project reader could potentially assign when the user logs in.

In PSNext 3.0 the performing organizations of a project can be initialized to a very small scope. It will then be increased little by little when resource requests are approved. Some organizations might prefer to control access to this project field by using permissions or workflows. The default value of a project's performing organization is still being the project creator's organization.

4.4 - TRUNCATING A REQUEST

As a project evolves, Project Managers may find that a given request, even if it has already been committed, is no longer relevant. The Truncate  tool in the Task Utilization view allows the project manager to delete the remaining part of a Resource request and its commitments as of a given date.

Note that since the Project Manager is the originator of the project's Resource Requests, he/she is able to delete them at any time no matter the status of the request. Resource Requests can be deleted by using the delete icon .

D - Availability and overallocation

Resource assignments to tasks are done by the Project Manager in an independent process.

PSNext will not undertake any control or enforce any rule when the Project Manager is assigning resources or scheduling the project. This is the way PSNext has always behaved with regard to resources' availability.

It would not be useful for a Project Manager to be prevented from delaying or rescheduling a task just because a resource assigned to it is not available. The Project Manager is considered as the project's highest authority and must not be blocked in her project management tasks.

However, PSNext 3.0 enhances some of the tools available in Planner to ease the resource assignments and management process for projects using a request mode (Project or Work package). These tools will behave "normally" for Projects whose request mode is set to "None".

1 - Resource fulfill tool

The resource fulfill tool can be used to fulfill the soft assignments of the Project's current schedule. PSNext will consider resource's availability based on the approved committed effort when proposing resources to fulfill soft assignments.

Project Managers that would have used the existing assignments as a starting point to build resource requests could easily fulfill them by using this tool.

2 - Resource Assign dialog

The resource assign dialog helps the Project Manager to quickly create assignments on multiple tasks at the same time. The displayed resources are those belonging to the performing organization.

The % Available value is based on each resource's approved committed effort over a specified time period and the existing assignments within the project.

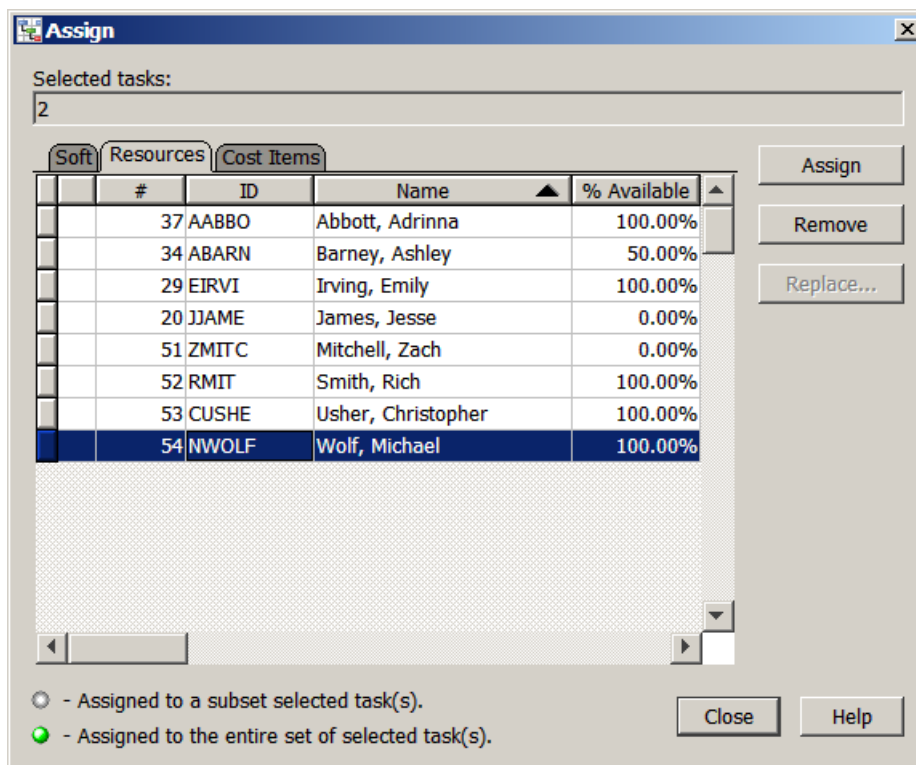


Fig 35. % Available is based on committed effort.

3 - Select Resource dialog

The select resource dialog is used in the “Assignments” tab of the task form to choose the name of the resource of the selected assignment. As in the Resource Assign dialog, the % Availability is based on the approved committed effort. The availability filtering options in the “Filter” tab of this dialog will consider this availability as well.

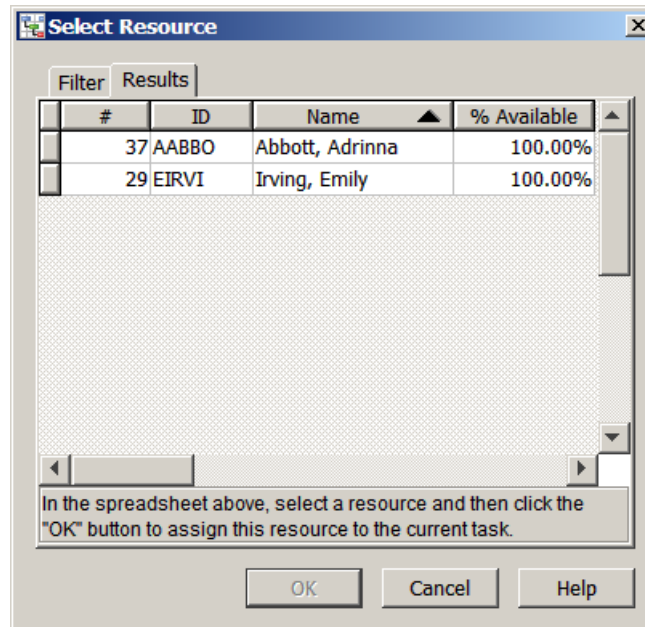


Fig 36. Choose the resource name for the current assignment

4 - Over allocation search

The over allocation search is available in Resource Utilization, Cost Item Utilization and Graph views. This tool has been enhanced in PSNext 3.0 and is available regardless the request mode being used.

Searching criteria can be customized by using formulas to better fit the searching needs.

The user specifies the types of rows (Row Objects) on which the filters should be evaluated. Here is a realistic example of over allocation filters that a user might want to search for when using a Request mode:

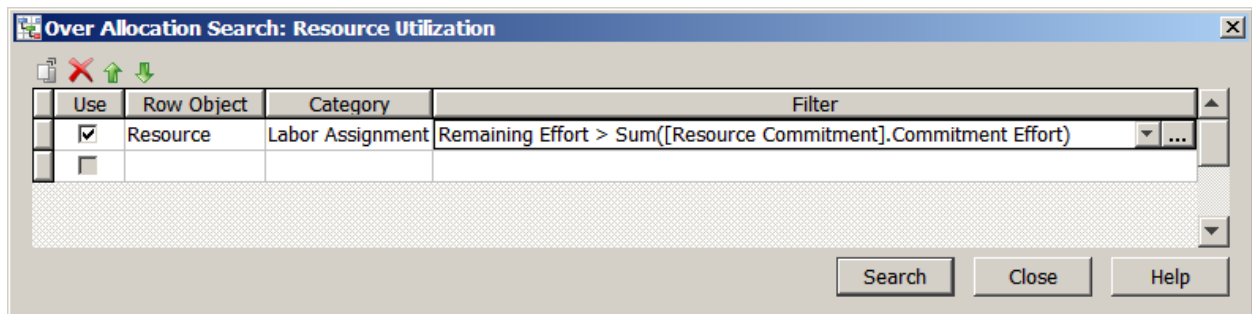
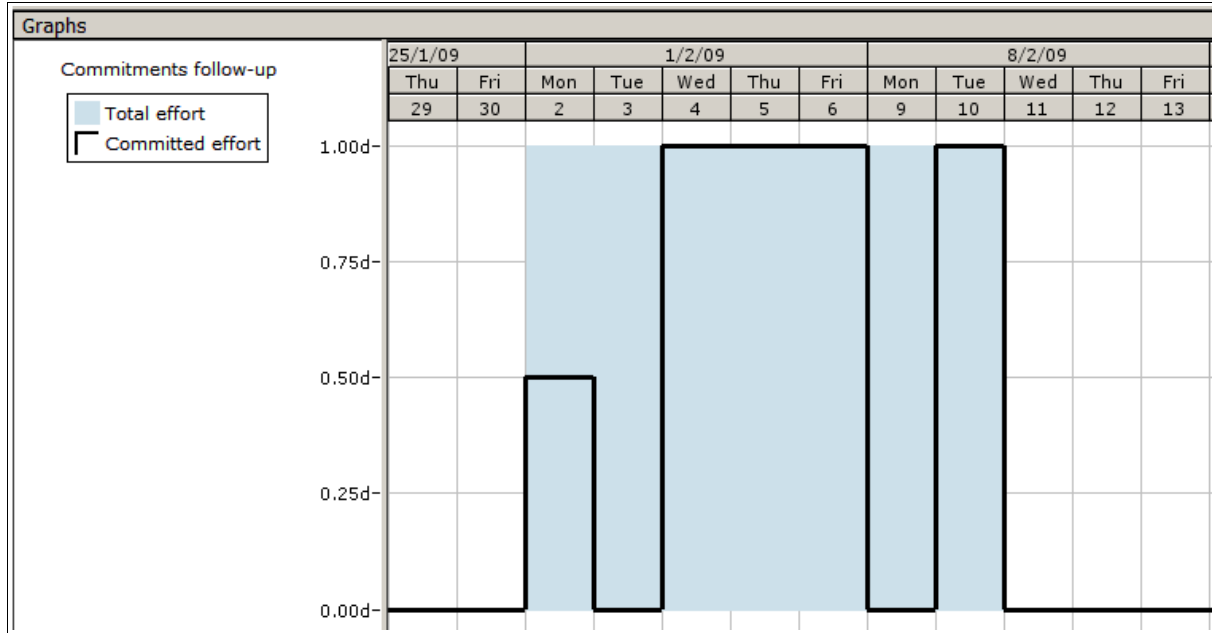


Fig 37. Over allocation search criteria can be customized

In the example above, the over allocation search will look for remaining effort that is greater than the commitment effort of the resource. Additional filtering on the status of the request can be done (i.e. Approved requests only).

When the dialog finds an over allocation, the distributed windowpane of the view is scrolled such that the cell is visible and selected. Collapsed lines will be expanded to search for all possible rows.

Over allocation search can be run in the Graph view too. In the following example note that the Resource's availability is not used, instead, its committed effort is provided for over allocation



analysis.

Fig 38. The graph view is a useful tool to follow-up Resource over allocations

5 - Resource leveling

The resource leveling tools offered by PSNext have also been enhanced and will help Project Managers level projects or work packages using requests. Instead of considering the resource's availability as a leveling basis, the tool will consider the approved committed effort.

E - Conclusion

PSNext 3.0 considerably enhances the Resources component to provide powerful tools to Resource Managers including new views, forms and a large set of filtering options.

Layouts, toolbars, and menus can be customized to provide a friendly and easy to use interface adapted to the Resource Management needs of each corporation.

Resource allocation capabilities enhance the team building workflow established between Project and Resource Managers to define the resources that will participate on the project as well as the effort they are committed to provide within a given time period.

Resource estimations of a rough schedule or information coming directly from the Portfolio can be used to build up the resource requests required for the project's execution.

Resource requests can be broken down into time frames to be gradually fulfilled for the project's convenience or to follow project management best practices (stage gates, Prince2, etc.).

Resource and Project Managers can now collaborate in PSNext to build up project teams.