Principal Toolbox

Version 5.5

User Manual

Principal Toolbox User Manual

Principal Toolbox 5.0

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1 Introduction to the Principal Toolbox

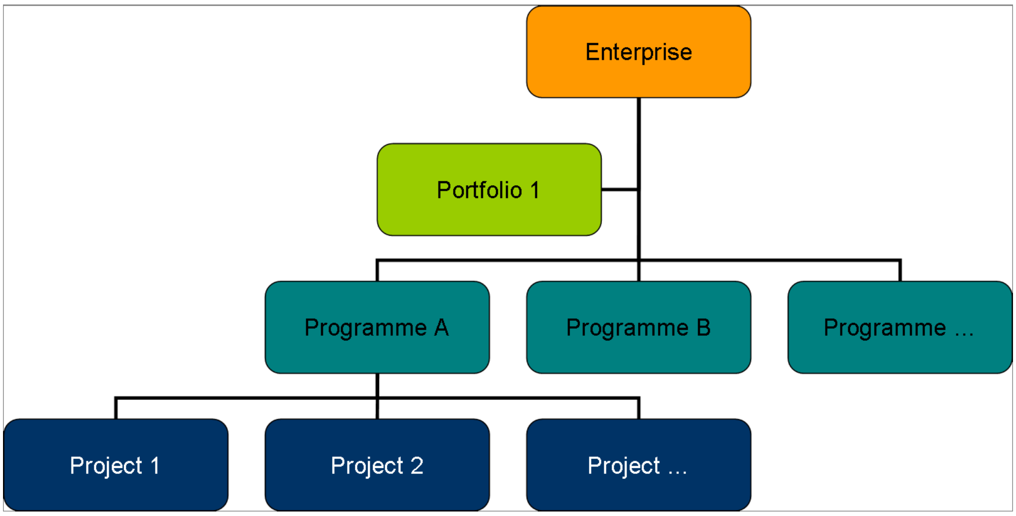
Principal Toolbox offers a powerful set of tools for the management of your projects, programmes and portfolios. PRINCE2™ support for projects is offered in project models and in the way processes are supported by the Principal Toolbox by default. Customising Principal Toolbox to follow the processes of your own organisation is easily accomplished.

This manual offers a comprehensive guide explaining how to use the Principal Toolbox. In the application itself the context-sensitive help is available on virtually every page. You can access the help by clicking the ? button.

The complete manual is available in PDF format for download as well:
Download User Manual as a PDF file

1.1 Structure of Principal Toolbox

The projects within the Principal Toolbox are organised in a hierarchical structure. This structure is configured and used within the project side of the Principal Toolbox. The picture below shows how a hierarchy can be build to host programmes and projects.



Example of an Enterprise Hierarchy. Each organisation will have a unique representation of their programmes and projects.

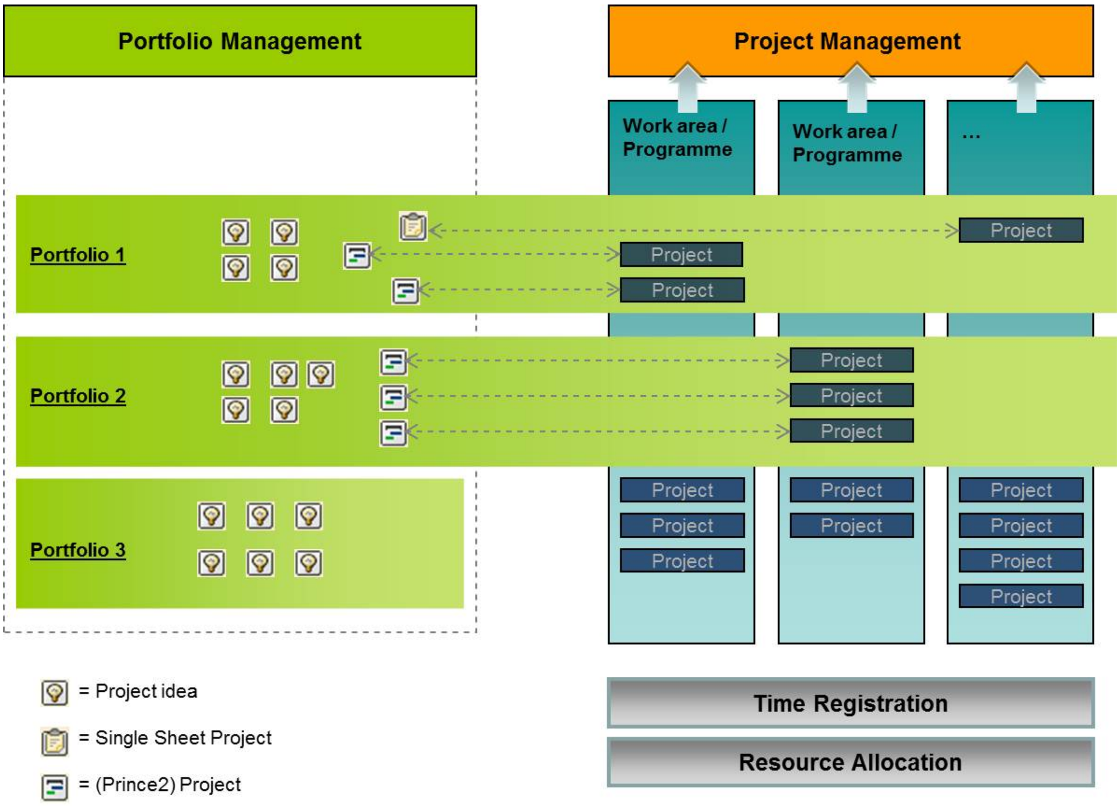
This structure can be changed to fit your organisation's needs. The highest level is called the 'enterprise level'. At this level, folders can be added to represent entities within your organisation.

The folders can be any of the following types:
- Work area: can contain work areas, programmes and project lists
- Programme: can contain work areas, programmes, project lists and projects
- Project list: can only contain projects

By choosing the right type of folders, the actual structure of for example business units, programmes and projects within your organisation can be reflected in the Principal Toolbox. The enterprise hierarchy aids in keeping an overview of all programmes and projects run throughout the organisation.

The same projects that have been fit in with this hierarchy that reflects the organisational structure, can also be made part of a portfolio. Portfolios are manages in a separate area within the Principal Toolbox, and this functionality is provided by an add-on module (Portfolio Management add-on 82).

The illustration below shows how Project Management and Portfolio Management work together:



1.2 Hardware and Software requirements

The following hardware and software requirements must be in place for using Principal Toolbox.

Minimum Requirements:	
Operating System	Microsoft Windows XP or later
Browser	Microsoft Internet Explorer 7 or later or FireFox 3 or later[1]
Network	Network or internet connection
Display	Resolution 1024x768 or higher
Software Requirements for using reports and exports:	
Software	Microsoft Office 2002 or later [2]
Software	Adobe Acrobat Reader 5 or later
Using Microsoft Project for planning projects:	
Software	Microsoft Project 2002 or later

If your browser's pop-up blocker settings are configured for maximum security, you will not be able to view any pop-up windows within Principal Toolbox. This includes all pop-up windows, even those that provide necessary functionality such as the calendar pop-up for choosing a date, the help window, and more.

Also some script blockers may be active. You will not be able to use drag and drop functionality within Principal Toolbox (for example the drag and drop functionality on the edit project plan page and the Gannt editor) if these script blockers are not disabled.

Some virus scanners, firewalls or browser add-ons, like the Google toolbar, also have pop-up or script blocking. Consult your software documentation on those products for details on how to configure them to allow pop-up windows and scripts from the Principal Toolbox.

1. Be sure there are no script blocking security settings or script blocking firewalls active.

2. For working with automated reports in Excel, the template needs rights to execute macro's.

1.3 Required Internet Explorer Security settings

The Principal Toolbox is completely web-based. This means it runs in your internet browser. Below you will find a table with the required security settings of the appropriate Internet Explorer security zone used by Principal Toolbox. In Internet Explorer go to *Tools > Internet Options,* select the *Security* tab and choose *custom level* to change the settings.

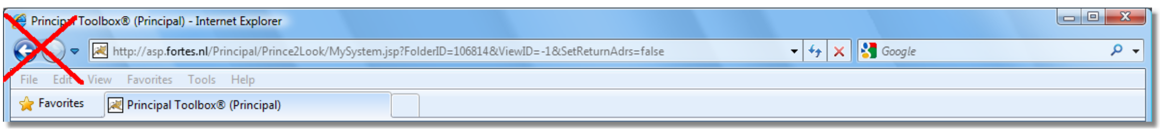
Section	Setting	Value	Remarks
ActiveX controls and plug-ins			
	Initialize and script ActiveX controls not marked as safe for scripting	Enable	Script errors on different pages occurs when disabled.
	Script ActiveX controls marked safe for scripting [1]	Enable	The Edit Project Plan window hangs while message "Processing please wait" is displayed.
Downloads			
	Automatic prompting for file downloads	Enable	Function to pack project offline can't offer to download the offline project.
	File download	Enable	When disabled, automated reports and documents can't be downloaded.
Miscellaneous			
	Allow META REFRESH	Enable	Internet Explorer window stays blanc after login when disabled
	Allow websites to open windows without address or status bars	Enable	Internet Explorer will display a grey address bar in all pop-ups when disabled
	Launching applications and unsafe files	Enable	Required for installing the MS Project Client add-in.
	Submit non-encrypted form data	Enable	When disabled, Internet Explorer can't update changes in text fields.
	Use Pop-up Blocker	Disabled	Internet Explorer blocks the "Edit name for new item" dialog after adding the first product on the Edit project plan page when enabled
Scripting			
	Active scripting	Enable	Login button on login screen doesn't react. Drag and drop in Edit Project Plan window won't work when disabled
	Allow paste operations via script [1]	Enable (or Prompt)	Keywords for automatic reports won't be copied to the clipboard when disabled.
	Allow Programmatic clipboard access [2]	Enable (or Prompt)	Keywords for automatic reports won't be copied to the clipboard when disabled.
User Authentication			
	Logon	Automatic for logon only in Intranet zone	When Single SIgn On is enabled, this setting allows to sent username and password over the intranet

1. Only required or available for Microsoft Internet Explorer version 6.
2. Only required or available for Microsoft Internet Explorer version 7.

1.4 Navigation

The Principal Toolbox is a web-based application in which navigation works the same way you are used to on the internet. You perform actions by clicking with your mouse button or by clicking hyperlinks on the page.

However, the normal buttons of your web browser will not work within the application.

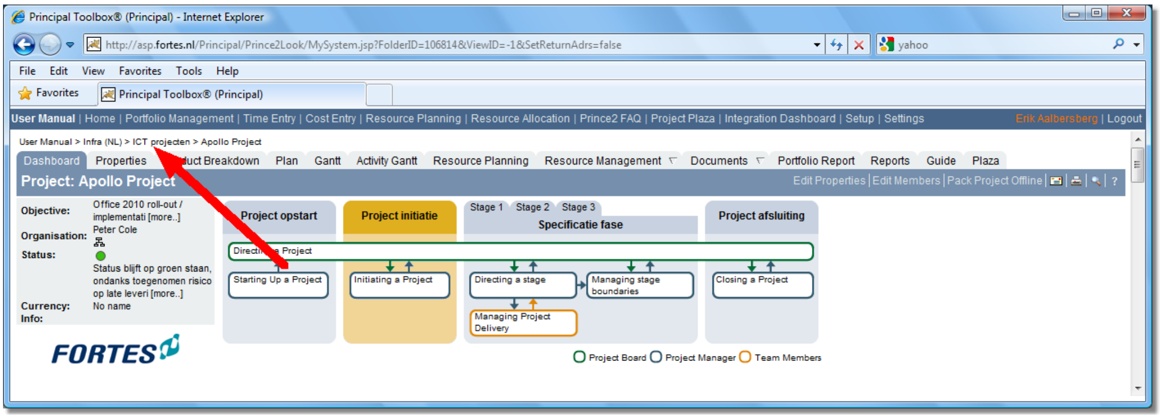


Browser buttons won't work

Instead, navigating through Principal Toolbox is done by using the dark blue header within your browser window. In the upper left hand corner, you find a reference to the highest level in the hierarchy for your organisation's programme and project tree. From there, you can navigate down the branches of the tree to locate your projects.

On your home page, accessible through the **'Home'** link in the dark blue header, you will find all projects, products and log items you are connected to. This way, you can quickly locate your projects and items you have to work on.

Throughout the application, except on your homepage, you will find the so-called bread crumbs that show you where you are in the programme and project tree. Click the bread crumbs anywhere higher up in the hierarchy.



Project Dashboard; bread crumbs

1.5 Logging on

Before you can log on to Principal Toolbox, the system administrator must first create a user name for you. After this has been done, you can log on using the following steps.

> ***Note**: Some organisations have so-called single sign-on configuration. In this case, you are logged on automatically with your Windows user name.*

1. Start up Internet explorer and navigate to the Principal Toolbox homepage. The internet address is found in the email that you have received from your administrator. The user name and password are also found in this email.

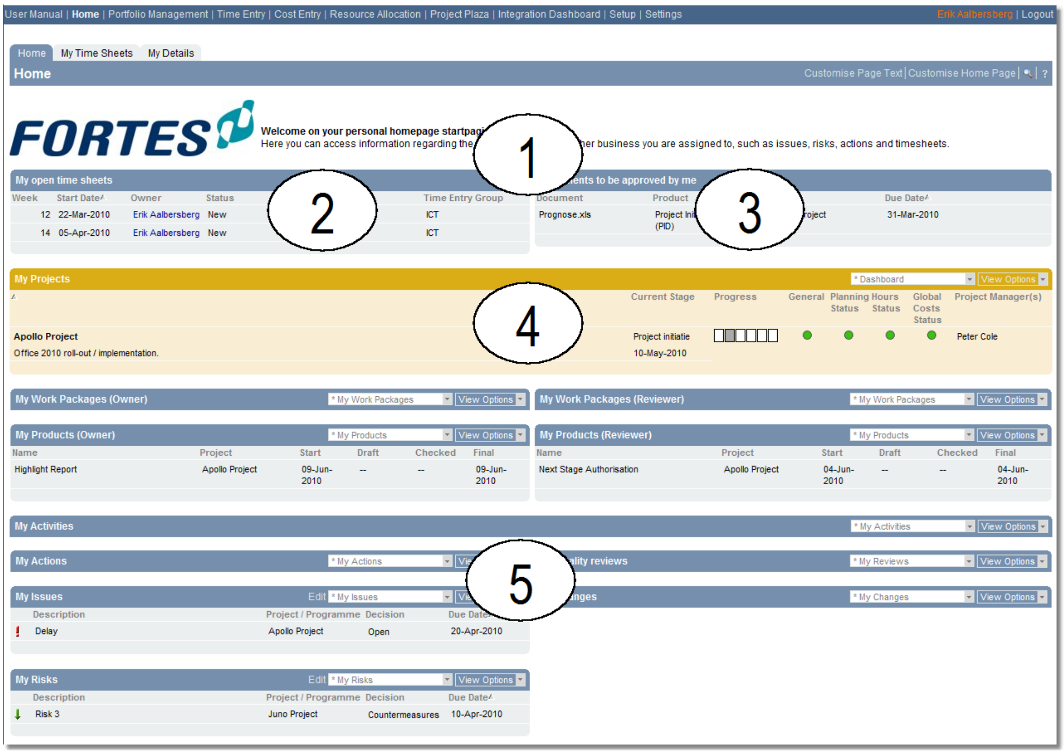
2. The log on window is shown.

3. Fill in your user name and password and click **OK**. The Principal Toolbox will open with your homepage.

2 Basics Principal Toolbox

2.1 Home page

On the home page you are able to see all programmes and projects you have a role/part in, as well as products, log items (including issues, risks, etc.) that have been assigned to you. After logging on to the Principal Toolbox you will be directed to your home page.



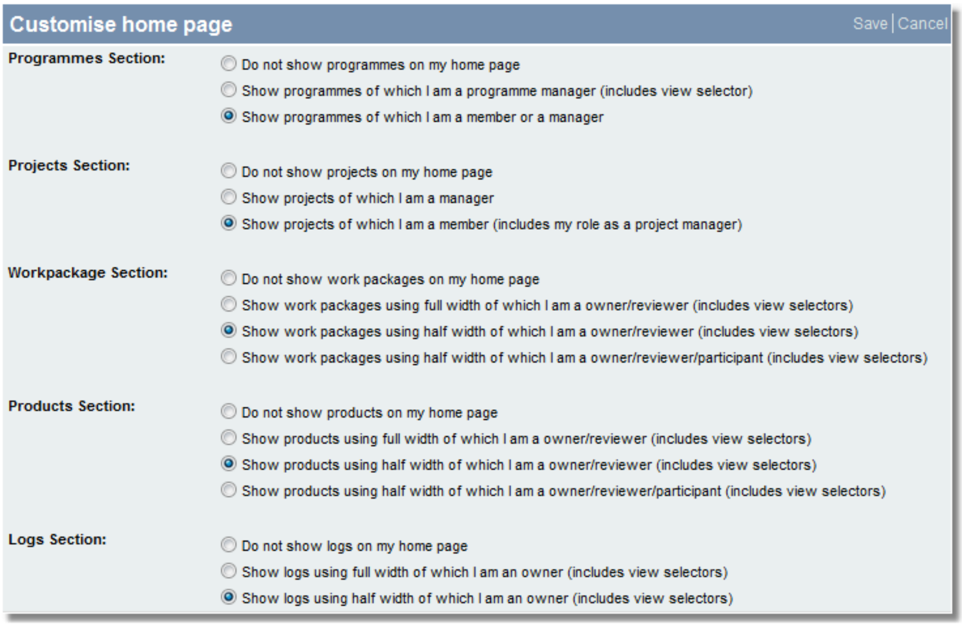
Home page

1. Area for general information.
2. Time sheets to be filled in and/or approved (add-on Timesheets)
3. Products/documents to be approved (add-on Advanced Customisation and Workflow)
4. All programmes and projects you have a role in.
5. All products, issues, risks, quality reviews, actions and changes assigned to you.

Configuring your home page

To configure the layout of your personal home page, click the button **Customise Home Page**. The opened window gives you the possibility to select:

- Which programmes should be displayed.
- Which projects should be displayed.
- How to display the products.
- How to display the log items.



Editing Home page settings

Tabs shown on your home page

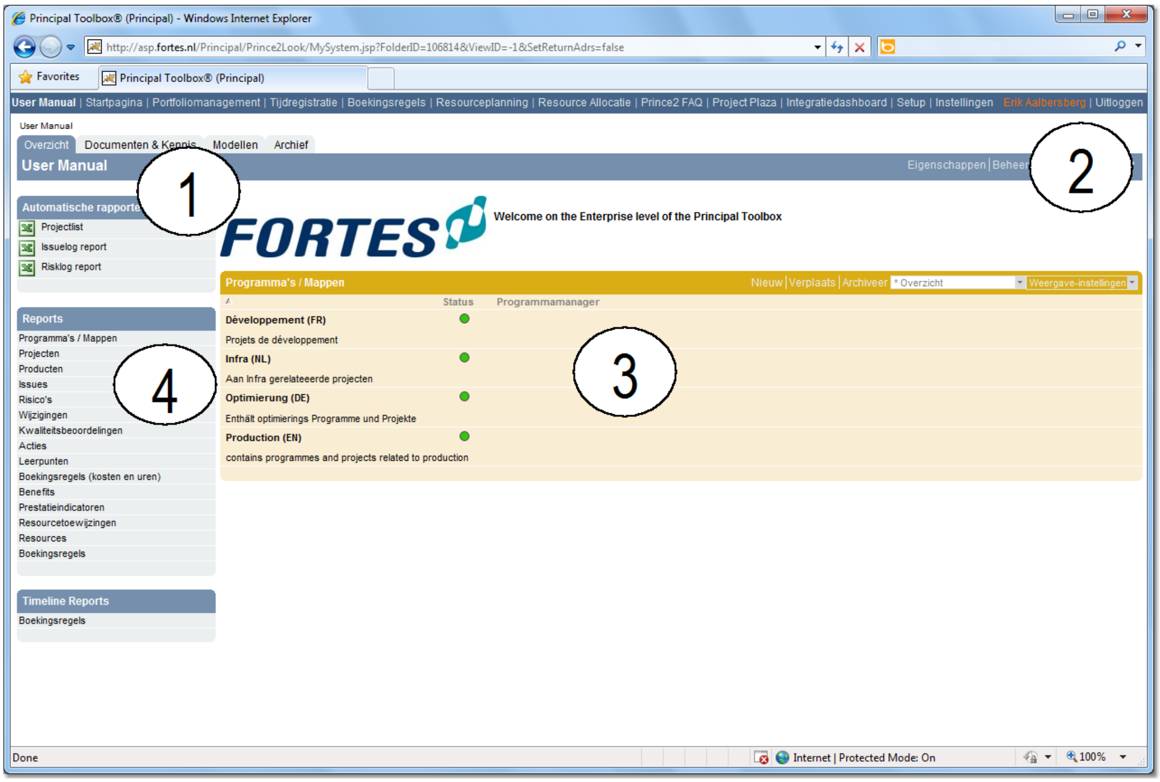
Your home page displays several tabs. Depending on your organisation's license some tabs might not be available. Here you can see:

- **My Time Sheets** shows all your time sheets when time registration is turned on.
- **My Resource Planning** shows all the projects where you're assigned.
- **My Details** where you can define some personal details.

2.2 Enterprise dashboard

The Enterprise dashboard is the highest level in the programme and project tree. Note that '***Enterprise'*** can be replaced by the name of your organisation. The Enterprise dashboard is accessible through the link in the blue header in the upper left corner of the window.

On the Enterprise dashboard you are able to reach all programmes within the organisation and you are able to get information regarding the progress of programmes as judged by the programme manager.



Enterprise dashboard

1. Tab pages
   The tab pages are standardized on the enterprise dashboard. The name of the tab page indicates the content of the page.

- Documents & Knowledge	:	A folder structure can be created here where files of any format can be stored and shared.
- Models	:	An overview of the project models on the enterprise level.
- Archive	:	Archived work areas / programmes / project lists and project models on the enterprise level.

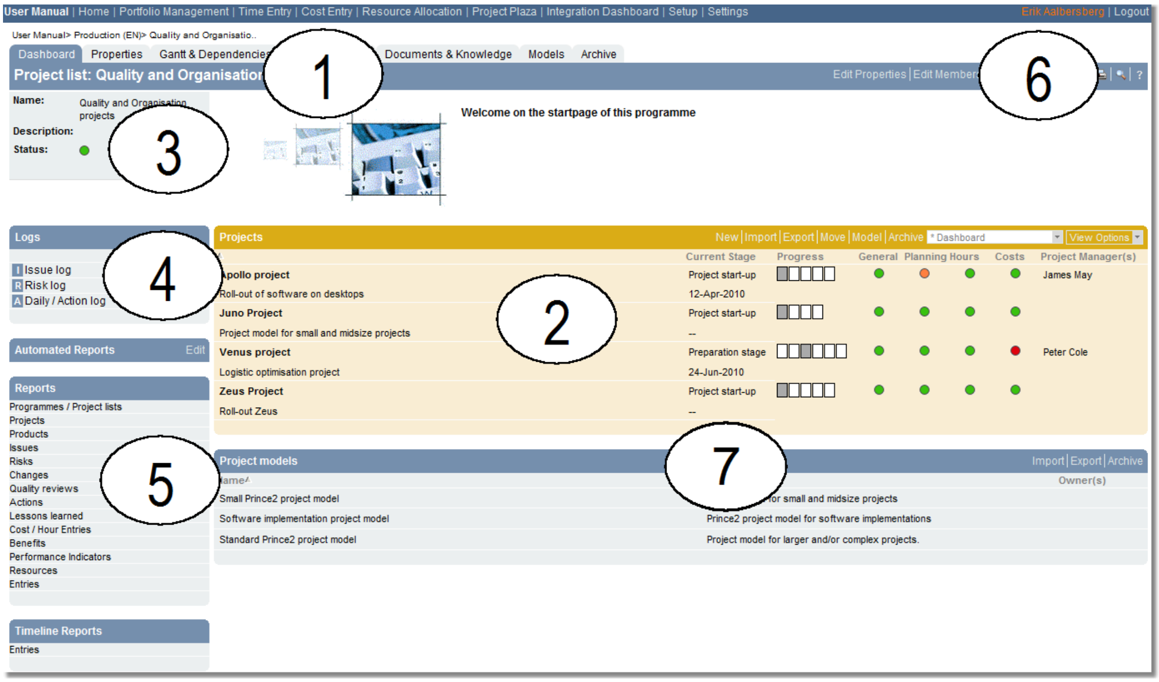
2. Functions at enterprise level
   With these buttons you can edit user roles on the Enterprise dashboard (‘**Edit members**’), edit the text and the image on the dashboard (‘**Edit**’), search the entire database, print the current page and access the help function.

3. Programme listing
   A list of all work areas / programmes and project lists on this level. Shown behind each programme name is a RAG indicator which indicates the status of the programme and the manager’s name.

4. Reports
   This area is shown if you have either a manager role or a reader role on this level. Reports give you access to views (tables) concerning all programmes, projects, products etc. within all project within the database.

2.3 Programme dashboard

The programme dashboard provides you with an overview of all sub-programmes and projects within the respective programme.



Programme dashboard

1. Tabs
The tabs are standard for each programme. The name of the tab indicates the content of the page. Depending on your organisation's license some tabs might not be available.

- Reports (projects)	:	Creation of reports/views about projects in a programme.
- Gantt chart	:	Graphical representation of all projects within the programme.
- Documents & Knowledge	:	Archive of important documents and/or useful best-practices.
- Models	:	An overview of the project models within the programme.
- Archive	:	Archived projects and project models within the programme.

2. List of projects (and programmes when applicable)
Gives an overview of the projects within this programme. A number of figures are presented that enable you to get an overview of the project status. The traffic lights used for the planning, hours and costs are defined by the tolerances 61 set by the programme manager.

3. Programme information
Some information regarding the specific programme (name, objective and status).

4. Logs
On programme level the following logs are available for use; issue, risk and daily/action log. A counter is displayed for each log indicating the number of items there are for each log and if there are new items. The log is selected by clicking the name of the log.

5. Report
Creation of reports/views about all projects and products within this programme.

6. Functions at programme level
Here you can make the 'Programme dashboard' available to users 16 ('**Edit members**'), change the text and the logo of the dashboard ('**Edit**'), use the search function, print the current page and consult the help function. The programme manager can also setup the tolerances 61 for the planning, hours and costs of all projects with this programme by using the '**Edit Tolerances**' button.

7. List of available project models
Gives an overview of the project models available within this programme.

2.4 Permissions and roles

Authorisation model
The Principal Toolbox allows for two types of users:
1. Administrators, who get access to everything everywhere
2. Users, who get access to entities and areas within the Principal Toolbox by assigning them roles

The roles that are assigned to a user determine what access the user has. Access can be restricted to various actions, like getting read-only access or allowing full access including removing items. A user can be assigned multiple roles at the same time. Below follows an overview of the various roles and the access rights associated with them.

Roles on enterprise, work areas, programmes, and project lists

Role	Rights
Enterprise Manager *(enterprise = highest level in the programme hierarchy)*	• Create and archive programmes on the enterprise dashboard • Assign *programme manager(s)* to a new programme • Assign *programme reader(s)* to a new programme • Manage roles at the enterprise level • Access information of all programmes and projects • Modify picture and text on enterprise dashboard
Enterprise Support	• Identical access rights as the Enterprise Manager
Enterprise Reader	• Access information of all programmes and projects
• Work area / programme / project list Manager • Work area / programme / project list Support	• Create, move and archive projects and project models on assigned level • Create, move and archive sub-programmes • Remove and restore archived projects, project models on assigned level • Assign project manager to a new project • Manage roles (managers and readers) of assigned level • Create, edit and remove issues, documents, risk's etc. within assigned level • Read all information within own and underlying levels • Set tolerances for the projects within assigned programme / project list • Modify layout of programme / project list dashboard
Work area / programme / project list Reader	• Read all information within own and underlying levels

Roles on portfolios

Role	Rights
Portfolio Management Manager	• Create and archive portfolios • Assign managers and readers to individual portfolios • Manage roles at all levels within the portfolios • Access to all portfolios and their data • Create and archive portfolio items within portfolios • Administer portfolio models • Remove and restore archived portfolio items • Assign a project manager when starting a project from a portfolio item • Changing the portfolio dashboard layout
Portfolio Management Reader	• Read access to all data within the assigned level

Role	Rights
Portfolio Management Members	• Can be assigned to individual portfolios as readers or managers Note: before being granted access to portfolios, users first have to be a member of Portfolio Management

Roles within projects

Role	Rights
Project Manager and Project Support	• Manage all information within own project • Edit project plan, planning, logs, etc. • Edit project team • Set the general status of own project • Modify lay-out project dashboard
Project Board members (Executive, Senior User, Senior Supplier)	• Read all information within a project • Add issues to the issue log
Team member	• Read all information within a project, except project costs information. • Add issues to the issue log

Roles on products

Role	Rights
Owner	• Add deliverables (documents) to a product • Add new log items (issues, risks, changes, actions, quality reviews) related to the product. • Editing all product specific and custom fields
Reviewer	• Add deliverables (documents) to a product • Add new log items (issues, risks, changes, actions, quality reviews) related to the product. • Editing all product specific and custom fields
Participant	• Add new issues related to the product.

Roles on logs (issues, risks, changes, actions, quality reviews)

Role	Rights
Owner	• Change all information in a log item • Assign the log item to another project team member
Creator	• Change all information in a log item • Assign the log item to another project team member
Project Manager and Project Support	• Change all information in a log item • Assign the log item to another project team member

Roles within Resource Allocation

Role	Rights
Resource Allocation Manager	Has the following rights on all Resource Pools: • Assign users to resource pools

Role	Rights
	• Remove users from resource pools • Changing properties of resource pools • Managing the Non-project Activity Sets • Defining resource availability • Allocating project and non-project work
Resource Allocation Reader	Has the following rights on all Resource Pools: • Access to all resource pools • Reader access to all allocation requests, time allocations, and availability data
Resource Allocation Members	• Can be assigned as managers or readers to one or more resource pools Note: before assigning users as managers or readers to a resource pool, they first have to be listed as a Resource Allocation Member.
Resource Pool Manager	• Assigning and removing users from the resource pool • Changing properties of the resource pool • Assigning and removing Non-project Activity Sets from the resource pool • Defining resource availability • Allocating hours against projects and non-project activities
Resource Pool Reader	• Read access to the resource pool • This includes read access to all allocation requests, time allocations and availability data on the applicable resource pool

Roles within Time Entry

Role	Rights
Time Entry Coordinators	Has the following rights within all Time Registration groups: • Assigning and removing users from the Time Registration groups • Changing properties of Time Registration groups • Managing Non-project Activity Sets • Creating and changing Time Registration configurations • Reading and modifying of the time sheets of all users
Time Entry Readers	Has the following rights within all Time Registration groups: • Access to all Time Registration groups • Read-only access to the time sheets of all users
Time Entry Members	• Can be assigned access to one or more of the Time Registration groups Note: before assigning users as managers or readers to a Time Registration group, they first have to be listed as a Time Entry member
Group Manager and Group Support	• Assigning and removing users from the applicable Time Registration group • Modifying properties of the Time Registration group • Managing Non-project Activities associated with the Time Registration group

Role	Rights
	• Modifying time sheets of all members of the Time Registration group
Group Reader	• Read access to the Timer Registration group • This includes read access to the time sheets of all the members of the Time Registration group

2.5 Entering and changing data

To enter and change data, you will always have to click the **Edit** button. If you have the user rights to edit data and the page contains editable fields, you will always find this button on the page you are at.

When creating new log items, like issues, risks etcetera, you will directly enter the *editing mode*, so you won't have to click edit.

2.6 The use of colours within projects

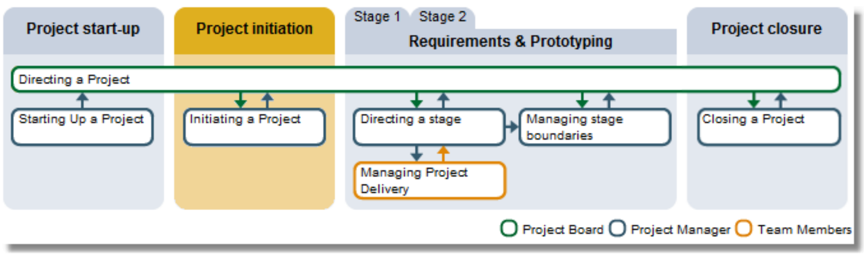
On the project dashboard, colours are used to indicate the active stage, types of products and to draw attention to potential problems.

Stage colour
The active stage in your project is coloured yellow, the other stages are grey. It does not mean the other stages cannot be edited, it is an indication and used for filtering purposes in certain views. In the product checklist, stage names are shown in black. On the Gantt chart, stage bars are also shown in black.

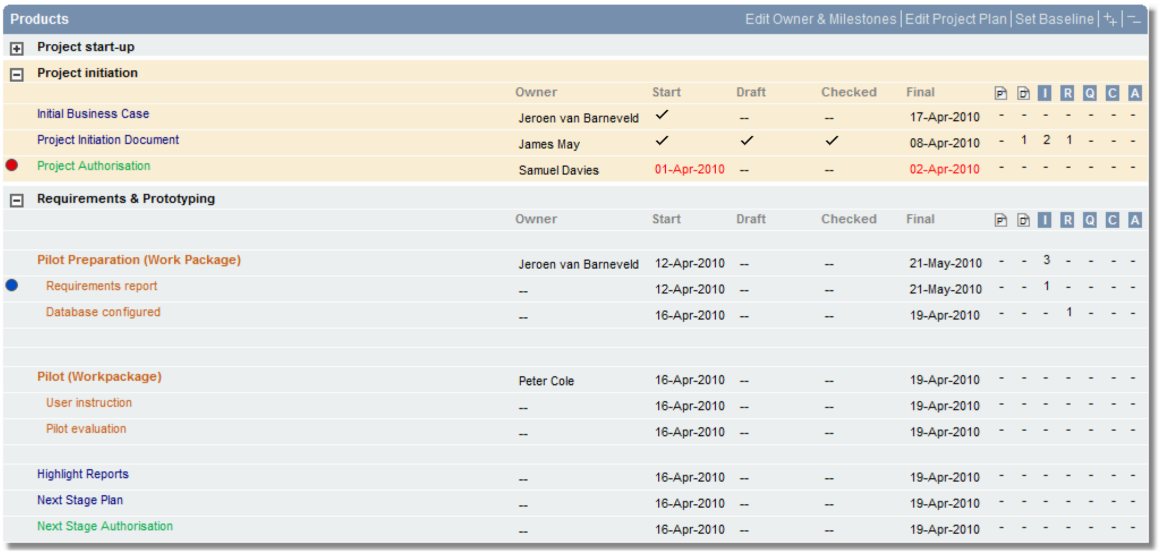
Types of products
Three types of products are identified in Principal Toolbox. Throughout the Principal Toolbox, these are shown in the following colours:

- Green: products of the project board, mostly authorisations and decision points.
- Blue: project management products, like the project mandate, PID, highlight reports etc.
- Amber: Specialist products. Specialist products are all products that are part of the product breakdown and define the final result of the project.

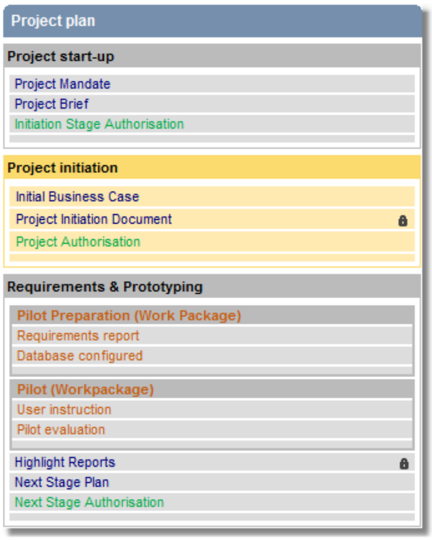
Work packages are shown in a bold amber font type. On the Gantt chart, work packages are solid amber.



Active stage in yellow



Active stage in yellow. Passed planned milestones in red. If final milestone has passed, red indicator in front of product.



Three different colours for different types of products

Indication of potential problems

On the project dashboard, dates are default depicted in black. If a date is either today or in the past, it is shown in red to draw attention.
In front of the product names indicators show potential problems:

● (red)	Final planned date has passed.
● (yellow)	An inconsistency is present with the product milestones (e.g. start milestone is planned later than the draft milestone)
● (blue)	Is shown when a conflict arises due to conflicting dependencies. If an end date of a ' Predecessor' is delayed or planned later than the start date of the 'Successor' a blue traffic light is shown to indicate a problem.

In the following section, the use of RAG indicators 21 on programme / project list dashboards is explained.

2.7 RAG indicators (traffic lights)

On dashboards of work areas, programmes and project lists, and on your home page, the status of projects is shown with RAG indicators. These indicate the actual status on a programme, project, or product.

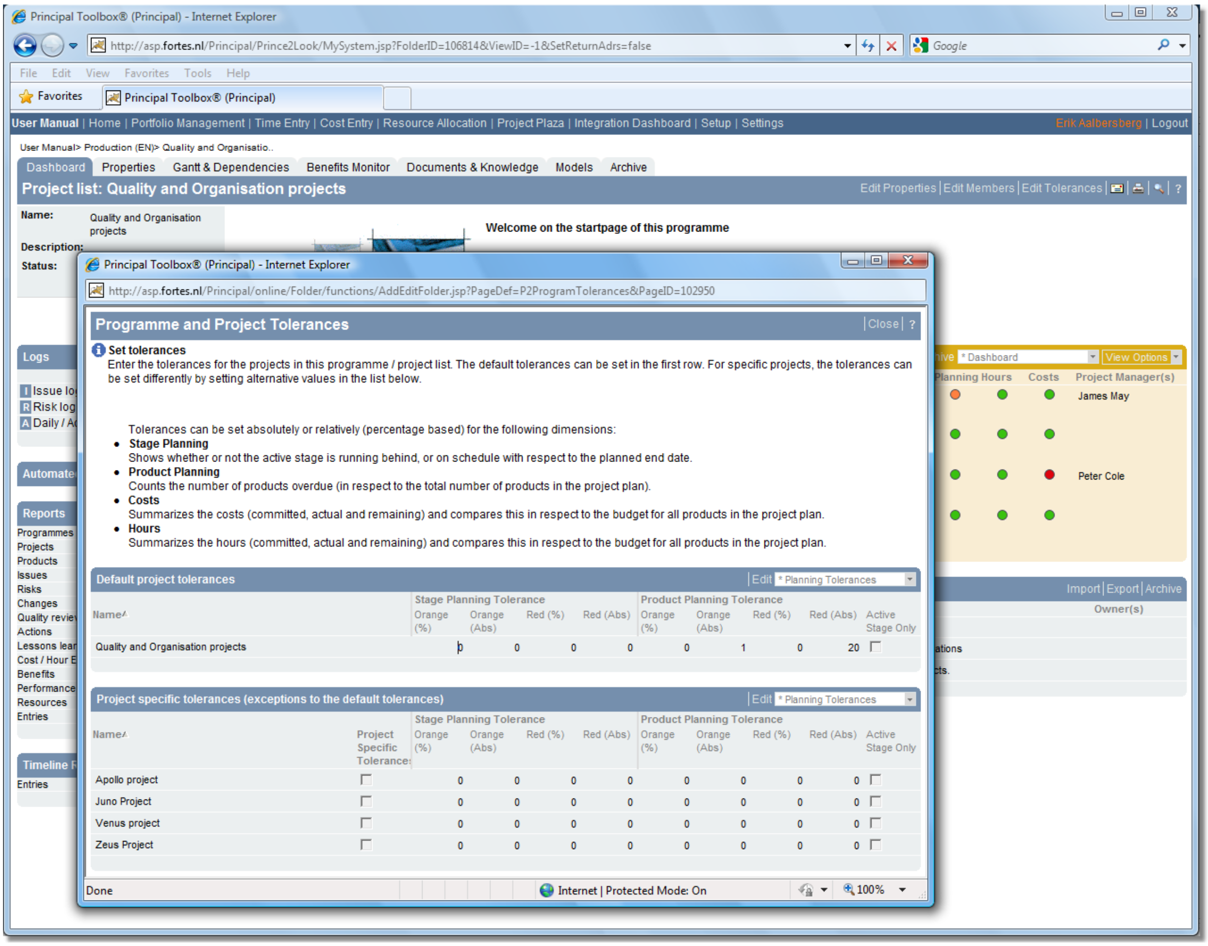
The red, amber and green indicators are used in respect to the status of the enterprise, programme, or the project.

For projects, indicators are shown for:

- General status : Set manually by the project manager to give the general opinion about project status.
- Planning status : Based on the tolerances of the programme / project list. Uses the number of products overdue.
- Cost status : Based on the tolerances of the programme / project list. Uses the deviation of expected costs from the budget.
- Hours status : Based on the tolerances of the programme / project list. Uses the deviation of expected spent hours from the budget.

● (red)	- Major deviation from the plan on costs, hours or planning. - Based on the tolerances set.
● (amber)	- Minor deviation from the plan on costs, hours or planning. - Based on the tolerances set.
● (green)	- No deviation from the plan on costs, hours or planning. - Based on the tolerances set.

The tolerances on the programme / project list can be defined by the programme manager at the dashboard of that level. These tolerances can be set in percentages or in absolute numbers.

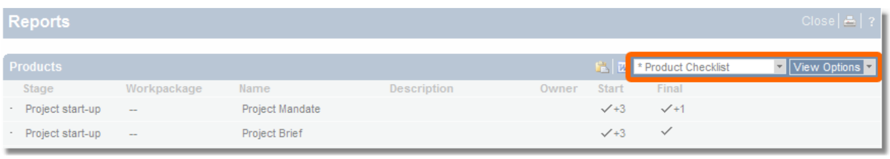


Tolerances can be set on the programme level

The use of indicators within projects is explained in the previous section 19.
For setting the tolerances in a programme or projectlist see: Setting tolerances 61

2.8 Views

Throughout Principal Toolbox, views are available to present information in a tabular form. On all organisational levels (e.g. enterprise, programmes, project lists) and within projects (on all logs and the **'Plan'** and '**Report**' tab) views are used.
The Principal Toolbox contains predefined views that are generally useful, but it is also possible to define your own views for your personal purposes. All views can be used for monitoring progress or in automated reports 128.



Use the drop-down list as shown in the picture above to select available views. With the **View options** drop-down menu you can define your own view and set options for views.

> ***Note:*** *on the Reports tab, you can choose the object you want to see information about in your project: Products, Cost/hour entries and Resource assignments are options.*
> ***Note:*** *Resource assignments are only available when the add-on Resource Allocation 100 is available within your organisation.*

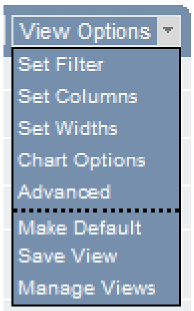
The different options in the **View options** menu are:

Set filter	:	Define a filter to make a selection of the shown products / issues / etc.
Set columns	:	Add or remove columns from the view.
Set widths	:	Set the column width, so the view fits better on screen or in a report.
Advanced	:	• Define calculations on certain columns. • Show or hide column names
Make default	:	This sets a view to the personal default.
Save view	:	Save the view for later use.
Manage views	:	Set properties for the view. You find more information at 'Manage views 24'.

Note that on some pages not all functions are available for use. The following example illustrates how to define a view on the 'Report' tab. The view will show all finished products and totals of budgeted and actual hours and costs.

1. Go to the '**Report**' tab.

2. In this example we will add a filter that shows all finished products in the project. Since we want to see a list of *products,* we choose **Products** in the left hand side of the window.



3. Click **Set filter** in the **View options** menu.
   To select finished products set the field 'Final status' to 'true'. After clicking **OK** you get a view of the selected, finished products.

4. With **Set columns** you can add and remove columns from the view.
   - To add columns to the view, select them on the left side in column 'All fields'. Click the **>>** button to add the columns.
   - To remove columns from the view, select them on the right hand side and click **<<** to remove.
   - Set the order of columns with the up and down buttons.

   You can also set the Sorting order of the view. The field 'Complete list' will show you either 50 results per page or the entire list on one page.

5. Change the column widths with the **Set widths** option. Drag the line between columns to increase or decrease the column size.

   Note*: If you would like to use your 'own' views for reporting you will have to take into account the maximum width of a page. The columns may not be wider than the portrait or landscape headers. Otherwise the table will be too wide for the page.*
   How to create your own report templates is described in the section Automated reports 128.
   Note*: the bars for portrait and landscape are of approximate size. Check the result in your reports.*

6. To show totals of numerical fields click the '**Advanced**' option, and select the columns for which you would like to know the totals. Click **OK**.

7. If you want to save the newly defined view you need to save it with **Save view**.
   To overwrite an existing view you saved before, select the name of this view at the Existing view pull down list. To create a new view enter the new name at 'New view'. Click **Save** to save the view.

8. Select personal, local or global. See manage views for more information.

9. With the '**Make default**' option a specific view can be set to the personal default view on that page

10.With the button '**Manage views**' the views available can be managed. See *Managing views.* 24

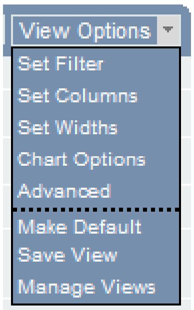
Tip: *If you define a (new) view as standard with the '**Make default**' button, the view will be shown when opening that tab.*

2.9 Manage views

Within the Principal Toolbox all users are able to define (personal) views of the information presented on the different report pages.

As already explained in the previous section, views can be defined on the different levels (e.g. enterprise, programme), on all logs and on the 'Plan' and 'Report' tab.

With the **Manage views** option, which is available on all mentioned pages, you can manage these views.



1. Go to a page where views can be defined and click **Manage views**.

2. A window will pop-up which lists all available views for this page. This window shows all available views.

Built-in views	:	Predefined views which are standard within the Principal Toolbox.
Global views	:	Global views defined by the organisation.
Local and personal views	:	Project or user specific views

The settings for the global views can be modified by the system administrator. The settings for the local and personal views can be modified by the user who has created the view and the system administrator.

List of views

3. To modify a view, click the name of the specific view. The built-in views can be hidden from the users of the Principal Toolbox (helpful for views defined only for reporting purposes). To do so click the specific view and place the tick mark  .

4. General and local and personal views have some more options that can be defined;

Name	:	To change the name of the view.
Remarks	:	Add remarks to the specific view.
Hidden	:	Makes a view not visible in the pull-down menu. The view is still available for the automated reports.
Type	:	Select availability for all users (view becomes a general view) or personal.
Location	:	Everywhere; view is available on all locations (all levels). On this location only; view is available on this specific location(e.g. this project only).

Adding a new view

5. Furthermore, you are able to import and export views. To export a particular view click the **'Export'** button and save the view to your desktop location. To import this view again click the **'Import'** button on the 'Manage views' page and select the *.ptv file. This view will be added as a personal and local view. Using the buttons as described above the type of view can be changed.


6. To remove views from the Principal Toolbox use the remove button. 

2.10 Document management

Within the Principal Toolbox you can store documents at various locations. Principal Toolbox will keep the document in the database, so they will be available to all users with access to the document in the Principal Toolbox. It is possible to overwrite older versions with newer ones. The Principal Toolbox will keep the old versions in storage. These will remain available for the manager of the particular level in the tool.

On top of that, it is possible to put an approval cycle on deliverables and/or documents with the add-on ‘Advanced Customisation & Workflow’.See Document management and approval 63 for more information about storing documents in Principal Toolbox.

2.11 Email function

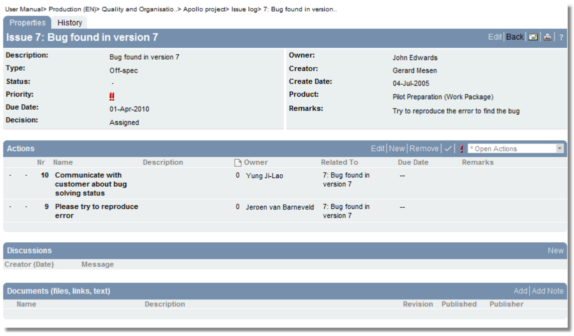
From almost any page in Principal Toolbox you can create email messages. These messages will automatically be addressed to the relevant team members, or e.g. the owner of log items etc. The message itself will contain summarised info about the page you created it from, and a hyperlink to the page in Principal Toolbox.

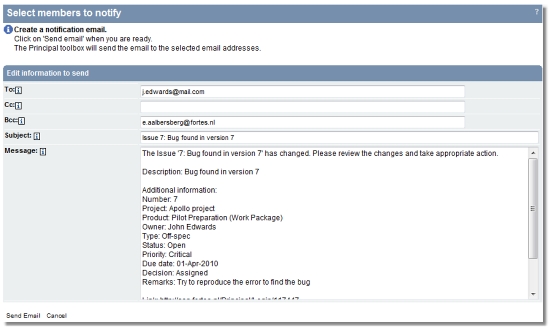
1. Click the email button, in the upper right hand corner of a specific page. In this example a new issue is created on the Apollo project and we want to inform the members of the new issue.

2. A new page will appear with a short description of the item (in this case: issue 12). You can select the project members you wish to notify. These can be inserted manually or by clicking **To**, **CC** or **BCC**.

3. Check the default contents of the message. You can make changes to it as you wish. Be careful to let the hyperlink intact, since this is very helpful to the recipient(s).

4. When finished, click **Send email** and the mail is sent to the recipients.



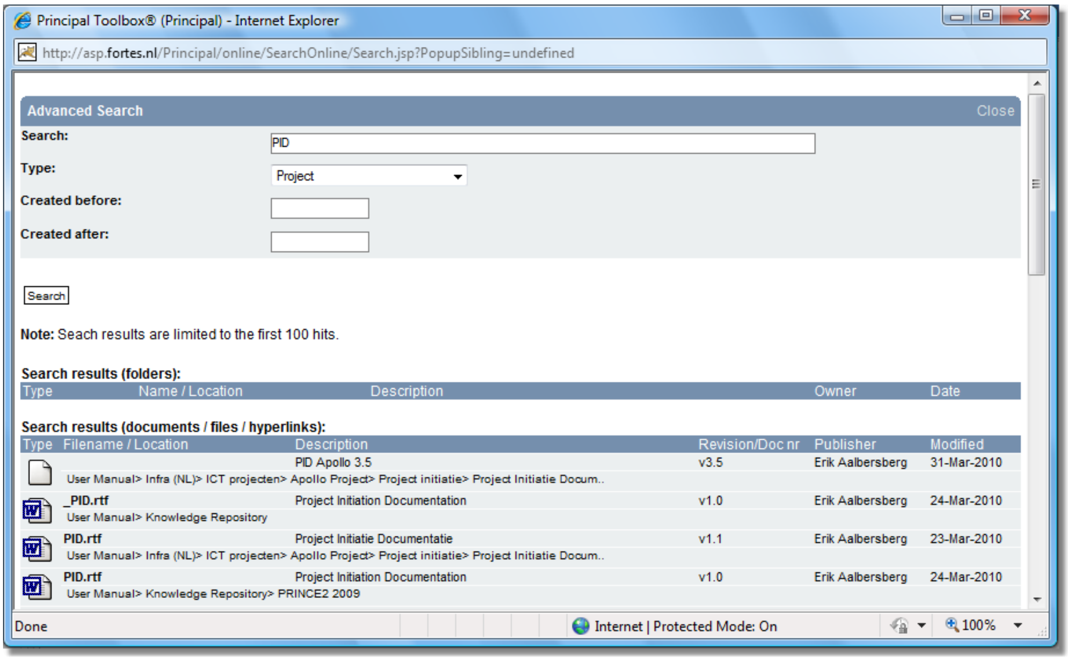


Note: *Since the email is sent by Principal Toolbox itself, the message will not be stored by your normal email software. For this reason, you get a 'BCC' of the email message.*

2.12 Search function

The search function allows you to perform keyword searches. You can also use the creation period to specify the period when the item was created.

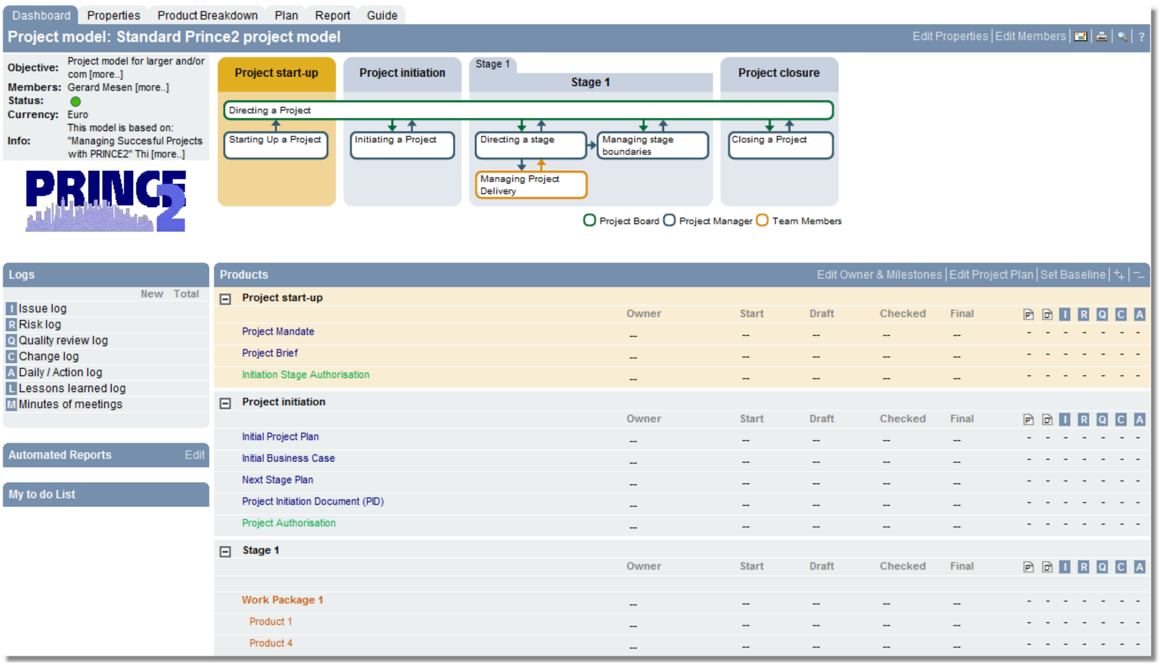
The search function can be found on all dashboards and on the home page.



Search page

2.13 Project models

In Principal Toolbox, all projects that have been created are based on a project model. A project model is an extensive template for projects. It contains products, document templates associated with these products, lessons learned, and automated reports. This way, it is possible to have standardised projects throughout the organisation, and project managers always have the right document and report templates available. Right from the start of the project, automated reports (if configured correctly) are available for reporting purposes. Below, an example of the dashboard of a project model is shown.



Part of the dashboard of the PRINCE2 project model, which is identical to a project dashboard.

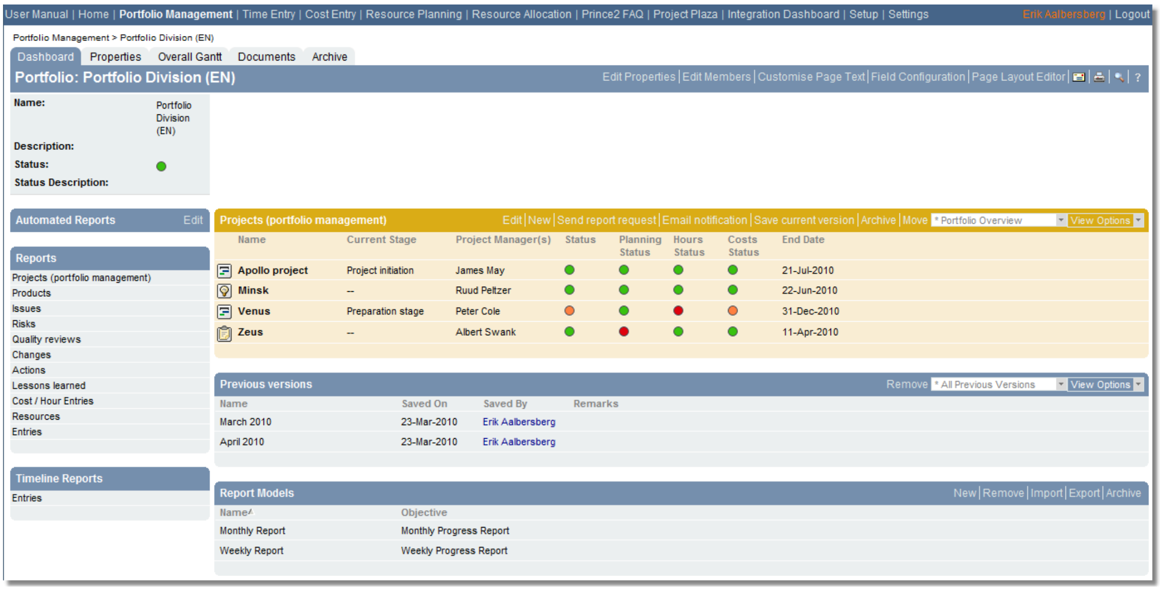
It is possible to have multiple project models within your organisation. So you can have a default PRINCE2 project model for general use and more specialised project models with specialised content. For instance, a project model for sales or for software implementation. For these purposes, you are able to build a product breakdown (see the section about product breakdown 34) that matches most situations for these specialised projects. When starting a project based on one of the models, you are able to adapt the product breakdown to fit the specific circumstances of the project.

More information about the creation and management of project models can be found in the section Managing project models 79.

2.14 Portfolio models

When creating a portfolio, it will be based on a portfolio model. This is similar to how a project is based on a project model.

A portfolio model contains automated reports, pre-defined project sheets, reporting models and a financial model. Using portfolio models ensures that portfolios throughout the organization follow the same standards.



The portfolio dashboard

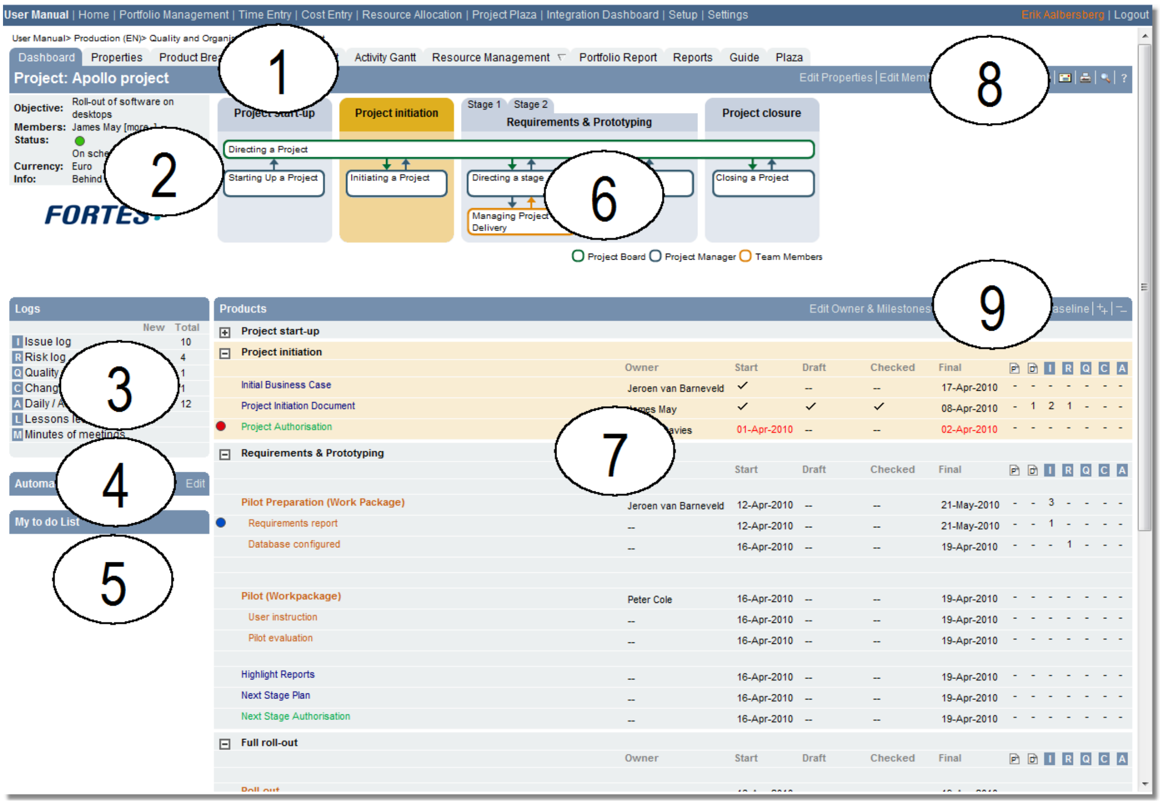
It's possible to define multiple portfolio models for different portfolios. Please refer to the section about the Portfolio Model 28 for information about setting up and configuring models.

3 Functionalities

3.1 Project management

3.1.1 Project dashboard

The project dashboard is one of the most important windows, because it enables the project manager to monitor the progress of the project.



Project dashboard

1. Tabs
   The tabs are standard for each project. Depending on your organisation's license some tabs might not be available. The name of the tab indicates the content of the page:

- Properties	:	Includes all project properties including custom fields and portfolio information.
- Product breakdown	:	A decomposition of the products realised by the project. The tab gives a graphical representation of the breakdown.
- Plan	:	To set milestones and assign resources to the different products. Overview of the project's hours and cost.
- Gantt	:	Graphical representation of the project products/activities and export functionality to MS Project.
- Product Flow (add-on)	:	When the MS Project add-on is available you can integrate with MS Project. Furthermore the Product Flow Diagram is visible.
- Activity Planning (add-on)	:	When the MS Project add-on is available you can see the latest published project plan
- Resource Planning (add-on)	:	Here you can see the capacity planning and allocated resources for your project.
- Resource Allocation (add-on)	:	When the Resource Allocation add-on is available, the Project Manager is able to request resources from resource pools. It also gives the Project Manager an overview of the requested and allocated resources.
- Documents	:	To manage project related documents the Project Manager can use the tab ' Documents'. This tab makes it easier to search for specific documents within a project. The tab gives you several options to search for documents.
- Portfolio Report (add-on)	:	When the Portfolio Management add-on is available and the Portfolio Manager has requested a report, the Portfolio Report tab will appear. The Project Manager can update the requested information on this tab and publish it to the portfolio.
- Reports	:	Report functionality about the products, cost / hour entries and resource assignments of the project.
- Guide	:	Explanation of the project in order of time (stage, products and templates)
- Plaza (add-on)	:	When the Project Plaza add-on is available the Project Manager can determine which information he would like to share on the Project Plaza. The Project Plaza is available for everyone and shows some information of the project.

2. General project information
   In this field you will find the general project information such as; objective(goal), organisation (project team) and status. This information can be changed using the '**Edit**' button).

3. Logs
   It gives an overview of the logs 67 that are used in a PRINCE2™ environment. A counter is displayed for each log indicating the number of items there are for each log and if there are new items. The log is selected by clicking the name of the log.

4. Automated reports
   A list of all automated reports 128 available within this project.

5. My to do list
   Overview of the actions that are assigned to you and their deadline. By clicking an action you obtain the additional information.

6. PRINCE2™
   Here you see the PRINCE2™ process model on which your project is based upon. The stage your project has reached is highlighted (yellow stage) and you can quickly go to the details of a stage by clicking a stage.

7. Product list
   Here you find the product planning concerned with the various stages and work packages.

8. Functions at project level
   Here you can compose the project team (**Edit members**), edit the general project information (**Edit** see point 2), use the search function, make a print of the current page, inform the project members by email and export key project information to a zip file ('**Pack project offline**'). See the section about pack project offline 59 for extra information.

9. Edit plan
   With the 'Edit plan' button you can design and modify your project plan. Furthermore you can produce a product breakdown structure here. (See section product breakdown 35).

3.1.2 Planning a project

Project planning within the Principal Toolbox can be done by following these seven steps:

1. Defining a product breakdown structure. 34
2. Defining stages and work packages. 37
3. Assign products to work packages. 42
4. Planning the milestones of the project (basic 44 or advanced option 44).
5. Assign responsibilities for products 48.
6. Assignment of budgets (hours and costs). 50
7. Defining dependencies between products. 51

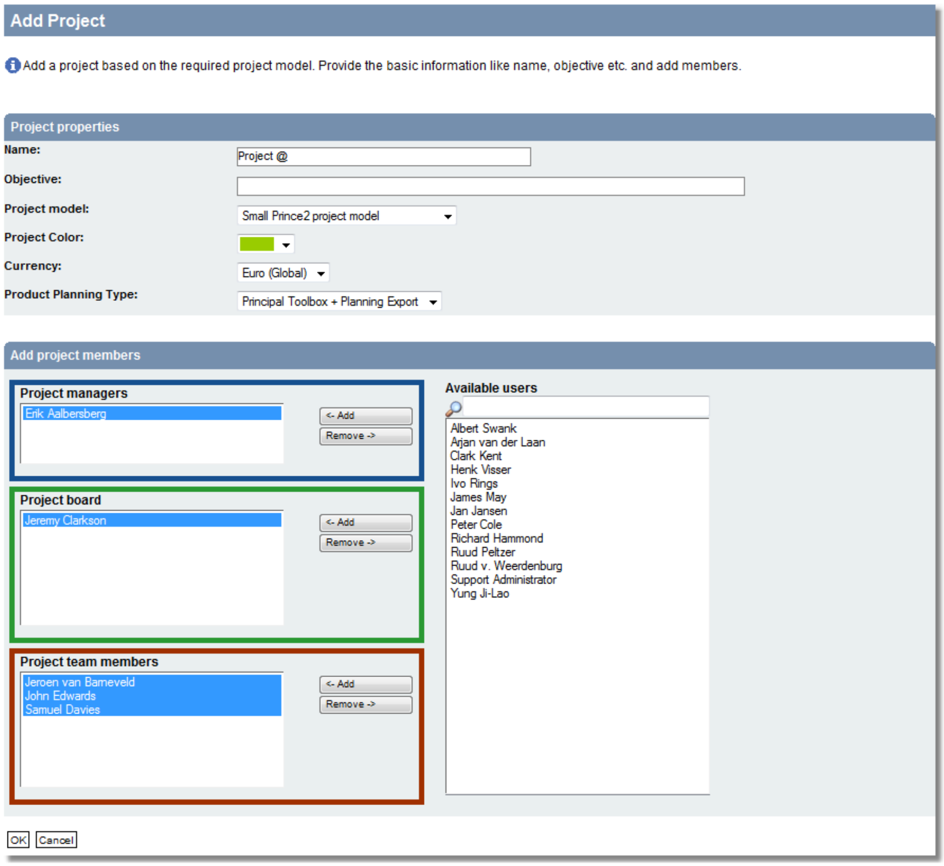
This sequence is just a suggestion. An iterative planning process is always possible; editing your project plan and other data remains possible throughout your project.

3.1.2.1 Creating a project

Projects are always created from a programme or project list dashboard. To create a new project do the following:

1. Go to the dashboard of the programme or project list.

2. Click **New** in the Project listing heading. The window 'Add Project' appears.



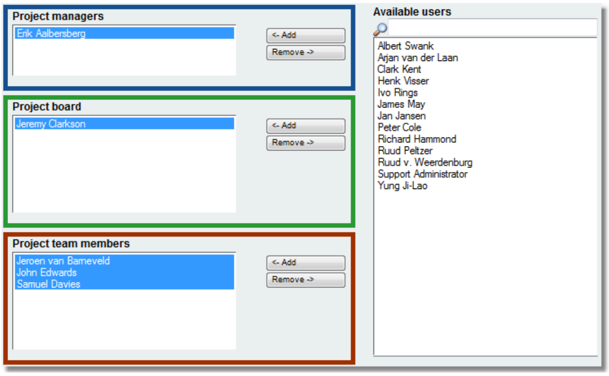
Creating a new project

3. Fill in the appropriate data at 'Project properties':

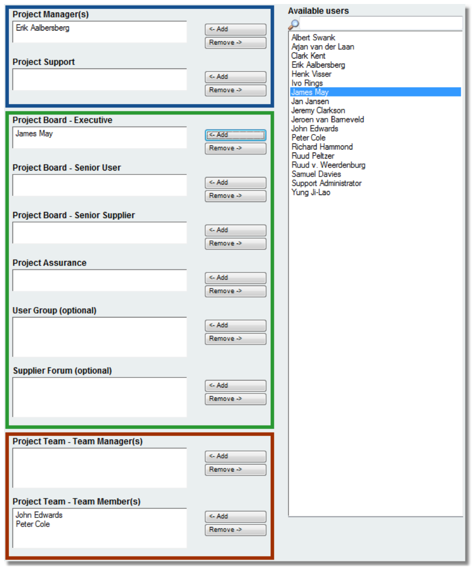
Name	:	Project name
Objective	:	Short description of the project's objective
Project model	:	Select the project model on which the project will be based
Valuta	:	The currency to be used for fields with financial content
Product planning	:	If the add-on Microsoft Project Client Integration is available, you have the choice to plan your project using MS Project. This adds the possibility (however much more complexity!) of activity based planning.

4. Scroll to the '**Add Project members**' section and add the project manager from the list of ' Available users'. If known, you can add the other members as well. With the search option a specific user can be found easily.

   Depending on your system settings, this page either shows you the roles project manager, project board and team members or it will show all PRINCE2 roles e.g. Senior supplier, project support, project assurance.



Edit members; limited role set



Edit members; all PRINCE2 roles

5. By clicking '**OK**' the project will be created.

Note: *Creating a new project can be done by the system administrator, and manager and readers of a programme / project list.*

3.1.2.2 Defining a product breakdown structure

The definition of a product breakdown structure assists in thinking through the result of the project, i. e. the final product. The final product of a project is broken down into manageable parts in the product breakdown structure. These parts are called specialist products and can be both physical products as well as documents.

Note: *Only project managers and project support can edit the project plan.*

Stages are edited in the 'Edit project plan' window. Before starting any action, go to this window from the project dashboard, product breakdown tab or plan tab, by clicking Edit Project Plan.

The Edit project plan window - introduction

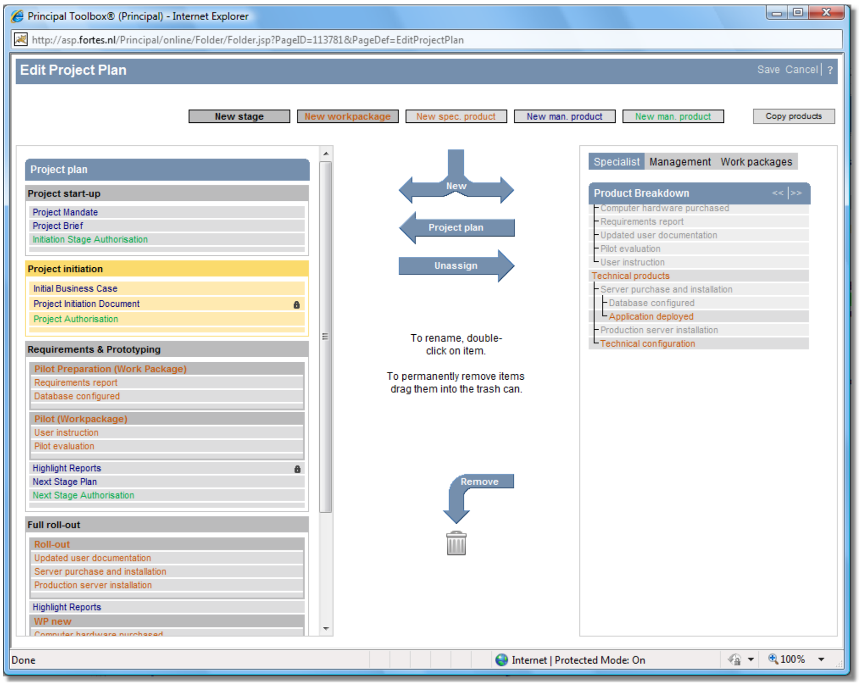
The 'Edit project plan' window is divided into two parts. On the left hand side you find the project plan, i.e. products that are present in your planning and on the project dashboard. On the right hand side you find an area where you can define new products, the product breakdown structure and work packages. In the Principal Toolbox, it is possible to have products defined and not use them in the planning. These can be kept in 'storage' on the right hand side of the window. See the remarks below for further explanation.
Three tabs are present on the right hand side of the window

Specialist: use this tab to define the product breakdown structure with amber coloured specialist products.

Management: use this tab to organize the stock of management products.

- Blue products for the project manager,
- Green products for the project board (e.g. authorizations and decision points).

Work packages: here you can define new work packages.



Edit project plan

Some remarks about the mechanisms of this window.

- All products and work packages are shown on the right hand side of the window. If they are used in the project plan, they will be shown grey in the right half of the window. If they are not used in the project plan, they are coloured (blue/amber/green) on the right hand side. You could consider the right hand side a (temporary) storage space for products not planned for delivery. This can be useful when templates or helpful texts are present you don't want to lose.
- Creating new stages / work packages / products is done by dragging them from the top of the window into either side of the window. Any of the items shown below can be dragged onto the project plan.
- 

  Important: when placing an item, check your mouse pointer. A black line must show to create a new item. If no black line shows at your mouse pointer, move your mouse around until you see it appear.

- Creating new specialist products: drag them onto the product list. The tab 'Specialist' will come to front if it wasn't. Drop the new product when you see the black line appear.
- Deleting items: only products / work packages which are not used in the project plan (i.e. not present in the left half of the window) can be deleted. Deleting items is done by dragging them onto the trash can in the upper right hand corner.
- Select multiple items at once by clicking the first, then click the next item while keeping CTRL or SHIFT pressed. CTRL lets you select multiple items one by one, SHIFT will select all in-between lying items at once.
- Deleting stages is done by dragging the stage directly onto the garbage bin. Products and work packages present in the stage are retained on the right hand side of the window.

A detailed description of how to create or change the product breakdown is given in the next section.

3.1.2.2.1 Creating the product breakdown structure

***Note:** Only project managers and project support can edit the project plan.*

If a product breakdown is already present, you can choose to either rename and re-order the products in the product breakdown, or you can delete the products from the present breakdown and start with an empty list.

- To rename items, double-click a colored product and enter the new name in the pop-up.
- If the product is grey, look it up in the project plan on the left side of the window and double-click the product there to rename.
- To delete products, they must not be present in the project plan. First drag them to the right hand side of the window, then onto the garbage bin.

- To add products, drag New spec. product to the position you want to insert the new product. Check the mouse pointer, it must show a black line.
- Change the order of products by dragging them to the right position.
- To change the hierarchy, use the arrow buttons in the right hand corner. Be sure to be on the specialist tab.

Product Breakdown

Move, delete and rename products:

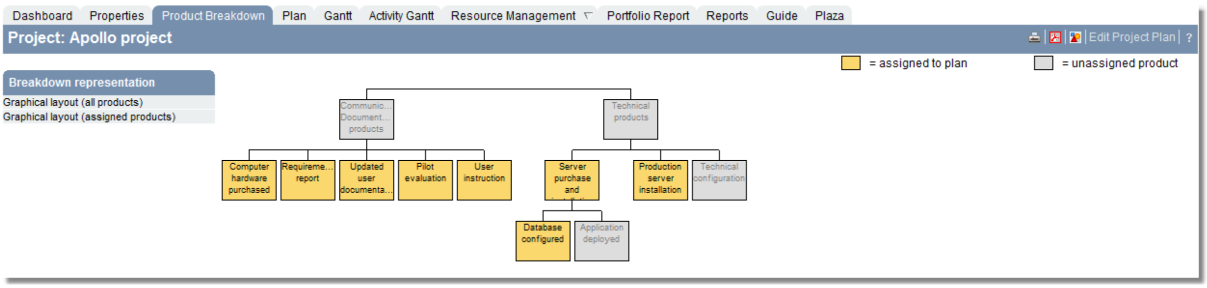
- The order of the products in the list can easily be changed by dragging the specific product to the correct location.
- To remove a product from the product breakdown, click the product and drag it to the recycle bin.
- To change the name of the product, double-click the product and change the name.

How to assign products to stages and work packages is described in the next sections.

3.1.2.2.2 Graphical view of the product breakdown

After editing the product breakdown, a graphical overview of the product breakdown is shown on the tab 'Product breakdown' in your project.

1. Go to the tab '**Product breakdown**'.
2. At the pull down menu (Presentation) you can select the view '**Graphical (All products)**'. A view similar to the view beneath will be shown.



Product Breakdown Structure

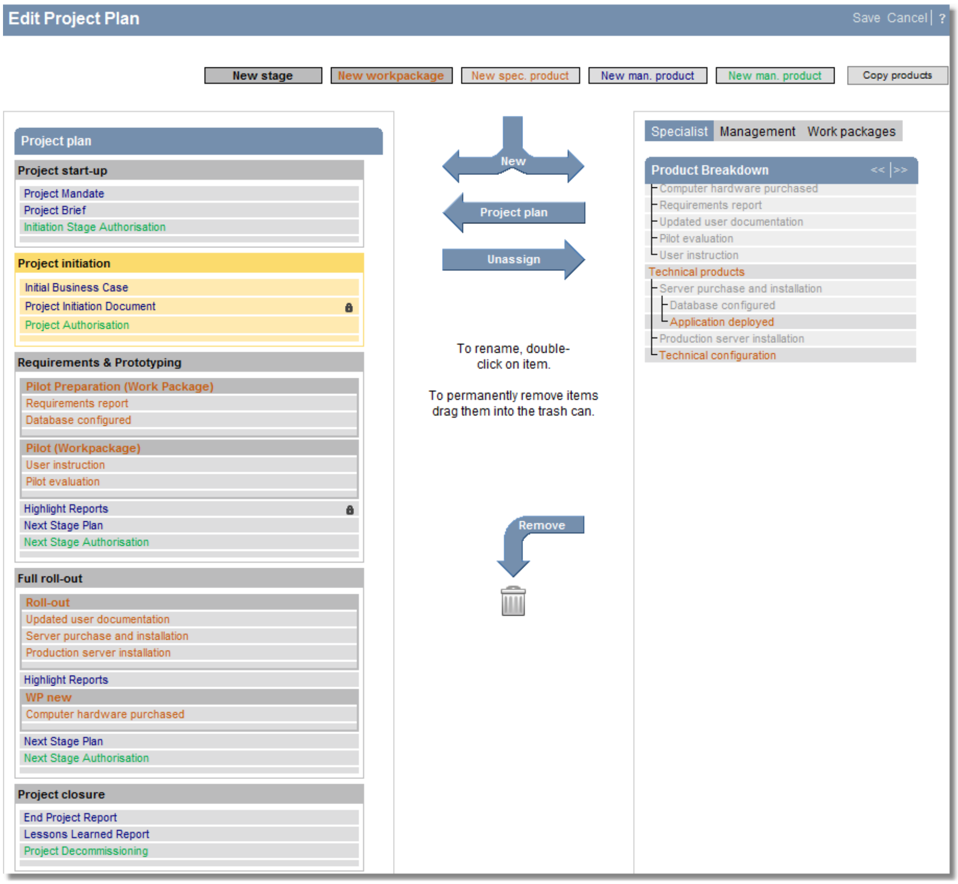
Products which are not assigned to a work package are shown in grey (*and are not part of the project plan*). Products assigned to a stage and / or work package are shown in yellow.

Assigning products to stages and work packages is described in the next two sections.

3.1.2.2.3 Editing stages

***Note:** Only project managers and project support can edit the project plan.*

Stages are edited in the 'Edit project plan' window. Before starting, go to this window from the project dashboard, product breakdown tab or plan tab, by clicking **'Edit project plan'**.



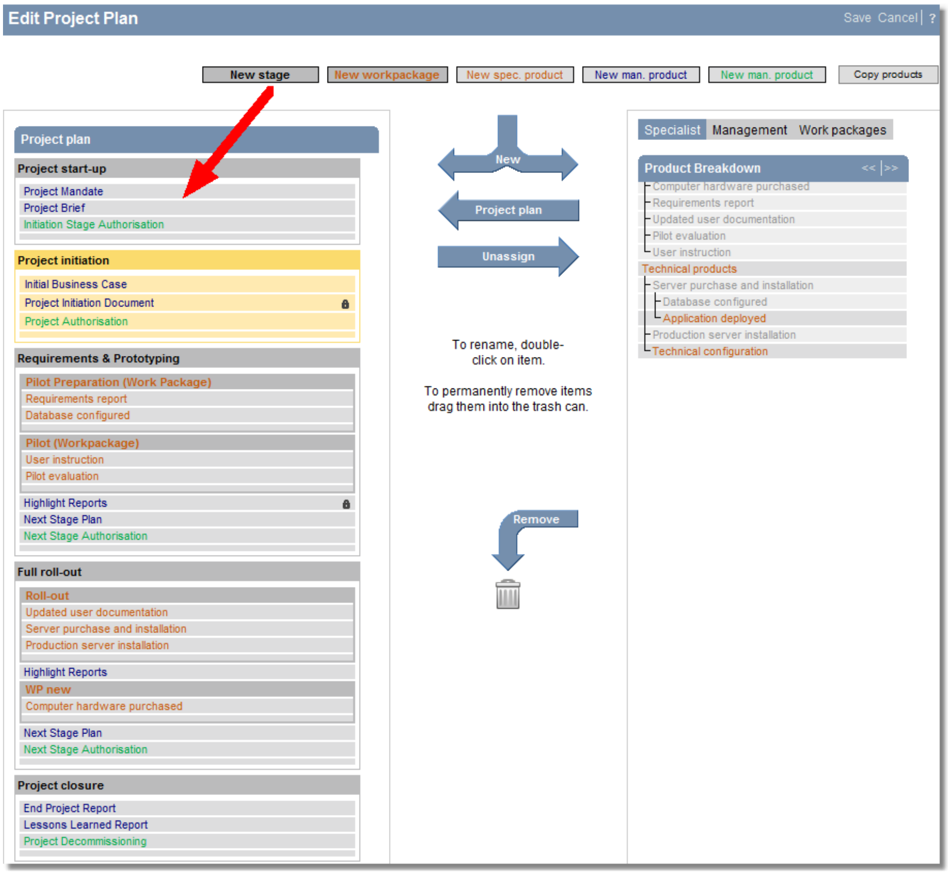
Before editing stages, first open the 'Edit project plan' window.

Renaming a stage

To rename a stage, double-click its name. Edit the name in the pop-up.

Adding a stage

To add a stage to your project plan, drag 'New stage' from the top of the window (shown below) to the right position in your project plan (the left side of the window).



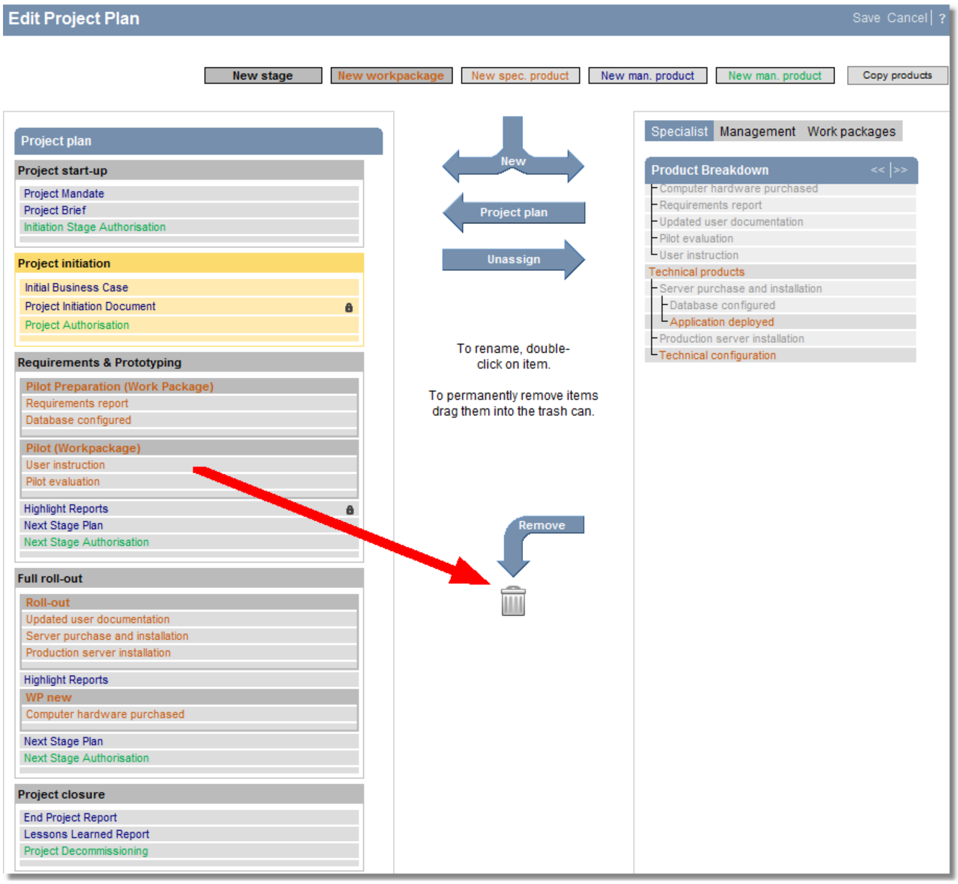
Add a stage by dragging 'new stage' into your project plan.

Moving stages

To move a stage, click its name and drag it to the right position. Check the black line indicating where the stage will be positioned.

Deleting a stage

To delete a stage, click its name and drag it right onto the garbage bin in the upper right hand corner of the window. If the stage contains products and/or work packages, these will be moved to their respective tabs on the right hand side of the window, so these will not be deleted.



Delete a stage by dragging it right onto the garbage bin.

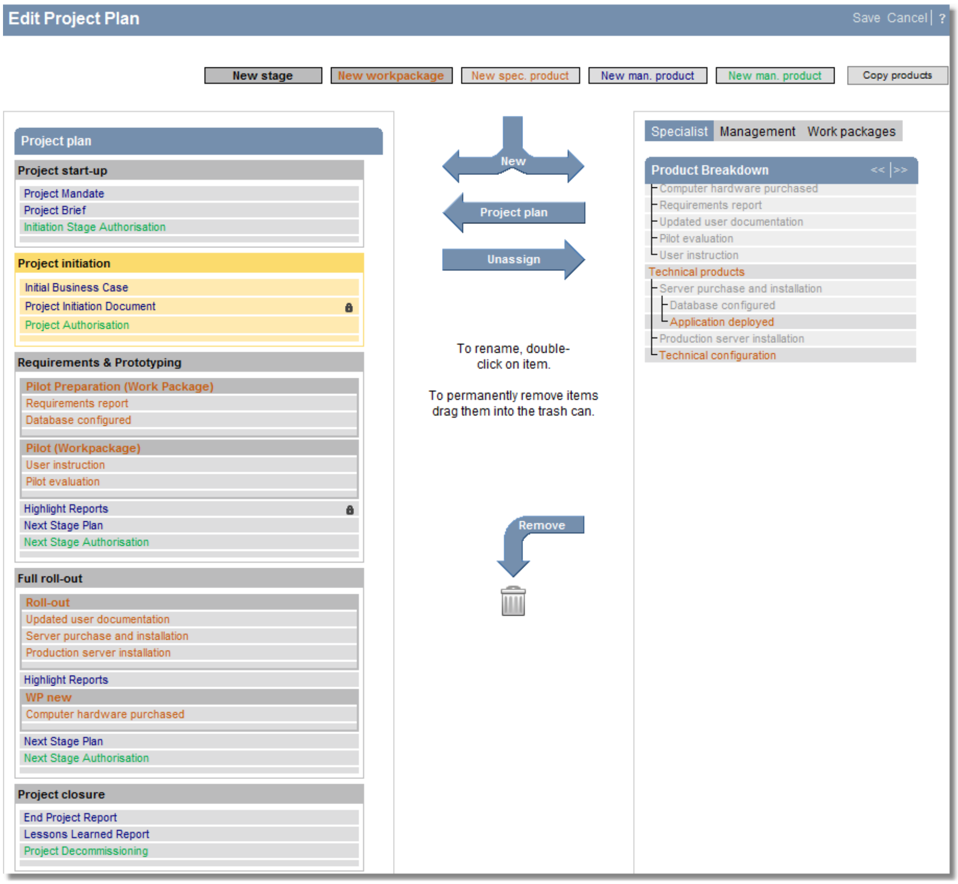
3.1.2.2.4 Editing work packages

Note: *Only project managers and project support can edit the project plan.*

Work packages are used to assign multiple products to the same team (PRINCE2), or as a means of making a further subdivision in stages. Principal Toolbox uses them to calculate summarised start and end dates, and subtotals of costs and hours.

Note: *empty work packages result in errors when the Principal Toolbox calculates progress on the project dashboard, so only use work packages with products inside (see the section* *planning products* 42*).*

Stages are edited in the 'Edit project plan' window. Before starting any action, go to this window from the project dashboard, product breakdown tab or plan tab, by clicking **'Edit project plan'**.



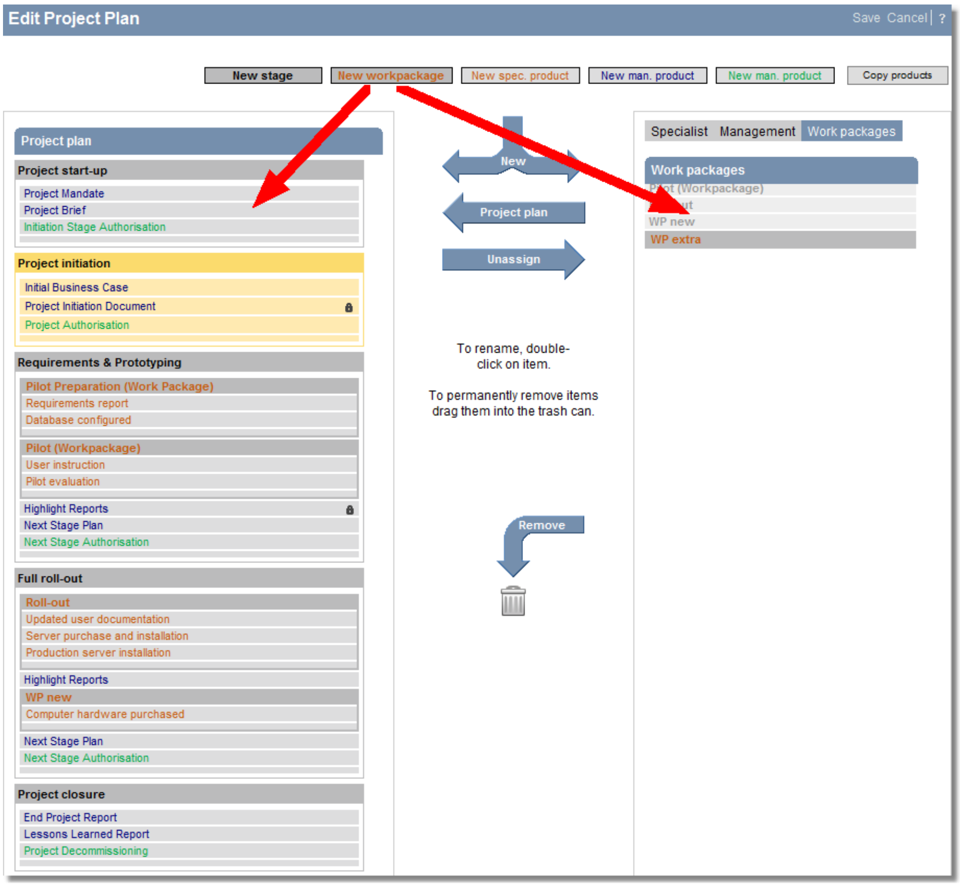
Before editing work packages, first open the 'Edit project plan' window.

Renaming a work package

To rename a work package, double-click its name. Edit the name in the pop-up.

Adding a work package

To add a work package to your project plan, drag 'New work package' from the top of the window (shown below) to the right position in your project plan (the left side of the window).
Alternatively, you can first define the work package in the right hand side of the window, and then drag it to the right position in your project plan.



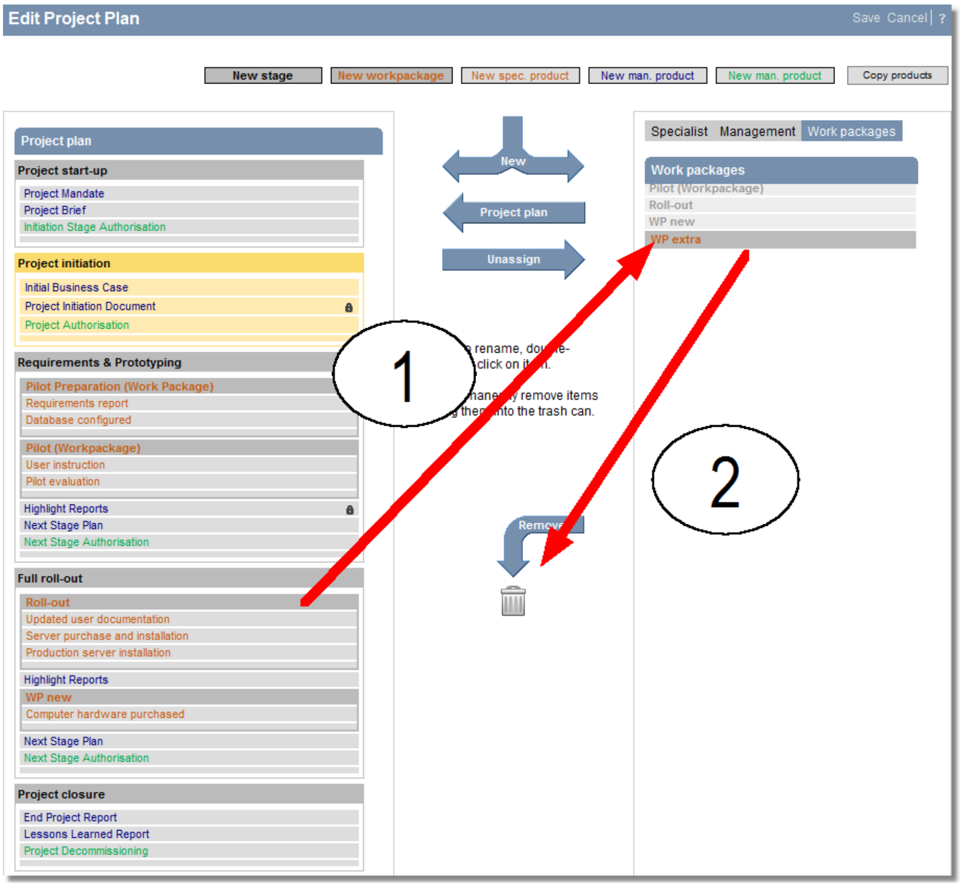
Add a work package by dragging 'new work package' into your project plan.

Moving work packages

To move a work package, click its name and drag it to the right position. Check the black line indicating where the work package will be positioned.

Deleting a work package

To delete a work package, click its name and drag it to the work packages list on the right hand half of the window. Only work packages that are not present in the project plan anymore, can be deleted by dragging them from the right hand part of the window onto the garbage bin (step 2 in the figure below).

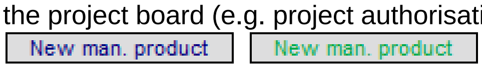


Deleting a work package: 1) drag it from the left part to the right hand part of the window.
2) Drag it from the 'work packages' tab onto the garbage bin.

3.1.2.2.5 Planning products

Stages are edited in the 'Edit project plan' window. Before starting any action, go to this window from the project dashboard, product breakdown tab or plan tab, by clicking '**Edit project plan**'.

Defining new products
You can find an explanation of creating a product breakdown 34 in the appropriate section. The definition of management products works in almost the same manner. Drag 'New man. product' onto the right hand part of the window. Use the blue management products for products of the project manager (like the project plan, highlight reports etc.). The green management products are meant for the project board (e.g. project authorisation, next stage authorisations etc.).



Adding products to the project plan
Products are always added to stages, and optionally to work packages. To plan products, simply drag them from the right hand side of the window to the correct position in the stage or work package. Click the 'specialist' tab for products that are part of the product breakdown. Management products are found on the 'management' tab.

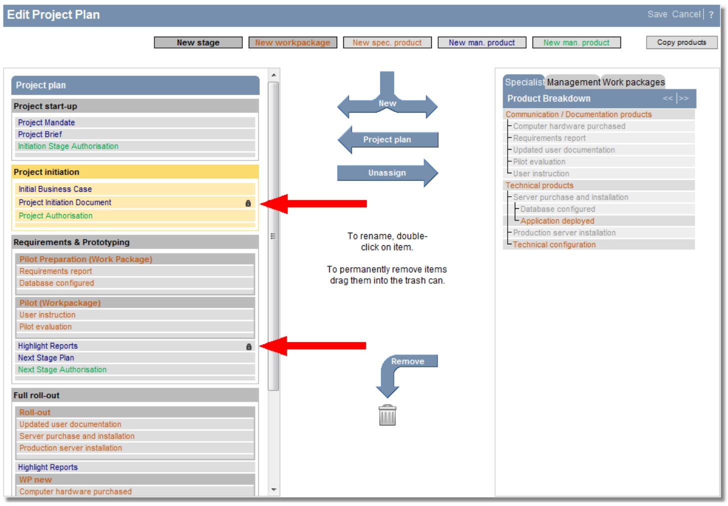
Products which have been placed in the project plan are grey in the product breakdown overview, or the management products overview.

The way to set planning dates for your project is described in the chapter planning product milestones 43.

Hint: *check the use of colours of products etc. in section 'the use of colours within projects* 19

Making a product mandatory
It is possible to make products mandatory. This means that a product is set in the project plan. A

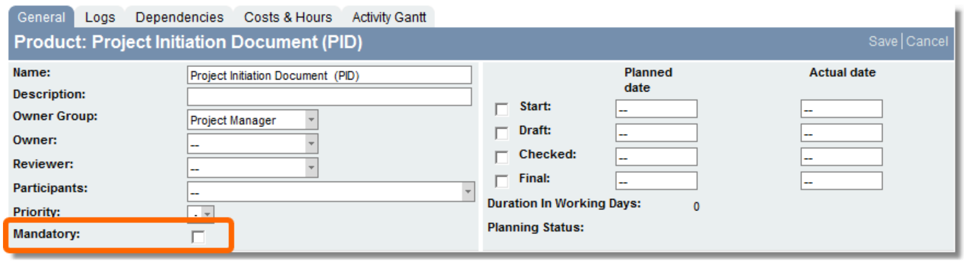
project manager is not able to change or delete the product. When a project manager wants to change the project plan the mandatory products are highlighted with a small lock. This immediately shows which products are mandatory.



Mandatory products in the project plan

The setting 'mandatory' is part of the product properties and therefore visible on the product page. A mandatory product within a project model can only be modified by the model owner and within an ongoing project by the system administrator.

To make a product mandatory, go to the product page of the product you would like to make mandatory. Click on **Edit** and check the box that says '**Mandatory**'. Then click on **Save** to save your changes.



Making a product mandatory on the product page

By using this functionality correctly it is possible to increase the uniformity of the work flow and improve the overall grip on the projects.

3.1.2.3 Planning product milestones

Each product in the project has four milestones you can use to manage product delivery.

- Start: set the date work has to start on the product
- Draft: plan the delivery of a draft version
- Checked: set the end date for quality review
- Final: the planned date for delivery of the final version of the product.

Planning the milestones within the project can be done in two ways:

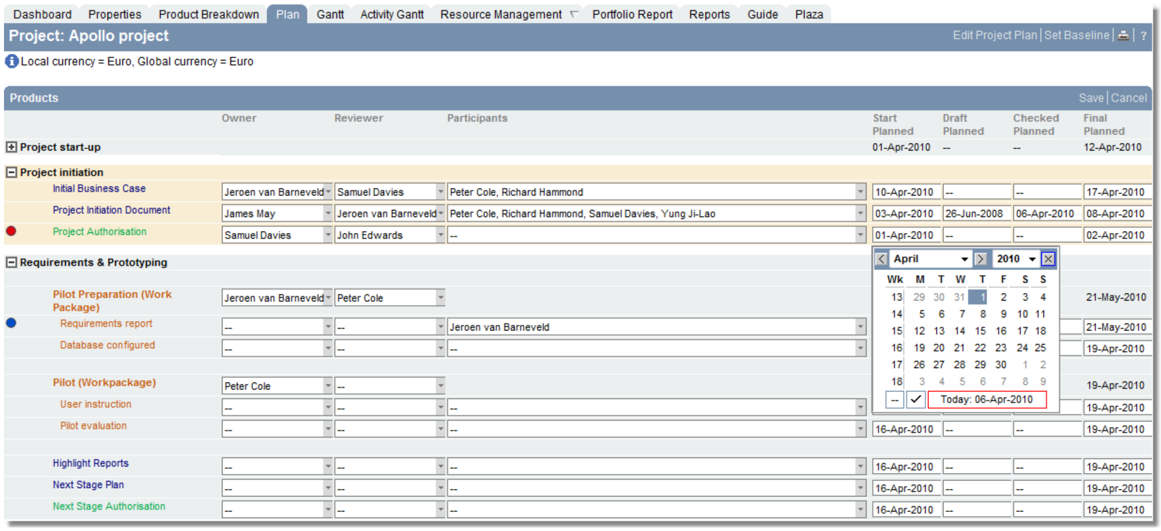
On the dashboard and plan tab 44 : Set milestones individually on the project dashboard or 'Plan' tab.

On the Gantt chart 44 : Use the Gantt chart editor with 'drag & drop' functionality.

The option with dashboard and plan tab is more or less like working like an Excel sheet, using a table to fill out dates for your project. The Gantt chart option provides a graphical planning chart, which you can edit using 'drag & drop' functionality. We will explain the two options in the next two paragraphs.

3.1.2.3.1 Using the dashboard or plan tab

On the project dashboard and the **'Plan'** tab, dates can be set by use of the keyboard and by selecting them in a calendar with your mouse.



Filling in the milestones on the 'plan' tab.

1. Go to the project dashboard or the **'Plan'** tab.
2. Fill in the milestones for each products:
   - o Start: set the date work has to start on the product
   - o Draft: plan the delivery of a draft version
   - o Checked: set the end date for quality review
   - o Final: the planned date for delivery of the final version of the product.

   The use of these milestones is optional. Principal Toolbox uses start and end dates to calculate duration of the project, stages and work packages. Therefore it is recommended to use at least these milestones on each product.

3. Dates are changed by clicking the double dashes, or by clicking an already present planned milestone. Enter the date with your keyboard, or select the date in the calendar.

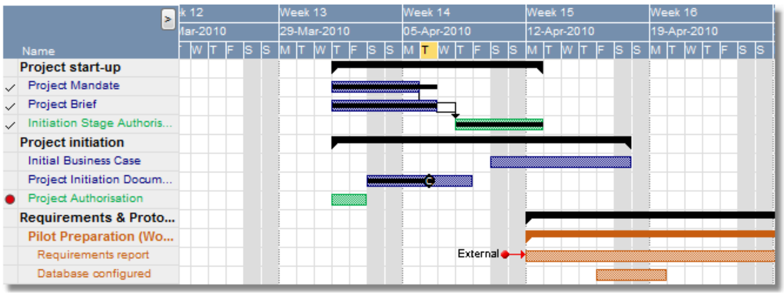
   Note: *If a milestone has finished (depicted by:'✓), you cannot change the date directly anymore. To change milestone data then, click the product name to open the product detail window. On the 'general' tab, you can delete or change the actual dates for each milestone.*

3.1.2.3.2 Using the Gantt editor

A Gantt chart shows a timeline of your product with the product milestones. Because Gantt charts are simple to understand and easy to construct, they are often used by project managers.

To use the Gantt chart in your project, follow these steps.

1. From inside your project, click the **Gantt** tab. A Gantt chart will be shown with all stages, work packages, and products listed. When you haven't entered any planned dates (milestones) yet, the start date of the project will be set to the date of today and the duration of all products will be set according to the duration in the project model.



Gantt

2. To edit the Gantt chart, click Edit Gantt in the blue page header.

> ***Note:*** *Only products can be planned directly in Principal Toolbox. Stages and work packages are summaries of the products they contain, so these cannot be changed directly.*

> ***Note:*** *To select products in the edit Gantt window, click the product name on the left of the window. To select multiple products, keep CTRL or SHIFT pressed while clicking multiple products.*

3. On the next page the planning can be entered in two ways. In the left hand half you can enter dates by clicking the cells and using the calendars. Alternatively, you can use the graphical part of the window. Here, you can change duration and dates with your mouse by dragging the time lines of products.

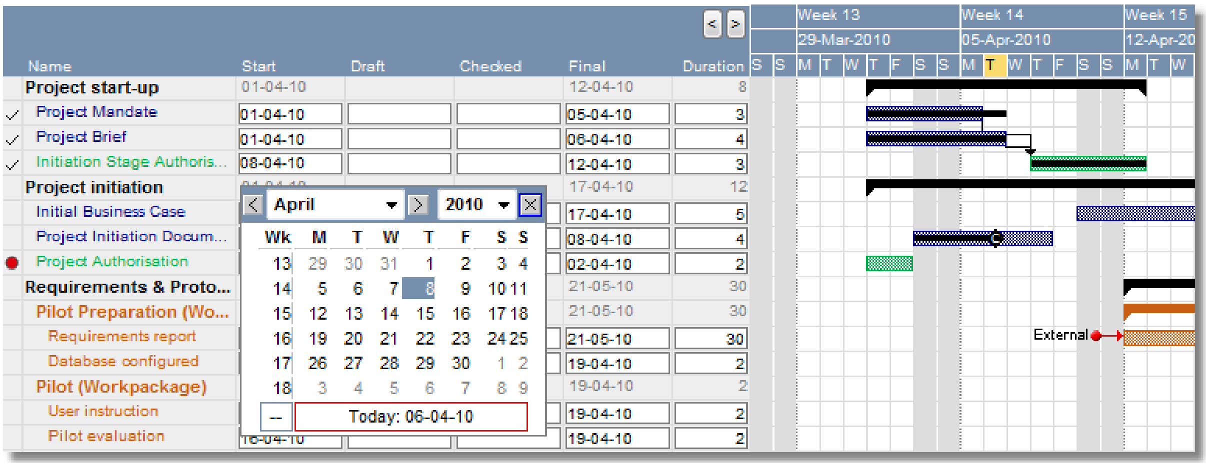
4. First of all you need to define the start date of your project. To do so click . In the dialogue, select the start date. This can also be used to move a group of products to a specific start date. See the note above for info about selecting multiple products.

5. Set the date of the first product in every stage or work package by dragging this to the planned start date or use the button shown above. All products in this specific work package or stage will be moved automatically to this date.

6. The next step is to plan the products in this specific stage or work package individually:
   a. To move the product forwards or backwards in time you need to place the cursor in the centre of the product bar, hold the left mouse button down and drag it to the correct position.
   b. To alter the duration, you need to place the cursor on one of the sides of the product time-bar and drag the side in the desired direction.

7. To define the draft and checked milestones or to set dates in a calendar, you can use the left side of the 'Edit Gantt' window. After clicking in a cell, a pop-up shows a calendar where you can choose the date.

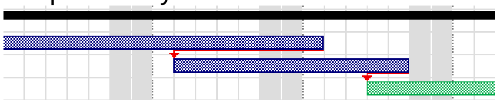
   As soon as you have set the draft or checked milestones in the table on the left, they are shown in the timeline on the right. Now you can drag them with your mouse as well.



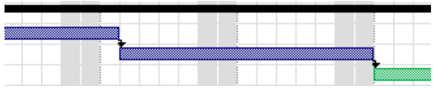
Editing the Gantt

8. To define dependencies between products, select two products and click **Add dependency**. This will create a finish-to-start dependency between the two products. To edit dependencies see the section [defining dependencies](51) 51. To delete a dependency use **Remove dependency**.
   Buttons:

9. If dependency conflicts exist in your planning you can use the 'Solve conflicts button': . Select the products you want to be recalculated and click the button.



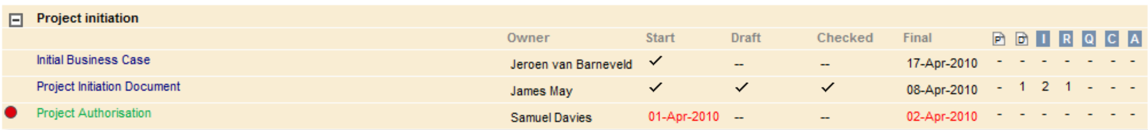
Before: dependency conflict



After: problem solved

10. When the plan is finished, click the '**Save**' button to save the changes made.

> ***Note**: inconsistencies or conflicts resulting from mutually depending products are indicated by coloured indicators. For their meaning, consult [the use of colours in projects](19) 19. For more help on dependencies, see [defining dependencies](51) 51.*



3.1.2.3.3 Baseline support

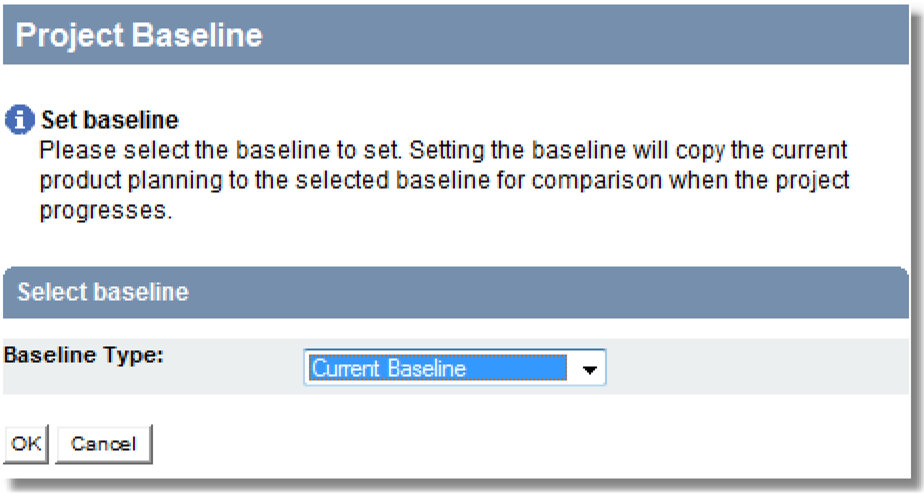
To keep track of progress and changes in the original planning is can be very useful to work with baselines. It allows you to compare the current schedule with the baseline planning.

There are two possible baselines in the Principal Toolbox. You can set a planning as *Initial Baseline* or *Current Baseline.* Setting the baseline will copy the current product planning to the selected baseline for comparison when the project progresses.

Set baseline

Save a planning as *Initial* or *Current baseline* by clicking **Set Baseline**. This button is available on the project dashboard, Plan and Gantt.

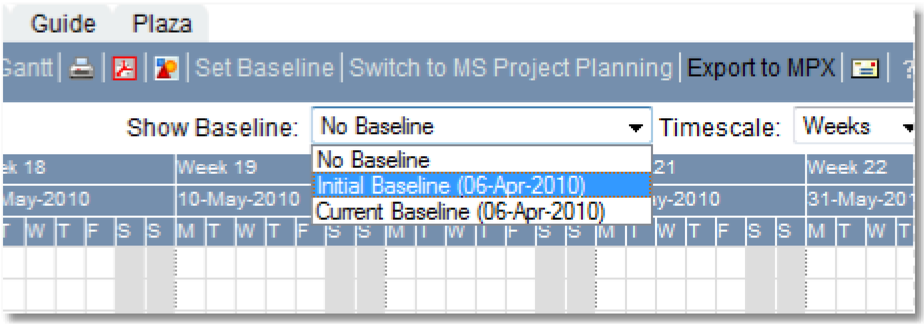
Choose the baseline type (Initial or Current baseline) to save the schedule.



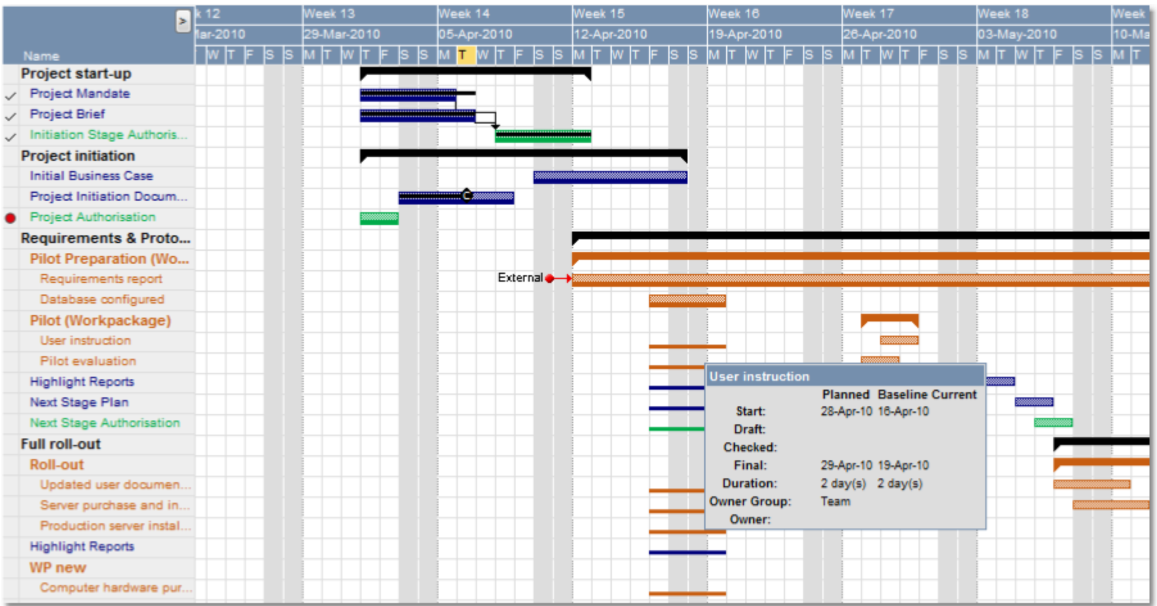
Setting a baseline

View a Baseline

In the Gantt chart a baseline planning can be shown in the current plan. You can choose to show the Initial or Current Baseline in the actual Gantt.



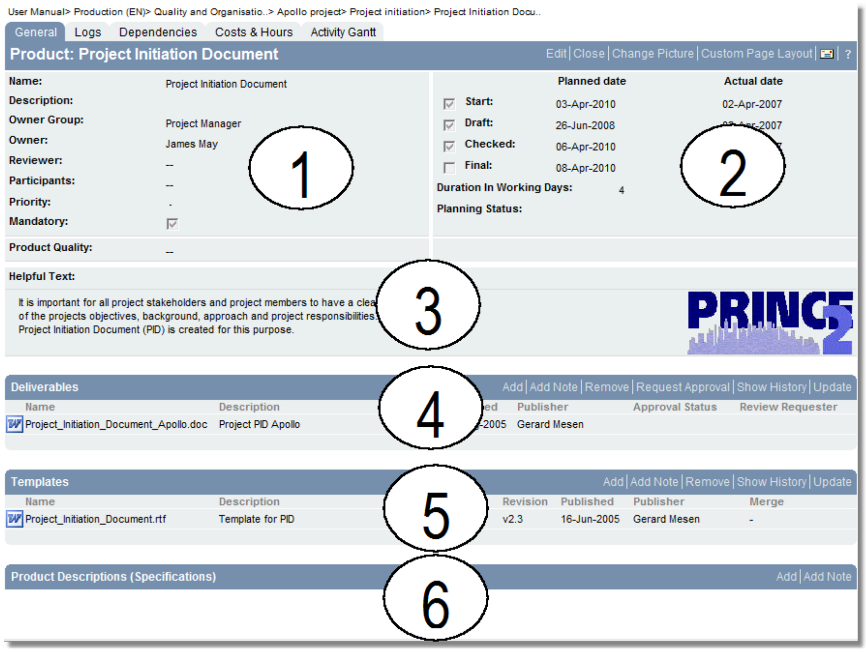
Selecting a baseline



Baselines on the Gantt

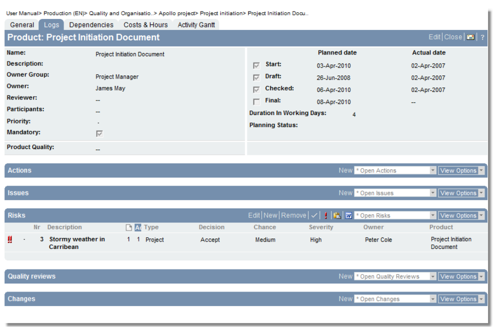
3.1.2.4 Product page

Every product which is defined has a standard product page. In order to consult the detailed information concerning this specific product you click the product name in the project dashboard.

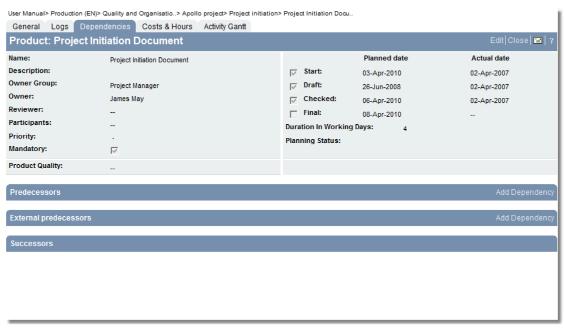


Product page

On the 'Product page' there are some extra tab pages: Logs, Dependencies and Costs & Hours (not shown). The Logs tab allows you to register items such as: issues, risks and quality 67. On the Dependencies 51 tab you can define dependencies between products to create a product flow. When the add-on 'Advanced Cost Registration' is available this tab is available for entering cost entries (See section cost administration).



Logs tab



Dependencies tab

3.1.2.5 Assigning responsibilities for products

Next step is to assign the responsible owners to the products in your project. This can be done by either the project manager or project support roles. Before you can assign products to project members, you have to make sure that all required resources are a member of your project (management) team.

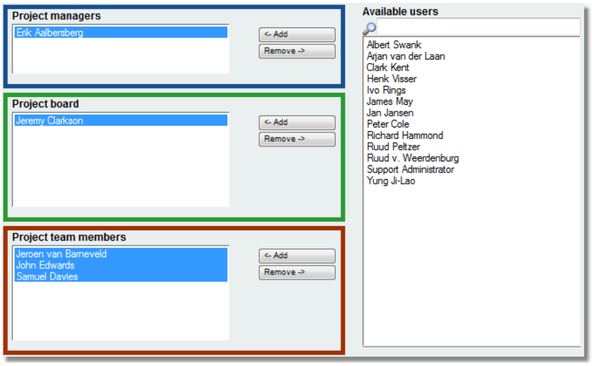
Assemble your project team

1. Go to the '**dashboard**' tab of your project.

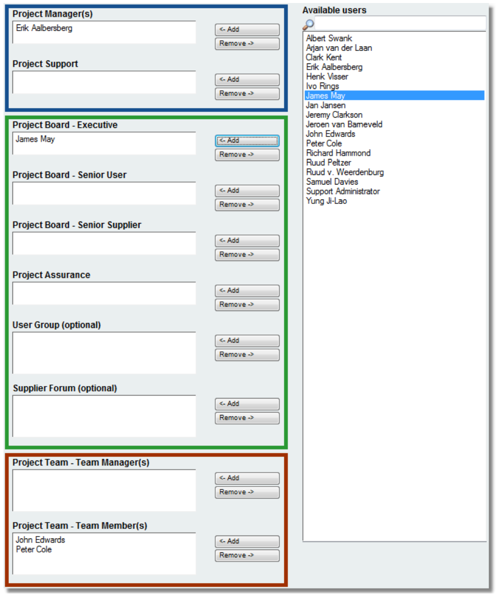
2. Click '**Edit members**' to see the members of your project team. To add people to your project team, select them from the list on the right and click **'Add'** at a specific role to assign them.

Use the search option to easily find a specific user.

Depending on your system settings, this page shows you either the project manager, project board and team members, or it shows all PRINCE2 roles i.e. Senior supplier, project support, project assurance, etc. This can be changed by the system administrator.



Edit members; setting 'limited set of roles'



Edit members; setting 'full set of PRINCE2 roles'

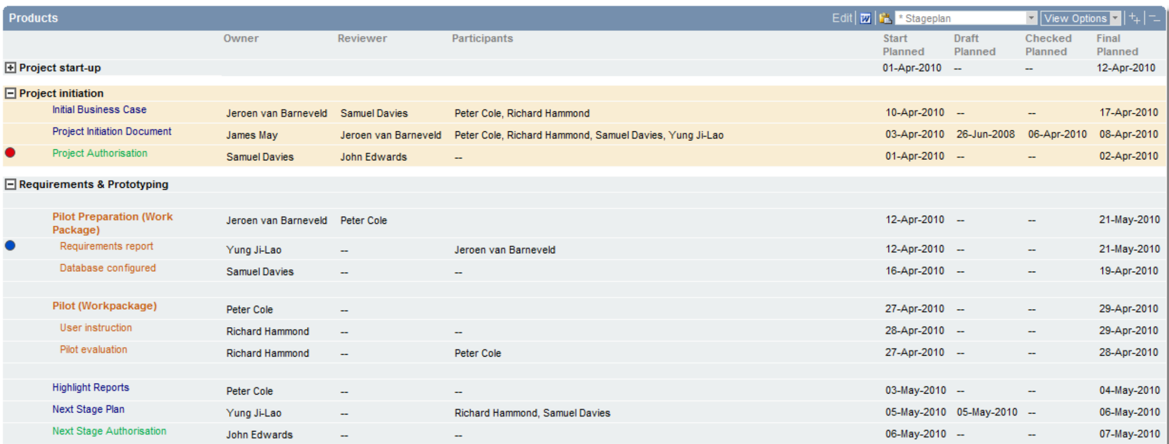
3. Click ‘**OK**’ at the bottom of the window to save the changes.

Assign products to owners, reviewers and participants

1. Go to the ‘**Plan**’ tab.

2. Complete following information for each product:

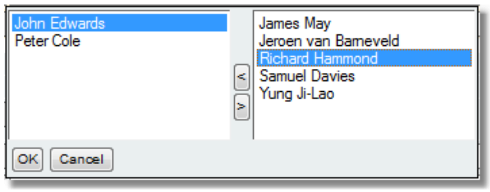
Owner	:	Owner/responsible for the product.
Reviewer	:	Reviewer of the product.
Participants	:	Participants at the product realisation.



Plan tab

By clicking on **Edit** and then clicking on the double dash a menu appears and you can select resources or dates. Selected resources and dates can be changed later in the same way.

The menu which assigns participants to a product also works in another way whereby more people can be added.



3. Select one or more members from the column on the right with your left mouse button (to select multiple members at the same time, keep the CTRL key pressed) and click the '**<**' key.

4. Click '**OK**' to assign the participants to the product. You can remove members by selecting them from the left hand row and then clicking the '**>**' key.

3.1.2.6 Assigning budgets

In the Principal Toolbox, product based planning takes a central place. Budgeting and cost registration is also product based, so all costs are calculated towards products.

> ***Note**: time, stage or project based costing is also possible in Principal Toolbox. In this case, dummy (management) products are added to the project plan (see planning products 42). In the case of time or project based costing, add the dummy products to the last stage of your project. This way, they stay visible throughout the project.*

For the registration of both costs and hours, five types of registration are available:

- Budget : The approved budget
- Committed : Costs you will have to pay, e.g. a contract signed, but not yet invoiced
- Actual : Money or hours actually spent
- Remaining : An estimate of costs or hours necessary to complete the product.
- Variance : The variance relative to the budget.
  Formula: variance = (committed + actual + remaining) - budget

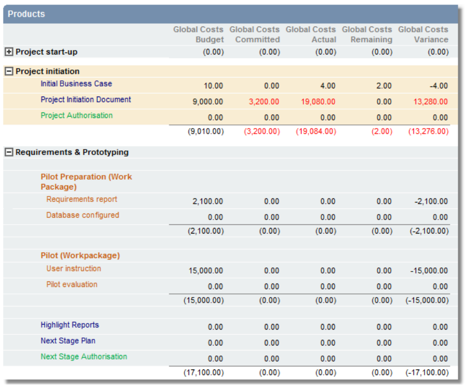
Below you'll find the steps to set the budget for your project.

1. Go to the **'Plan'** tab.

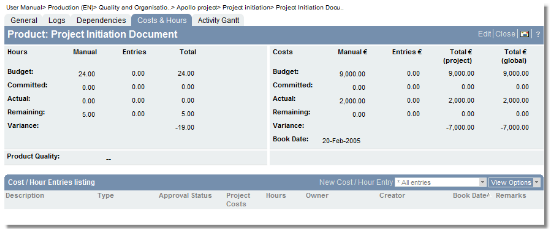
2. In the pull down menu select **Costs manual** or **hours manual**.

3. Click the **Edit** button and fill in the budget in the field 'Hours budget manual' (hours) and 'Cost budget manual' (costs). Fill in 'Hours remaining manual' and 'Cost remaining manual' with the same value of hours and costs. By doing this you keep the 'variance' with respect to the budget, at the start of the project at 0. As the project progresses you can see at 'variance' the number of hours or costs over or under the budget.

4. Alternatively, go to the each product page and click the tab **Costs & Hours** and insert the different budgets there.

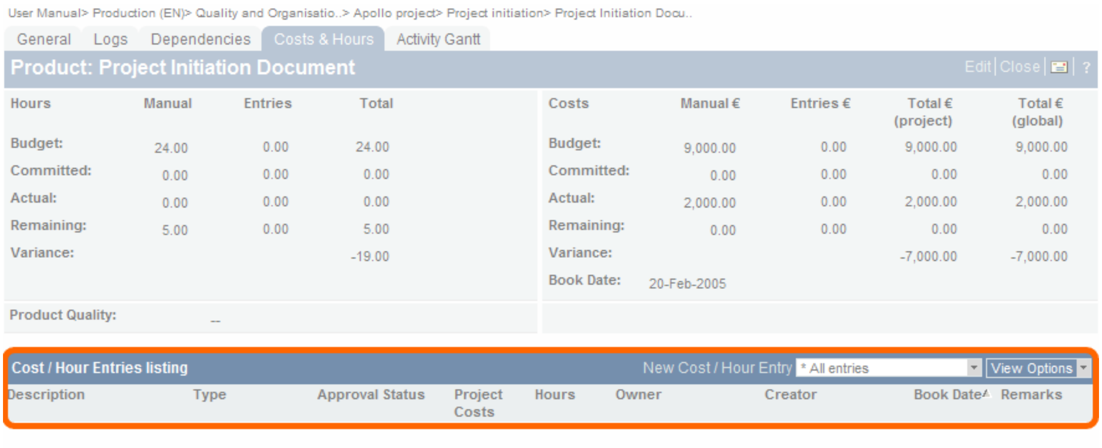


Costs & Hours on a project level



Costs & Hours on a product level

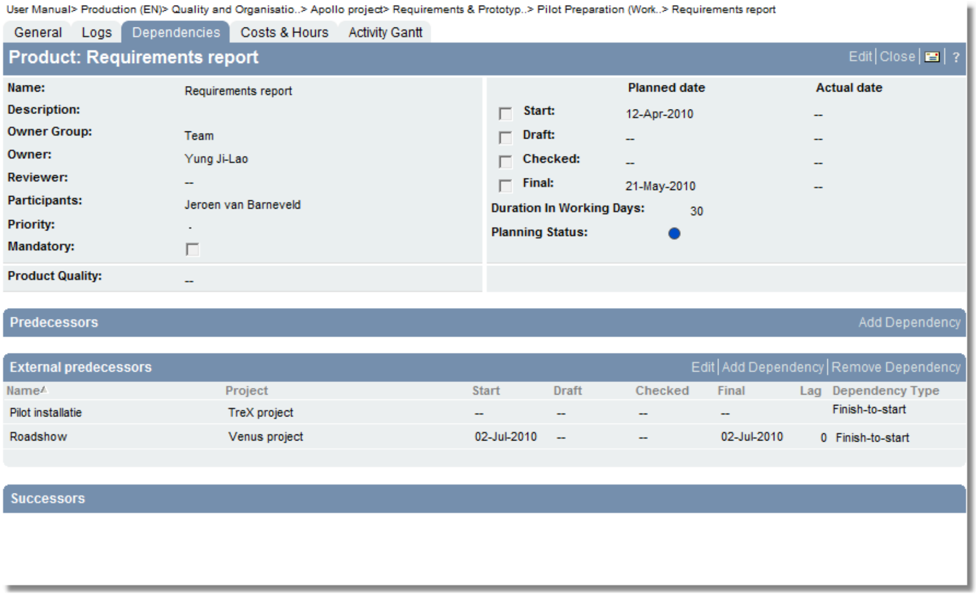
Using description above gives an overview of your project costs and hours in tabular form. If you want to keep track of history or the construction of the numbers on the page, the Principal Toolbox has the option of cost and hour entries. If these are available within your organisation, you will find a section **'costs / hours listing'** on each product page, on the 'Cost & Hours' tab, as shown below. See the section working with cost entries for more information.



3.1.2.7 Defining dependencies

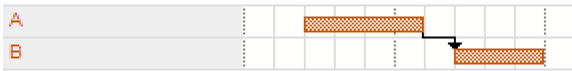
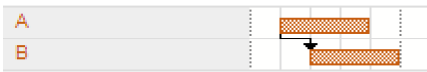
The easiest way to define dependencies within your project is by using the editable Gantt 44. Dependencies created on the Gantt chart are inserted as 'finish-to-start' relationships. To modify the dependency type or to define dependencies with products from other projects (inter-project dependencies) you need to open the product details (from the project dashboard, plan or costs & hours tab) and go to the 'Dependencies' tab.

1. Click the name of the product you want to create a dependency for, and select the tab **'Dependencies**'.



Dependencies tab in the product detail window

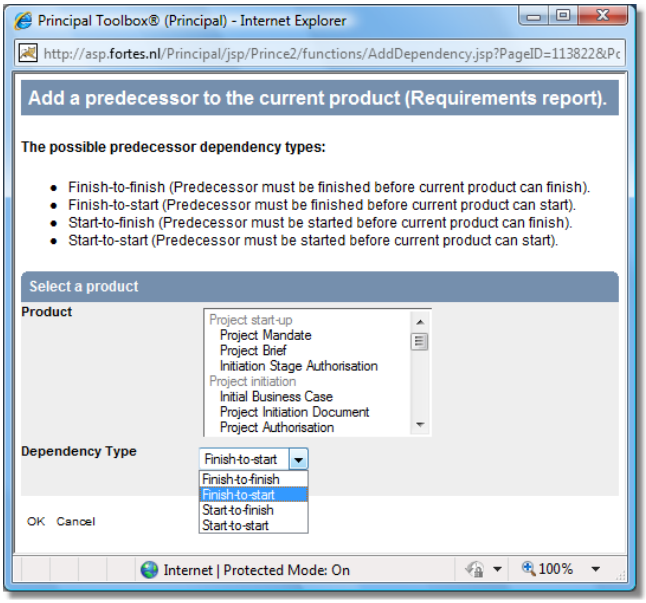
2. On this tab you can add ‘Predecessors’, from your project and from external projects. Click **Add** to select one or more ‘Predecessors’. Then select the project and the product which are the ‘ Predecessors’ and define the type of relation, options are:

Finish-to-finish:	Product (B) cannot be finished until product (A) has been finished. For example, if you have two products, "Wiring" and "Installation inspected", "Installation inspected" cannot be finished until "Add wiring" has been finished.	
Finish-to-start:	Work on product (B) cannot start until product (A) has been finished. For example, if you have two products. "Constructed fence" and "Painted fence", "Painted fence" cannot be started until "Constructed fence" has been finished. This is the most common type of dependency.	
Start-to-finish:	Product (B) cannot be finished until work on product (A) has been started. The Predecessor must be started before current product can finish.	
Start-to-start:	Work on product (B) cannot start until work on product (A) starts. For example, if you have two products, "Foundation poured" and "Concrete levelled", "Concrete levelled" cannot begin until "Foundation poured" begins.	

3. Click **OK** to create the relationship.

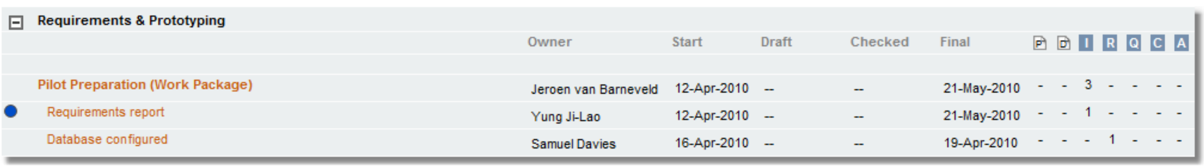
Note: *only predecessors can be defined. This way, a project manager cannot make another project dependent on his or her own project. To define successors, the project managers have to cooperate.*

4. The type of the dependency and the lag (delay) can be modified on the main page. Lag is a delay between products that have a dependency. For example, if you need a two-day delay between the finish of one product and the start of another, you can establish a finish-to-start dependency and specify two days of lag time.



Adding a dependency

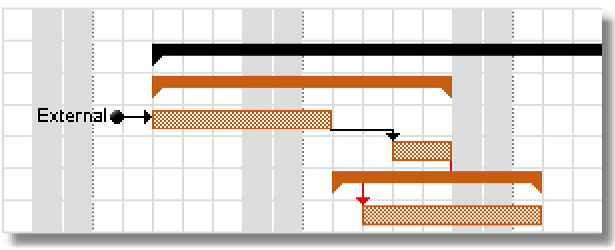
The relationships are verified based on the start and end date of the products. If an end date of a ' Predecessor' is delayed or planned later than the start date of the 'Successor' and the relation is defined as; Finish-to-Start, a blue traffic light is shown to indicate a problem.



Dependency on the project dashboard

External dependencies

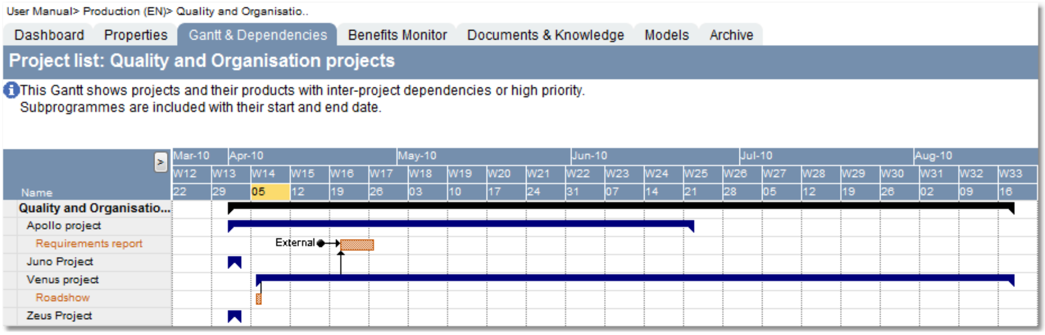
External dependencies are represented in the projects Gantt diagram. These are represented with a big dot and the word 'external'. To see details of the dependency; place your mouse on the dependency and a pop-up screen will show the details.



Dependencies on the Gantt

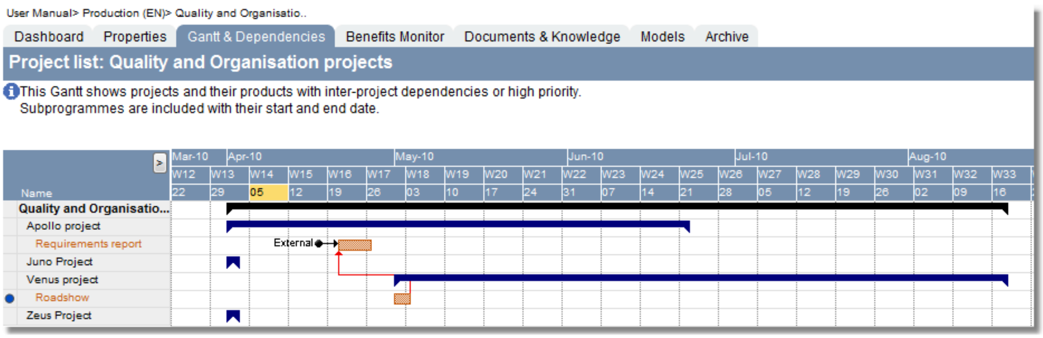
On programme level these inter-project dependencies are also represented so the programme manager can see bottlenecks in the execution of the programme.

See the screenshots below:



Dependencies on the programme Gantt

If for some reason the Office relocation project is delayed or planned later the Gantt will indicate that there is a problem with the planning.



Dependencies on the programme Gantt

3.1.2.8 Requesting resources

The Project Manager is able to request resources to staff his project. Resources can be requested as skill, or, if the project manager has a specific preference, as 'named' resources. Before a project manager is able to request resources from a resource pool, a pool or multiple pools have to be linked to the project.

How a Project Manager links a resource pool to his project and how a he or she requests resources van be found at 'Requesting resources within a project' 110.

Note: *To be able to request and allocate resources, the Resource Allocation module needs to be available!*

3.1.3 Managing a project

During the execution of a project the defined products are to be realised. In this section you will find:

- How to monitor and enter progress.
- How to communicate with Principal Toolbox.
- Ways of composing reports and views.
- How documents/templates are managed.
- How issues and risks are registered and monitored.
- How to use the hours entry module.

3.1.3.1 Progress: Planning

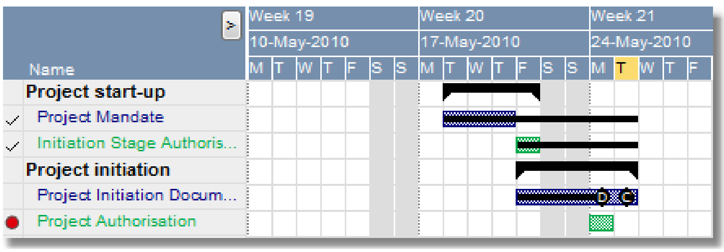
You are able to get an easy overview of the progress of the project on the project dashboard. Immediately visible are:
- delayed and finished products
- the number of issues, risks etc. within your project and per product or work package.
- deliverables added to products, etc.

On the dashboard:

Planning on the project dashboard

- Planned dates set on today or before today are shown in red.
- If the final planned date lies before today a red dot appears to the left of the product name.
- Finished milestones are marked with a tick: ✓. If the final milestone is ticked off, the tick is shown to the left of the product name.

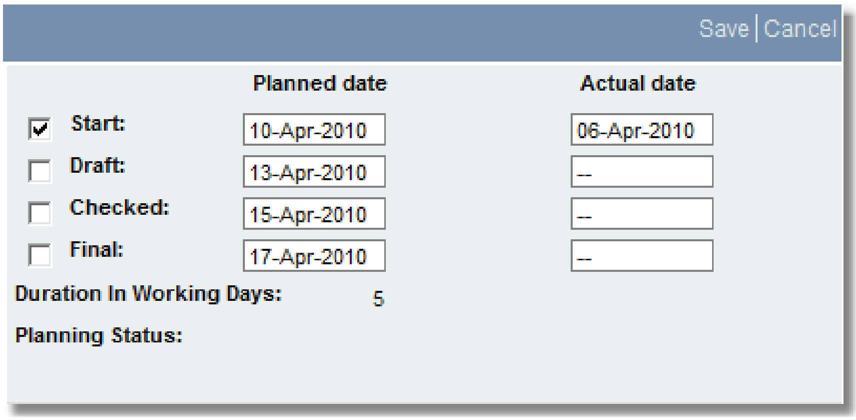
On the Gantt chart;



Planning on the Gantt chart

- If the final milestone of the product is delayed a red dot appears next to the product name.
- If milestones of the product have been finished, this is shown in the planning with a solid colour bar inside the product bar. (In the figure shown above, the draft version of the Initiation Stage Plan has been finished)
- Finished products are marked with a tick (✓) and the solid bar indicates when the product actually has been finished (e.g., in the figure above, the Project Mandate was finished on the 25th of May, but was scheduled to finish on the 21th).

To report progress you do the following:
1. Go to the '**Project dashboard**'.
2. Click the name of the product to view the **'Product page**'.
3. To change the planned date, select the date and enter the new date in the calendar.
4. To register passing of milestones, tick the checkbox for Start/Draft/Checked/Final. The date will be set to today by default, alternatively enter another date in the column 'actual date'.



Planning on the product page

5. Passing a milestone can also be marked directly on the project dashboard. To do this click the appropriate milestone date next to the product and tick it off using the tick sign.

3.1.3.2 Registration of actual hours

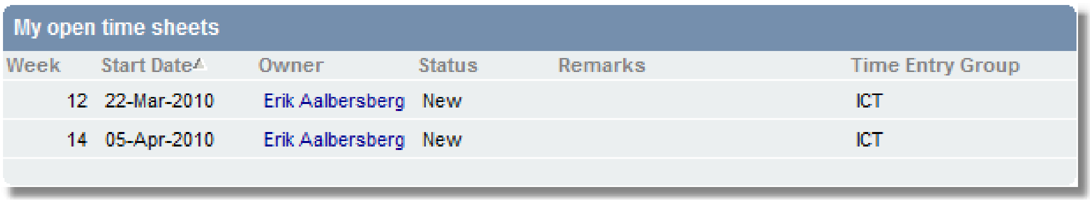
Registration of hours in the Principal Toolbox can be done in multiple ways, depending on the available add-ons:

- Manual entry of aggregated hours per product (no add-on required).
- Enter hours using hour entries. This way you can keep track of history and the build-up of the number of actual hours shown (requires add-on 'Advanced Cost Registration').
- Time entry with the Principal Toolbox add-on 'Timesheets'. Users of Principal Toolbox get a weekly time sheet on which they can enter their actual spent hours (requires add-on 'Timesheets').

System administrators and time sheet managers, check '[Configuration of time entry](114)' 114 for more information about possible configurations.

3.1.3.2.1 Filling in time sheets (add-on)

When users of Principal Toolbox have been added in the module **'Timesheets'**, they get a weekly time sheet on their home page:

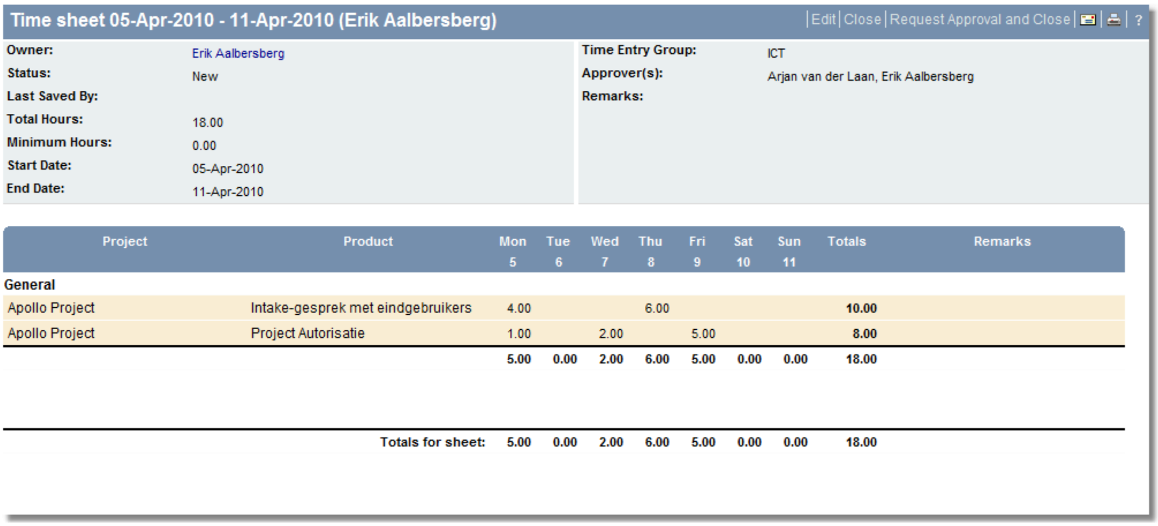


By clicking the date of the time sheet, the time sheet opens. On it you will find the selection of products you are allowed to book hours on. The selection of products that is shown is dependent on the settings of your 'time entry group'. It could be, that only products are shown of which you are owner, reviewer or participant. Alternatively, only products with an hours budget can be shown on time sheets.

In both cases, you can add the number of hours in the row of the appropriate product, in the column of the correct day. The total number of hours for each product, day, and week is shown directly on screen.

At the bottom of your time sheet, you find a selector for projects and non-project activities. Here you can select products or activities that are not shown in the product list.

After finishing your time sheet, you need to request approval on the data you entered. How this works is described in the next section 57.



Timesheet

Principle of time sheets and hour entries
Time sheets need to be approved, otherwise the hours and associated costs will not be accepted. After approval of the time sheet, the fields of the time sheet will be added to the appropriate products in the form of a so called cost/hour entry. These entries are visible to the project manager from the product detail page. They provide an overview of the different bookings that have been made on products and allow to see which user worked how many hours on what date on which product.

3.1.3.2.2 Time sheet approval (add-on)

For the requester
After filling in the time sheet, you need to request approval. This is done with the 'request approval' button. The approval request is automatically delivered to the approvers.

> ***Note**: only approved hours will be taken into account in the project costs & hours overview. Before approval, they are not visible in projects or products.*

If a time sheet has been disapproved, it will re-appear on your home page with status 'disapproved'. To see why it was disapproved, open the time sheet and click **Status** to see any remarks of the (dis)approvers. You can make any necessary changes and request approval again.

At the section **'My open time sheets'** on your home page, you will find an overview of your time sheets with the approval status. Here, you can access approved time sheets. Note the view selector on this tab, this defines which time sheets are visible.

For the approver
Check the section 'Configuration of time entry 114' .

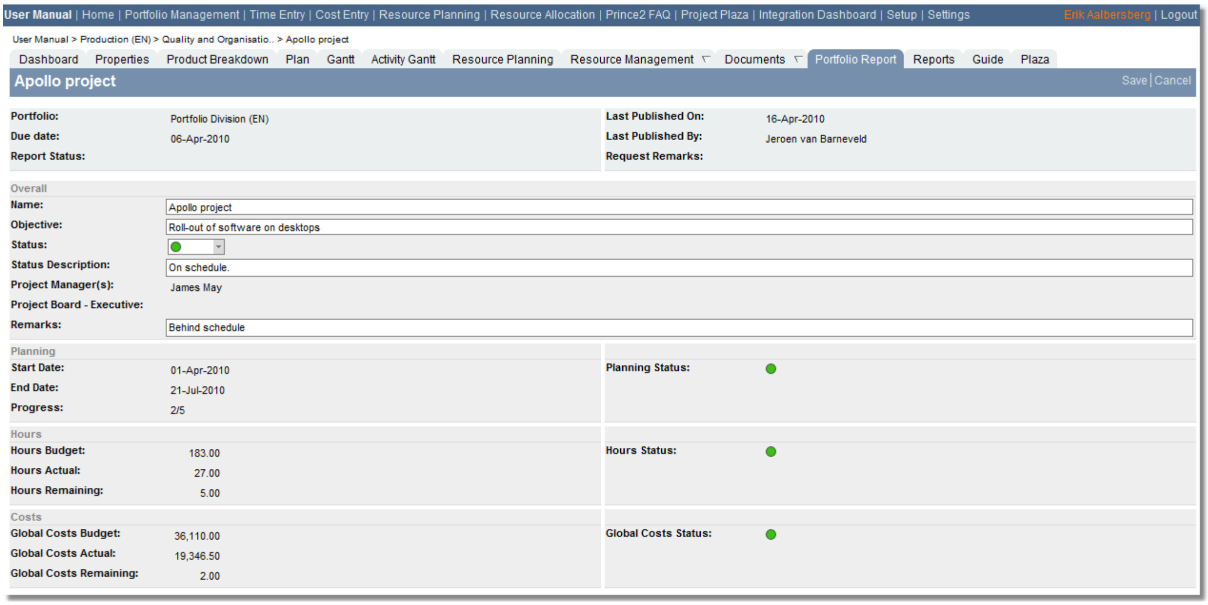
3.1.3.3 Reporting

Within the Principal Toolbox you can make progress information available and generate reports. In this section the various options will be presented.

3.1.3.3.1 Portfolio reporting (add-on)

If and when the project manager is expected to report project status information back to the Portfolio, a reporting request will be sent and appear on the project.
The request is found within the project on a separate tab with name "**Portfolio report**". The report layout is based on the reporting model as defined on the portfolio.
To supply the requested information the project manager follows these steps:

1. Within the project, select the tab "**Portfolio report**" and press the "**Edit**" button



The porfolio report is to be filled out by the project manager

2. Update the editable fields with the latest information, and press the "**Save**" button

3. Then press the "**Publish to portfolio**" button to send the information off to the Portfolio.

3.1.3.3.2 Copying data

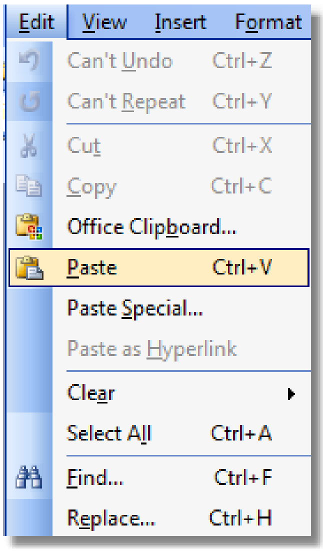
Within the Principal Toolbox there are two options to copy a specific view to another application. Options are:
- Copy to clipboard.
- Save list to RTF.

Copy to clipboard 
The ‘Copy to clipboard’ function is a quick way to export the information shown on the current page to another application (e.g. email).

1. Click the  button.

2. Then open the file you want to paste the information into. Choose **Paste** from the **Edit** menu. Now you only have to arrange the document composition yourself.

> ***Note**: Some applications empty the clipboard when they are started. In that case, first open the application and only then copy the information.*

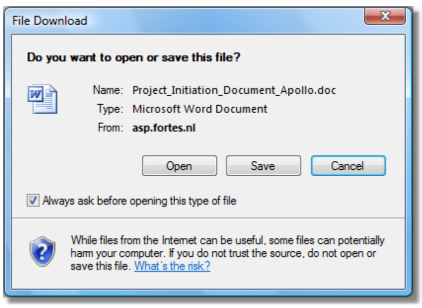


Save list as RTF 

The 'Save this list as RTF' function creates a so called RTF (rich text format) file which can be opened in MS Word.

1. Click the  button.

2. The web browser opens a pop up for opening or saving the RTF list.



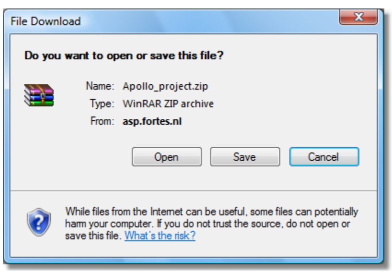
3. When clicking the **'Open'** button, MS Word will automatically be opened and the data is available for further modification.

3.1.3.3.3 Offline availability of project information

With the button '**Pack project offline**', a zip file is created that contains an offline 'website' with the most important project information. This file can be opened in any web browser. This allows for viewing and sharing the most important data of your project. Changing project data is not possible offline.

1. On the project dashboard, click 

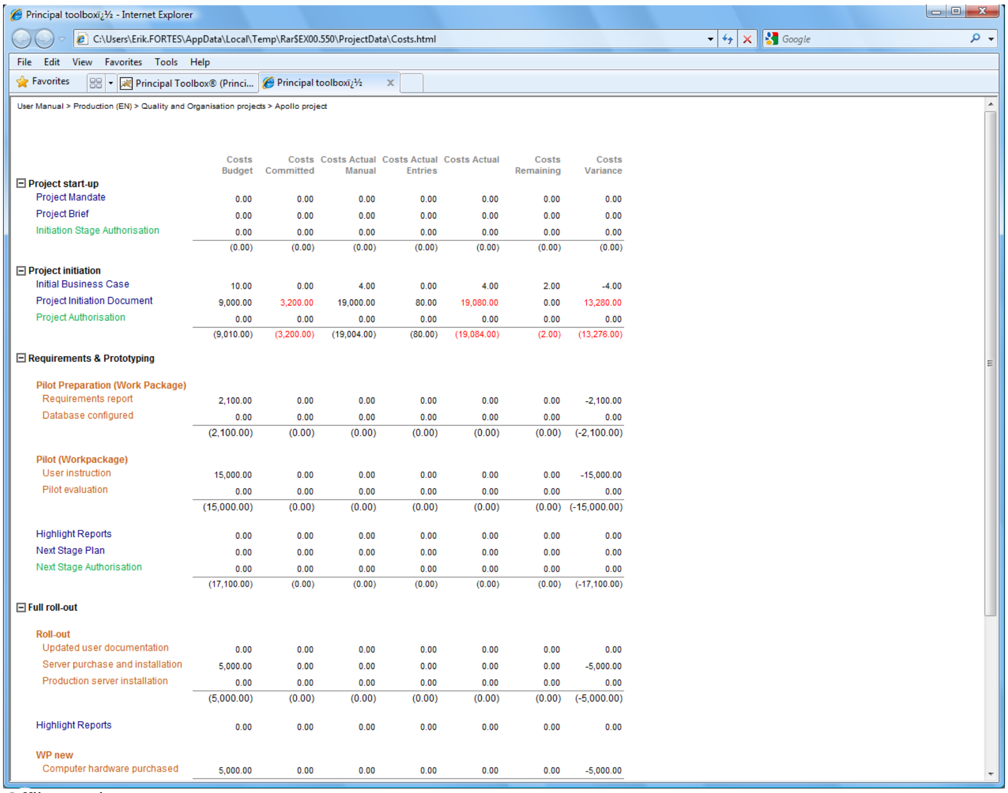
. A dialogue will appear.



2. Click **Save** and specify the location where to save the file.

3. Next step is to open the document and extract it to a specific location. The file is compressed using Winzip technologies. On systems with Windows XP or 2003 this file can be extracted automatically. Otherwise you can download WinZip at www.winzip.com.

4. At the specified location a new folder is created named after the specific project. Double-click index.html in this folder to open the web pages. The project plan, costs and hours and all logs are viewable.



	Costs Budget	Costs Committed	Costs Actual Manual	Costs Actual Entries	Costs Actual	Costs Remaining	Costs Variance
Project start-up							
Project Mandate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Project Brief	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initiation Stage Authorisation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Project initiation							
Initial Business Case	10.00	0.00	4.00	0.00	4.00	2.00	-4.00
Project Initiation Document	9,000.00	3,200.00	19,000.00	80.00	19,080.00	0.00	13,280.00
Project Authorisation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(9,010.00)	(3,200.00)	(19,004.00)	(80.00)	(19,084.00)	(2.00)	(13,276.00)
Requirements & Prototyping							
Pilot Preparation (Work Package)							
Requirements report	2,100.00	0.00	0.00	0.00	0.00	0.00	-2,100.00
Database configured	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(2,100.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(-2,100.00)
Pilot (Workpackage)							
User instruction	15,000.00	0.00	0.00	0.00	0.00	0.00	-15,000.00
Pilot evaluation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(15,000.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(-15,000.00)
Highlight Reports	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Next Stage Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Next Stage Authorisation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(17,100.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(-17,100.00)
Full roll-out							
Roll-out							
Updated user documentation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Server purchase and installation	5,000.00	0.00	0.00	0.00	0.00	0.00	-5,000.00
Production server installation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(5,000.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(-5,000.00)
Highlight Reports	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WP new							
Computer hardware purchased	5,000.00	0.00	0.00	0.00	0.00	0.00	-5,000.00

Offline project

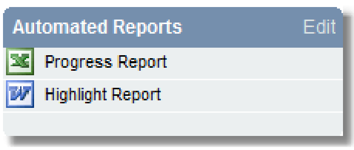
3.1.3.3.4 Generating automated reports

The Principal Toolbox has extensive report functionality available. These reports come either as RTF-files (readable by all text processors, like Word, WordPerfect) and Microsoft Excel files.

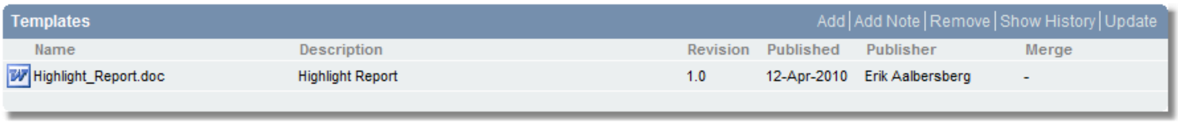
Within the Principal Toolbox a number of fixed keywords are available which you can use in your templates. When generating a report these keywords will be replaced by information from the Principal Toolbox database.

All views defined in the Principal Toolbox (general and personal) are available for reporting.

1. Go to the '**Project dashboard**' or go to a specific product page where a merge template is available.



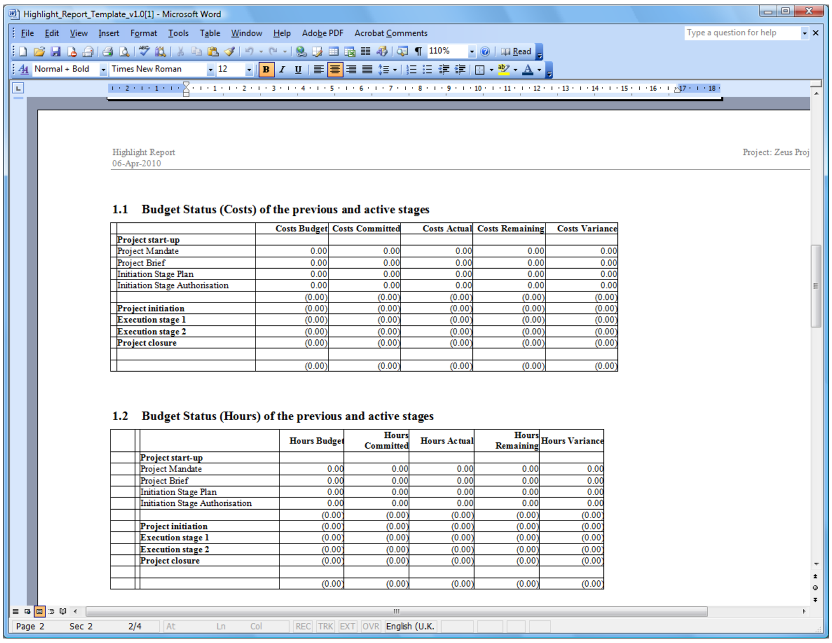
On the Project Dashboard



On the product page

2. To generate a report with the project actuals, click the name of the report at the heading ‘ Automated reports’ or at the product page.

3. After the report is opened in a new screen it can be altered and then saved. In order to make the report available to the project team it is necessary to upload it in the Principal Toolbox (see the next section, [Adding documents] 64).



Highlight Report
06-Apr-2010

Project: Zeus Proj

1.1 Budget Status (Costs) of the previous and active stages

	Costs Budget	Costs Committed	Costs Actual	Costs Remaining	Costs Variance
Project start-up					
Project Mandate	0.00	0.00	0.00	0.00	0.00
Project Brief	0.00	0.00	0.00	0.00	0.00
Initiation Stage Plan	0.00	0.00	0.00	0.00	0.00
Initiation Stage Authorisation	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Project initiation	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Execution stage 1	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Execution stage 2	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Project closure	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

1.2 Budget Status (Hours) of the previous and active stages

	Hours Budget	Hours Committed	Hours Actual	Hours Remaining	Hours Variance
Project start-up					
Project Mandate	0.00	0.00	0.00	0.00	0.00
Project Brief	0.00	0.00	0.00	0.00	0.00
Initiation Stage Plan	0.00	0.00	0.00	0.00	0.00
Initiation Stage Authorisation	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Project initiation	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Execution stage 1	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Execution stage 2	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Project closure	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

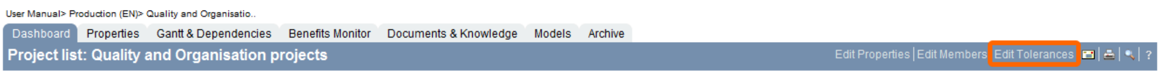
See [Automated reports] 128 for more information

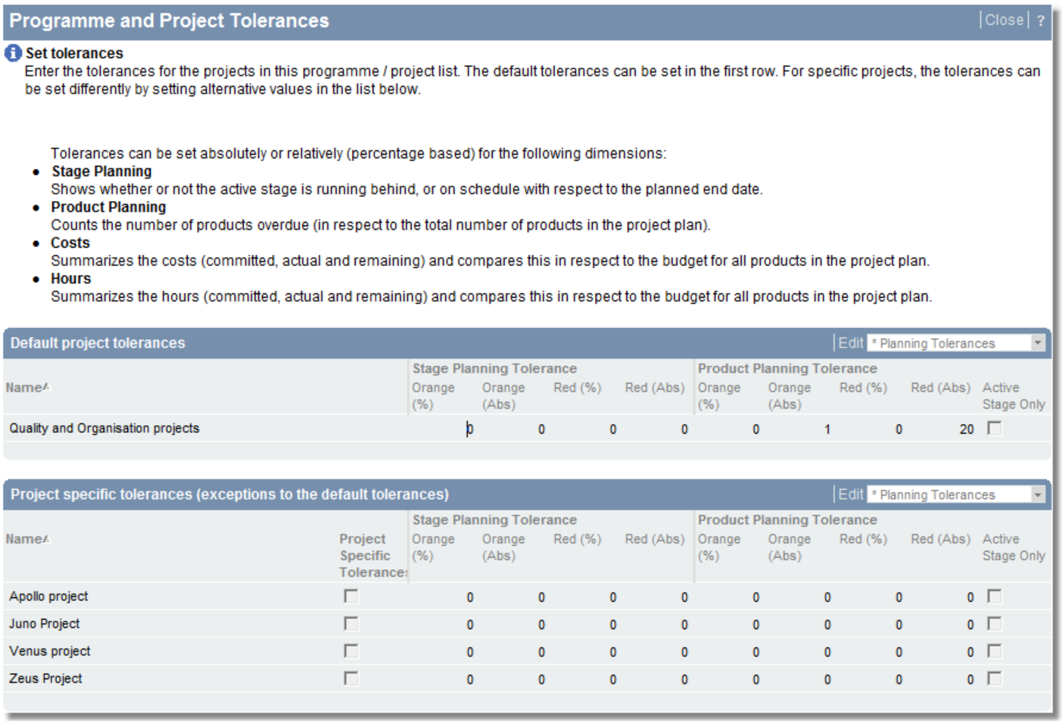
3.1.3.3.5 Setting tolerances

Tolerances are used to monitor project status. At the start of the project, the project manager and project board agree on the tolerance for the project. Tolerances are the allowed deviation in time, quality, costs and hours from the planned values. When a project exceeds the agreed tolerances, according to project management methodology it needs to be reported to the project board. In Principal Toolbox, this can be made visible with the RAG indicators on any programme dashboard.

> ***Note**: tolerances need to be set for each project list and programme separately. They are not inherited from higher levels.*

Tolerances can be set by a programme manger for the programme / project list as a whole and for projects separately. To set tolerances, click **'Edit Tolerances'** on the programme dashboard.





Name	Stage Planning Tolerance Orange (%)	Orange (Abs)	Red (%)	Red (Abs)	Product Planning Tolerance Orange (%)	Orange (Abs)	Red (%)	Red (Abs)	Active Stage Only
Quality and Organisation projects	0	0	0	0	0	1	0	20	☐

Name	Project Specific Tolerances	Stage Planning Tolerance Orange (%)	Orange (Abs)	Red (%)	Red (Abs)	Product Planning Tolerance Orange (%)	Orange (Abs)	Red (%)	Red (Abs)	Active Stage Only
Apollo project	☐	0	0	0	0	0	0	0	0	☐
Juno Project	☐	0	0	0	0	0	0	0	0	☐
Venus project	☐	0	0	0	0	0	0	0	0	☐
Zeus Project	☐	0	0	0	0	0	0	0	0	☐

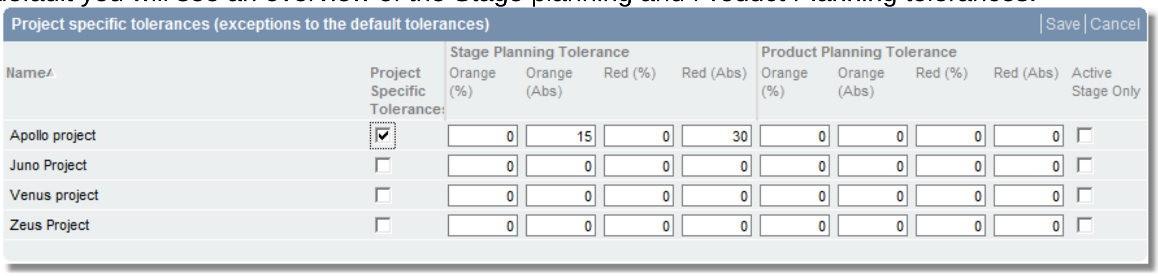
Tolerances can be set for the entire programme or project specific

In the 'Programme and project tolerances' window, you can set tolerances for the following four categories.

- Stage : Shows whether or not the active stage is running behind or on schedule with respect to the planning end date.
- Planning : Counts the number of products that are overdue (final planned date before today and product is not finished).
- Hours : Compares the spent hours (commited + actual + variance) with the budget.
- Costs : Compares the spent costs (commited + actual + variance) with the budget.

The 'default project tolerances' are used for all projects in the programme. If project specific tolerances are filled for a project, these will overrule the default tolerances.
- Activate the Project specific tolerances per project by selecting the checkbox in the column **Project Specific Tolerances**.
- For the tolerance settings to be active for the current stage select the checkbox in the column **Planning active stage only**.

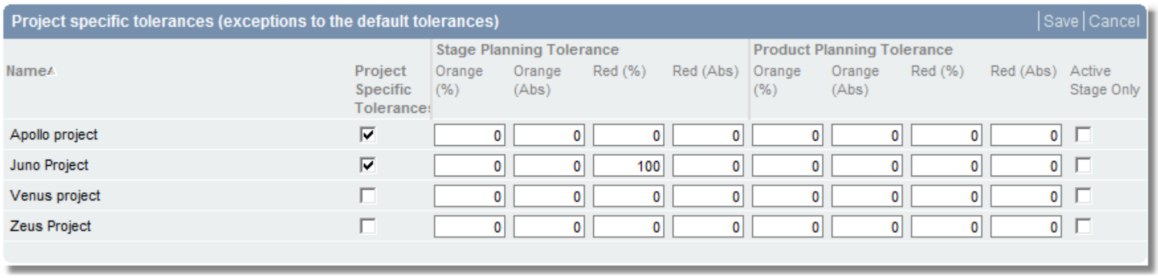
By default you will see an overview of the Stage planning and Product Planning tolerances.



Name	Project Specific Tolerances	Stage Planning Tolerance Orange (%)	Orange (Abs)	Red (%)	Red (Abs)	Product Planning Tolerance Orange (%)	Orange (Abs)	Red (%)	Red (Abs)	Active Stage Only
Apollo project	☑	0	15	0	30	0	0	0	0	☐
Juno Project	☐	0	0	0	0	0	0	0	0	☐
Venus project	☐	0	0	0	0	0	0	0	0	☐
Zeus Project	☐	0	0	0	0	0	0	0	0	☐

Setting planning tolerances

Select the view **Cost & Hours Tolerances** from the drop down list to set the Cost and Hours tolerances.



Setting Cost & Hours tolerances

For each of these, you can set both absolute numbers and percentages of the total. The colours of the RAG indicators are set according to worst case scenario tolerances for cost and hours. Example:

Tolerances set:

Costs orange (%):	10%
Costs red (%)	20%
Costs orange (abs)	5,000
Costs red (abs)	10,000

Project costs:

Budget	100,000.00
Committed	25,000.00
Actual	65,000.00
Remaining	23,000.00

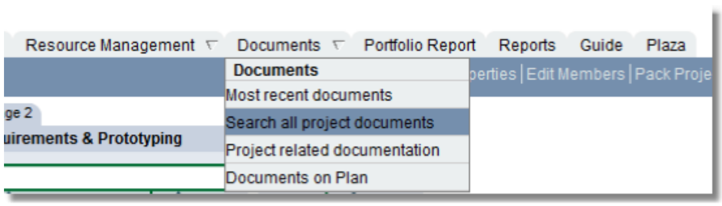
So the expected costs for the project are (25,000 + 65,000 + 23,000) = 113,000. The budget is 100,000, so the expected deviation is 13,000.
According to the percentages set, this would result in an amber (orange) indicator. However, since the absolute number for a red indicator is 10,000, it will show red on the programme dashboard.

3.1.3.4 Document management and approval

You can store documents at various locations within the Principal Toolbox. The Principal Toolbox will keep the document in the database, so it will be available to all users with access to the document in the Principal Toolbox. It is possible to overwrite older versions with newer ones. The Principal Toolbox will keep the old versions in storage. These will remain available for the manager of the particular level in the tool.

On top of that, it is possible to put an approval cycle on deliverables and/or documents with the add-on ‘Advanced Customisation & Workflow’.

To make document management much easier, the tab 'Documents' has been added on the project level. This tab makes it easier to search for specific documents within a project. The tab gives you several options to search for documents.



Most recent documents	:	List of the 100 most recently changed documents for this project.
Search all project documents	:	Search for documents in this project.
Project related documentation	:	Documents that are not linked to a specific product.
Documents on Plan	:	Documents per product

3.1.3.4.1 Adding documents and templates to products

Documents in any file type can be added to a 'Product page':

Product Description	:	Product specification; goal, composition and quality demands.
Templates	:	Template(s) as the basis for the (management) products.
Deliverables	:	Products/documents to be delivered.

1. Go to the ‘Product page’.

2. Click **Add** in order to add a document or to add an intranet link. Fill in the following information:

Description	:	Description of the document.
Revision/Doc nr.	:	Document version.
Filename	:	Select a document with the ‘Browse’ button or, alternatively
Internet address	:	Fill in a hyperlink.
Internal document link	:	Provide a document ID from a document at another location in the Principal Toolbox application. The ID can be found in the document history. This allows for a centrally placed document to be linked to from projects. Update by updating only the original centrally placed document.

3. Click **OK** to add a document to the Principal Toolbox.

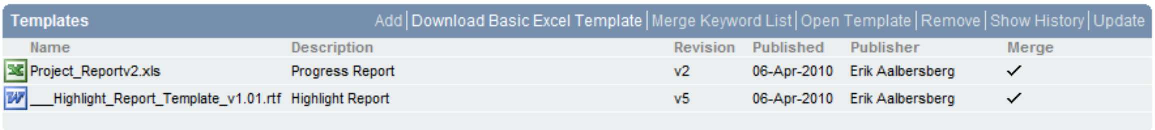
You are able to open documents saved in the Principal Toolbox, however you are not allowed to edit them. In order to edit a document it is necessary to download the document. After editing you have to add it as a new version.

> ***Note**: Hyperlinks have the following syntax:*
> - *internet addresses look like "http://intranet.organisation.com/documents/example.doc"*
> - *links to document locations look like: "file://p:\documents\example.doc"*
>
> *When using links to document locations, make sure all users have the same drive mapping.*

3.1.3.4.2 Updating a document

1. Locate the document you want to update.

2. To update the document with a new version, select it and click **Update**. Fill in the following information:


Templates — Add | Download Basic Excel Template | Merge Keyword List | Open Template | Remove | Show History | Update

Name	Description	Revision	Published	Publisher	Merge
Project_Reportv2.xls	Progress Report	v2	06-Apr-2010	Erik Aalbersberg	✓
___Highlight_Report_Template_v1.01.rtf	Highlight Report	v5	06-Apr-2010	Erik Aalbersberg	✓

Description	:	Standard description of the last version
Revision/Doc number	:	New version number.
Filename	:	Select the new version of the document with the ‘Browse’ button,
Internet address	:	**OR** fill in a hyperlink.
Internal document link	:	Provide a document ID from a document at another location in the Principal Toolbox application. The ID can be found in the document history. This allows for a centrally placed document to be linked to from projects. Update by updating only the original centrally placed document.

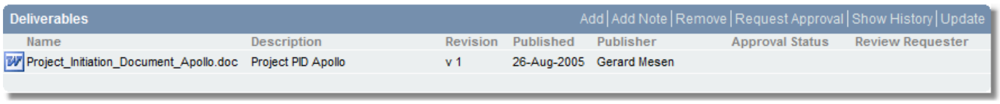
3. Select the document concerned and click **Show History** in order to show a list of all the former versions of the document. Remove other versions by using the '**Remove**' button.

3.1.3.4.3 Document approval (add-on)

Important documents like the Project Initiation Document (PID) and end project report need to be approved by a member of the project board. Other documents/deliverables in the project may need to be approved by a specific person as well. To support this approval procedure, the 'Approval' add-on is available.

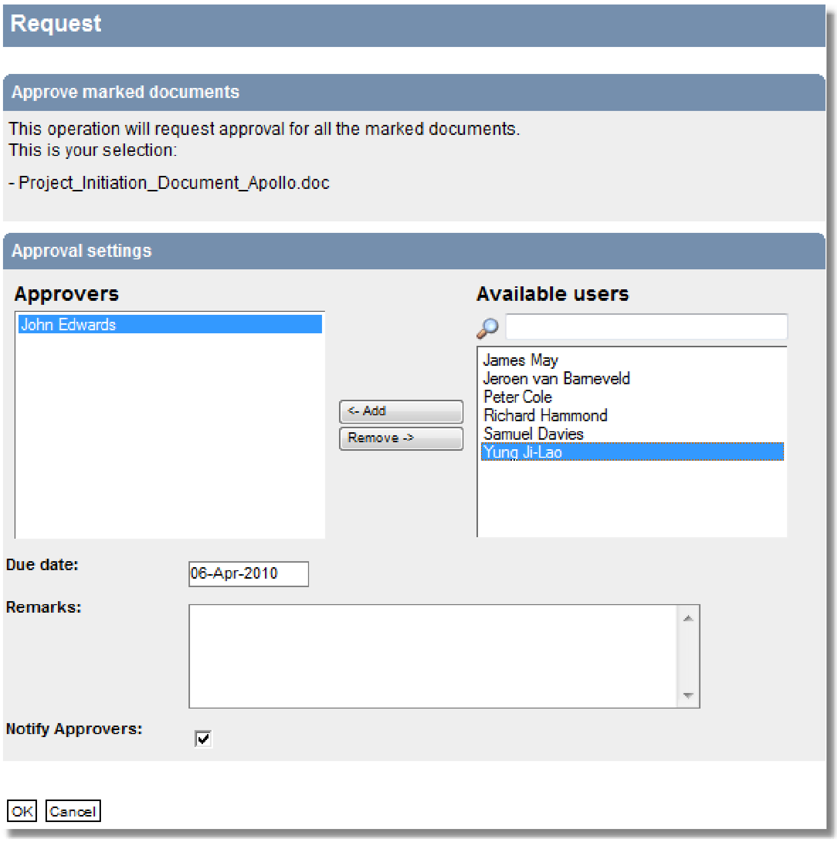
1. Go to the 'product' page of a product.

2. Click **Add** or **Add note** at Deliverables to insert a specific deliverable.



3. To request approval on this document, place the tick mark in front of the document and click the '**Request approval**' button. A new window will open.

4. First you will have to define the approver(s) for the document. The next step is to set the due date and insert any remarks to inform the approver(s). If you do not want to send an e-mail to the approver, remove the tick mark at '**Notify approver**'.



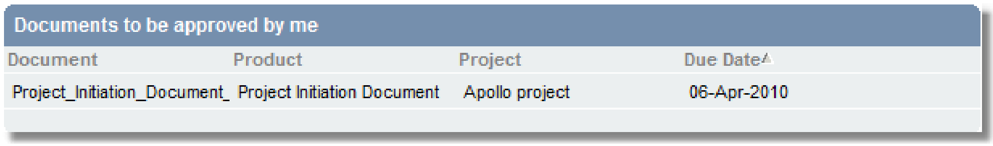
Requesting approval

5. Click **OK** to sent the document in for approval. On the product page the status changes to 'Waiting for approval'.

Approving a document

The reviewer needs to review the document and approve or disapprove it. The documents which need to be approved can be found at the reviewers 'Home' page.

1. Go to your 'Home' page. Here you will see all documents waiting for approval.



2. Click the Product name to open the specific 'Product page'. To review the document click the document name.

3. After the review you need to '**Approve**' or '**Disapprove**' the document by clicking the appropriate button. A new window will appear where you can insert remarks.

4. Click '**OK**' to finish the approval procedure. And the status of the document will change to Approved or disapproved.

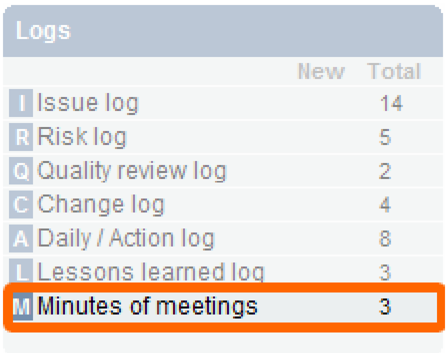
3.1.3.4.4 Adding minutes of meetings

Fast consultation of the minutes of meetings can be very useful for the project team members and makes the dissemination of minutes and diary dates unnecessary.

In the logs section on your project dashboard you find a link for 'Minutes of meetings'. Here you can keep all of the meeting reports and appropriate documents.

1. Go to the '**Project dashboard**'

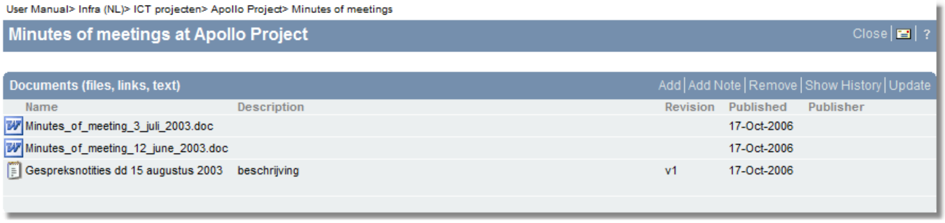
2. Select '**Minutes of meeting**' under the logs.



Logs

3. Using '**Add**' you can add the minutes of the meeting, with '**Add note**' you can add a note and with remove you can remove it again.

4. Using the '**History**' and '**Update**' buttons you can look at the history of a document and with update you can replace an existing document (see Updating a document 64).



minutes of meetings

3.1.3.5 Issues, risks, quality reviews and lessons learned

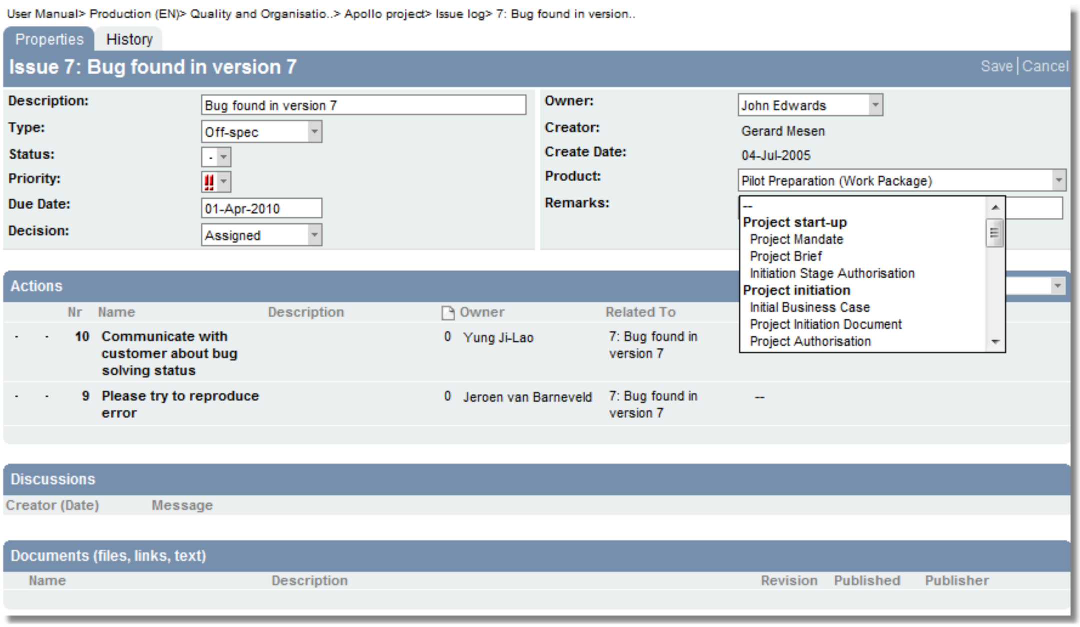
Within the Principal Toolbox all (possible) log items (issues, risks, quality reviews, changes, lessons learned) can be logged through the different logs available on the project dashboard.

On all logs custom fields can be defined with the add-on 'Custom fields' 161. Only the basic functionality is explained in the manual. The logs available within the Principal Toolbox, are

- Issue log 68
- Risk log 69
- Quality review log 70
- Change log 72
- Daily / Action log 73
- Lessons learned log 74

> ***Note:** An issue, risk etc. can initially be created on project level, but after examination can be reassigned to a specific product or work package. To assign an issue, risk, etc. to a product (or to change the product which is affected) open the issue and select the appropriate product in the pull-down menu at 'Product'.*

> ***Note**: The owner of a log item are able to change all information of that log item. The project manager and project support can change all information of all log items at any time.*



Adding an issue

History log

For every log-item there is a history tab available. This shows history information for tracking who has done what.

History tab for an issue

Discussion messages on log items

On a log item it is possible to add discussion messages. On these messages the author and date is registered.

Here you are able to start a new discussion

3.1.3.5.1 Issue log

Issues can be created in two ways; by clicking '**Issue log**' on the 'Project dashboard' or by making a new issue from a product on the product page. In the second case the issue will automatically be related to the specific product.

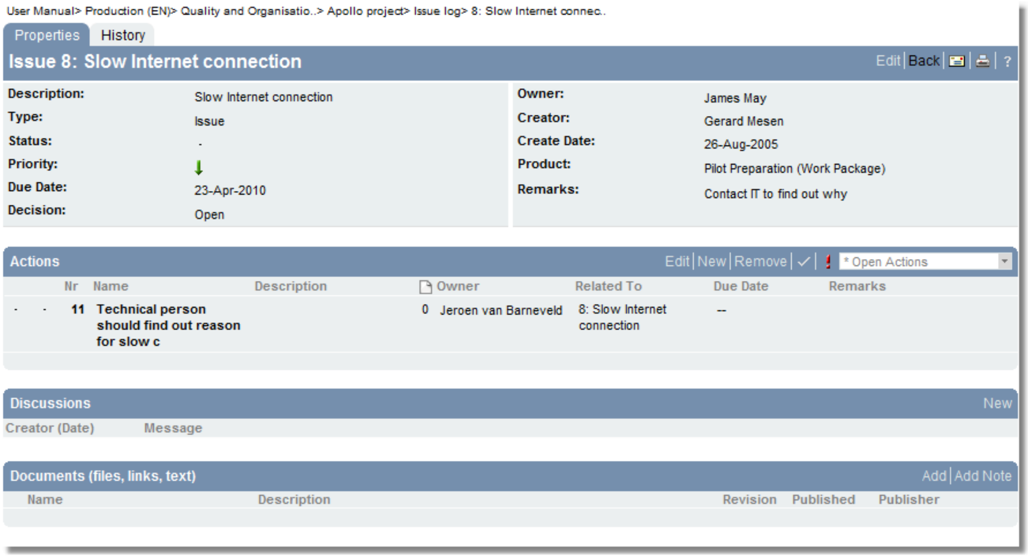
1. Go to the summary page of a product.

2. Now click the tab '**Logs**'.

3. Click '**New**' in the blue 'Issue listing' bar. Then fill in the following information:

Description	:	Give a description of the issue.
Type	:	Choose the type; RFC, Off-spec, Question, Concern or Issue.
Status	:	Give the status of the issue.
Priority	:	Decide the priority of the issue.
Due date	:	When does the issue need to be resolved?
Decision	:	The decision concerning the issue.
Owner	:	Owner/responsible person for the issue.
Product	:	To which product or work package is the issue related, leave blank when it is project related.
Remarks	:	Any remarks concerning the issue.

4. By clicking '**Add**' or '**Add note**' you can add important documents/notes on to the issue.



Adding a new issue

5. You can always alter the issue later by clicking on the issue in the 'Issue log'.

6. The project manager and project support roles can also copy and move issues. To copy an issue to another programme or project, you can use the **'Copy'** and **'Move'** buttons. With copy, you create a duplicate issue within your own project. With the move button, you can select another project or programme to move the risk to.

7. In order to close an issue you can set the ‘Status’ to ‘closed’ but you can also select the log item(s) by clicking the row to select and then clicking the '✓' button.

Issue log

> ***Note**: All project team members are allowed to create new issues. The project manager and project support can edit all issues. The owner and creator of an issue can edit all information of that particular issue.*

3.1.3.5.2 Risk log

The risk log is a central place where risks are identified, described and where certain decisions and actions are taken.

A risk can be made in two ways; by clicking ‘**Risk log**’ on the ‘Project dashboard’ or by making a new risk at a product on the ‘Product page’. In the second case the risk is automatically related to the specific product.

1. Go to the ‘Product page’ of a product.

2. Now click the tab ’**Logs**’.

3. Click here behind ‘Risk listing’ on ‘**New**’. Then fill in the following information:

Description	:	Give a description of the risk.
Type	:	Fill in the type of risk.
Status	:	Fill in the risk status.
Priority	:	Decide the risk priority.
Due date	:	Final date where after risk measures need to be taken.
Decision	:	The decision of the risk occurring.
Chance	:	Chance of the risk occurring.
Severity	:	Impact cause upon risk occurrence.
Owner	:	Owner/responsible person for the risk.
Creator	:	Author of the risk.
Product	:	To which product is the risk related, leave blank when it is project related.
Remarks	:	Any remarks concerning the issue.

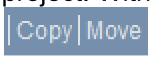
4. Save your new entry by clicking the **'Save'** button.

5. Furthermore you can also add an action to the risk by clicking ‘**New**’ behind ‘Risk listing.

6. By clicking ‘**Add**’ or ‘**Add note**’ you can add important documents/notes to the risk.

7. You can change the risk any time at a later date by clicking it's description in the ‘Risk log’.

8. Close a risk by setting the status to **'Closed'**

9. The project manager and project support roles can also copy and move risks. To copy a risk to another programme or project, you can use the **'Copy'** and **'Move'** buttons. With copy, you create a duplicate risk within your own project. With the move button, you can select another project or programme to move the risk to. 

***Note**: Only the project manager and project support can create new risks. However, the owner and reviewer of a product can also create risks related to that product. The project manager and project support can edit all risks. The owner and creator of a risk can edit all information of that particular risk.*

3.1.3.5.3 Quality review log

A quality review (quality control) is a standard method to test a product for its measurable quality criteria. This technique is especially suitable for documents (e.g. developments, procedures and reports).

The criteria for the quality of a product are taken up in a product description. It describes the goal of the product, the composition of the product, which sources are to be used, the form in which the product should be delivered and which quality criteria the product must meet.

We will describe the quality review procedure underneath:

1. Go to the ‘Product page’ of a product. The ‘checked’ date on this page gives the date on which the quality review should be finished. To document this further, quality reviews can be created in the quality review log.

2. Click the '**Logs**' tab.

3. Click '**New**' in the blue "Quality review listing" bar.

4. Fill in the following information:

Description	:	Short description of the quality review.
Status	:	Open/Closed. Has the review been carried out?
Priority	:	Priority of the quality review.
Due date	:	When is the review due by.
Method	:	Describe the method (see the Product Description).
Reviewer	:	Who will carry out the review.
Results	:	Give the review results. (--, OK and action items)
Owner	:	Owner of the quality review.
Creator	:	Creator of the quality review.
Created	:	Date when the quality review was made.
Product	:	To which product is the review related, leave blank when it is project related.
Remarks	:	Remarks with regard to the quality review.

5. Click the **'Save'** button to save your new entry.

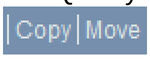
6. It is possible to add actions and documents to the quality review. To add an action you need to do the following; click '**New**' behind 'Action listing' and fill in the following information:

Name	:	Name (identifier) of the action
Description	:	Description of the action
Status	:	Status (open / closed)
Priority	:	Priority
Due date	:	When should the action be finished
Owner	:	Owner / person responsible for the action
Creator	:	Who has created the action
Related to	:	Here a link to the quality review will be shown.
Remartks	:	Any remarks, status description.

7. Click the **'Save'** button to save your new entry.

8. By clicking '**Add**' or '**Add note**' behind documents you can add documents or notes with additional information to the quality review.

Adding a quality review

9. To copy or move a Quality review to another programme or project, you can use the **'Copy'** or **'Move'** button. 

3.1.3.5.4 Change log

The Principal Toolbox has a separate ‘Change log’, which offers a central repository for documentation of changes within your project.

The project manager needs to judge all issues by their priority and their impact. In case that an issue (off-spec, RFC) falls within the tolerance of a stage then he/she can choose to accept the issue and log the change in the ‘Change log’.

If an issue leads to the result that the project/stage is threatened to fall outside the tolerances set the project manager needs to discuss the issue with the project board. They decide whether actions on the issue are carried out or not. If the project board decides to accept the issue then the project manager needs to define a change.

1. Go to the ‘Project dashboard’.

2. Go to the ‘**Change log**’.

3. Click **'New'** in the blue ‘Change listing’ bar.

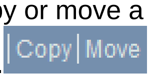
4. Fill in the following information:

Description	:	Description of the change.
Type	:	Choose between Specification, Hours, Costs and Planning
Status	:	Open / closed
Priority	:	Low, normal, high, critical
Due date	:	Optional, final date the change needs to be dealt with.
Owner	:	Responsible owner of the change
Creator	:	Creator of the change.
Created	:	Date of creation
Product	:	Optional: product the change is related to.
Remarks	:	Any remarks / status description.

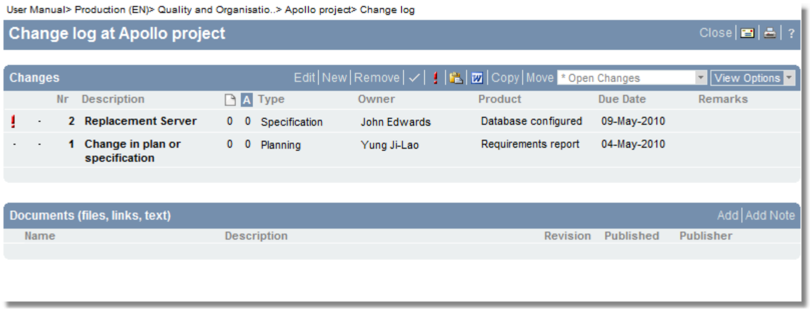
5. Save the new entry by clicking the **'Save'** button.

6. If necessary, it is possible to add a related action to the change. Click ‘**New**’ in the blue 'Action listing' header on the details page of the change. For more info about actions see Daily/action log 73.

7. By clicking ‘**Add**’ or ‘**Add note**’ in the 'Documents' header you can add any related documents or notes.

8. To copy or move a change to another programme or project, you can use the **'Copy'** or **'Move'** button.

9. To close the change, set the status of the change to 'closed'. Alternatively, from the change log, you can select the change and set the status to closed with the ✓ button.



Change log

3.1.3.5.5 Daily/action log

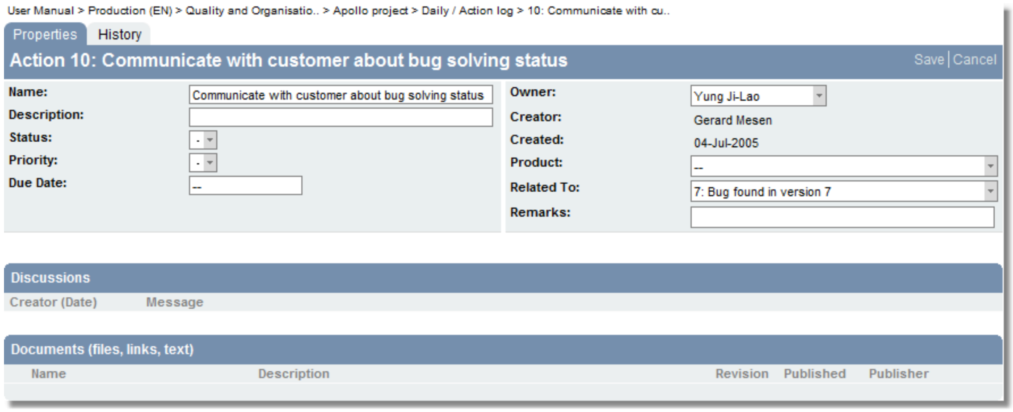
Actions can be created from product pages, related to issues, risks, changes, quality reviews and from the action log.

To define an action do the following:

1. There are several places from where you can create actions, if you have the correct user rights:
   a. From the project dashboard, open the **'Daily/action log'**.
   b. Alternatively, go the **'logs'** tab of a product.
   c. Find the blue 'Action listing' header when on the detail page of an issue, risk, or other log item.

2. Now click **Action log** and fill in the following information:

Name	:	Name of the action.
Description	:	Description of the action.
Status	:	Status (Open/Closed).
Priority	:	Priority.
Due date	:	When does the action need to be completed.
Owner	:	Owner/responsible for the product.
Creator	:	Creator of the action.
Related to	:	Relation to a product, issue, risk, etc.
Remarks	:	Any remarks



Adding an action

3. Click the **'Save'** button to save your new action.

> ***Note**: Only the project manager and project support can create new actions. However, the owner and reviewer of a product can also create actions related to that product. The project manager and project support can edit all actions. The owner and creator of an action can edit all information of that particular action*

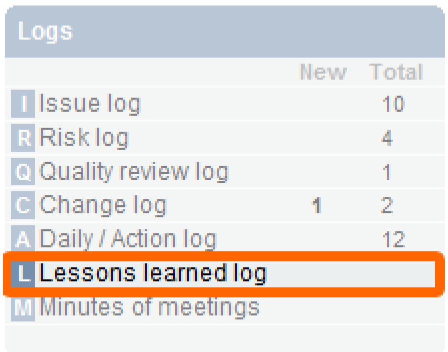
3.1.3.5.6 Lessons learned

To archive positive or negative experiences that may be useful in future projects the lessons learned log is available. Based on the lessons learned log you can create an automated 'lessons learned report' at the end of the project. The lessons learned can be from all areas of interest; the project management method, tools used, good/bad experience with suppliers, etc.

The report can published to allow the organisation to improve the best practices from among other things its project management. Add valuable lessons learned to the project model(s) to have them easily available for project managers and team members.

1. Go to the ‘Project dashboard’

2. Now click the ’**Lessons learned log**’.



Lessons learned log

3. Create a new lessons learned entry by clicking **'New'**.

4. Fill in the following information:

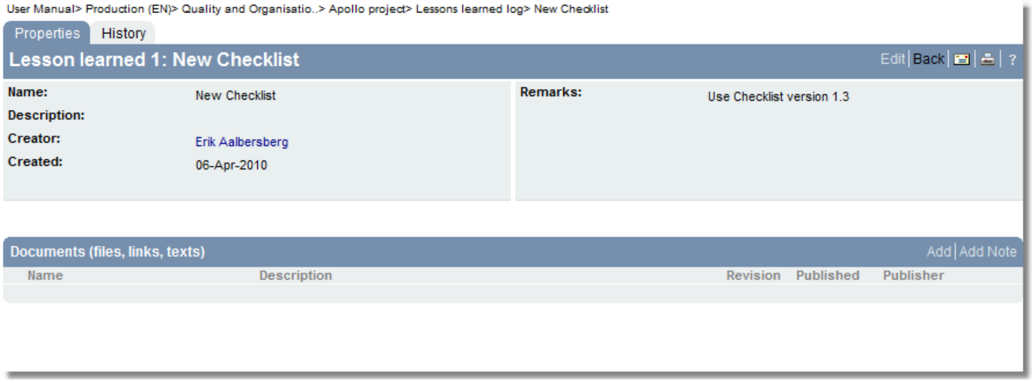
Name	:	Name of the lesson learned
Creator	:	The creator is filled in by the tool.
Created	:	Creation date of the lesson learned. Filled automatically.
Remarks	:	Explanation of the lesson learned.

5. If more information needs to be added to the lesson learned, a document or note can be attached.

Click ‘**Add**’ or ‘**Add note**’ in the blue 'Documents' header to add a document or note.

6. After completion of these actions, click the **'Save'** button to save the new entry.

7. To copy or move a lessons learned to another programme or project, you can use the **'Copy'** or **'Move'** button. 



Lesson learned

> ***Note**: Only the project manager and project support can create new actions. However, the owner and reviewer of a product can also create actions related to that product. The project manager and project support can edit all actions. The owner and creator of an action can edit all information of that particular action.*

3.1.4 Finishing a project

Once the products of the project have been realised the project needs to be finished in a controlled way. A number of management products such as the lessons learned report, end project report, and a follow-on action recommendation can be used to report about open actions and recommendations. The project board will then confirm the project closure.

The lessons learned report can be based on the lessons learned log that has been kept during the project. It is quite easy to generate an automated report 128 of this log.

The other logs can be consulted to make the end project report and the recommendations for follow up actions. In the recommendations for follow on actions all the points of attention are shown that are no longer carried out in the project but can be dealt in a new project.

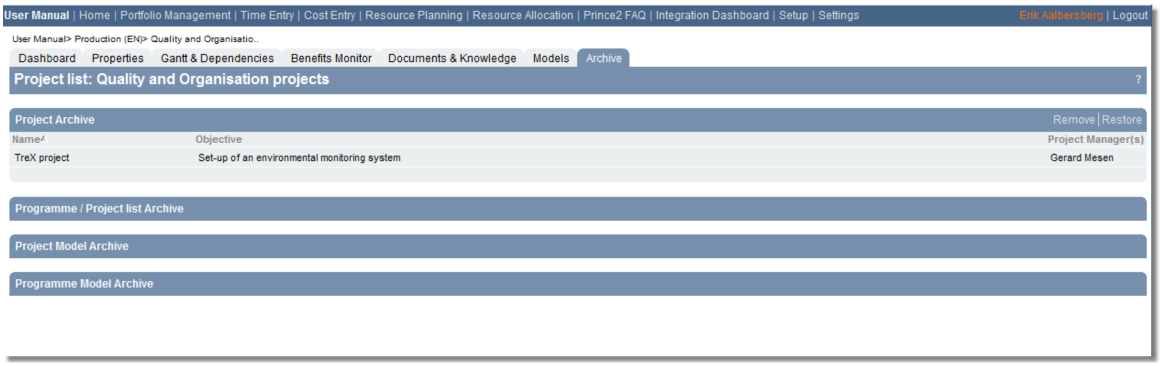
In this section we will further review:
- archiving projects; 76
- removing a project or project model. 77

The activities described in this section can only be carried out by the programme manager.

3.1.4.1 Archiving a project (-model)

> ***Note**: Archiving a project can be done by the manager of a programme / project list, or the system administrator. Archived projects are no longer visible to users without these roles. If you want the project to remain available, create a separate project list called 'Archived projects', or a similar name.*

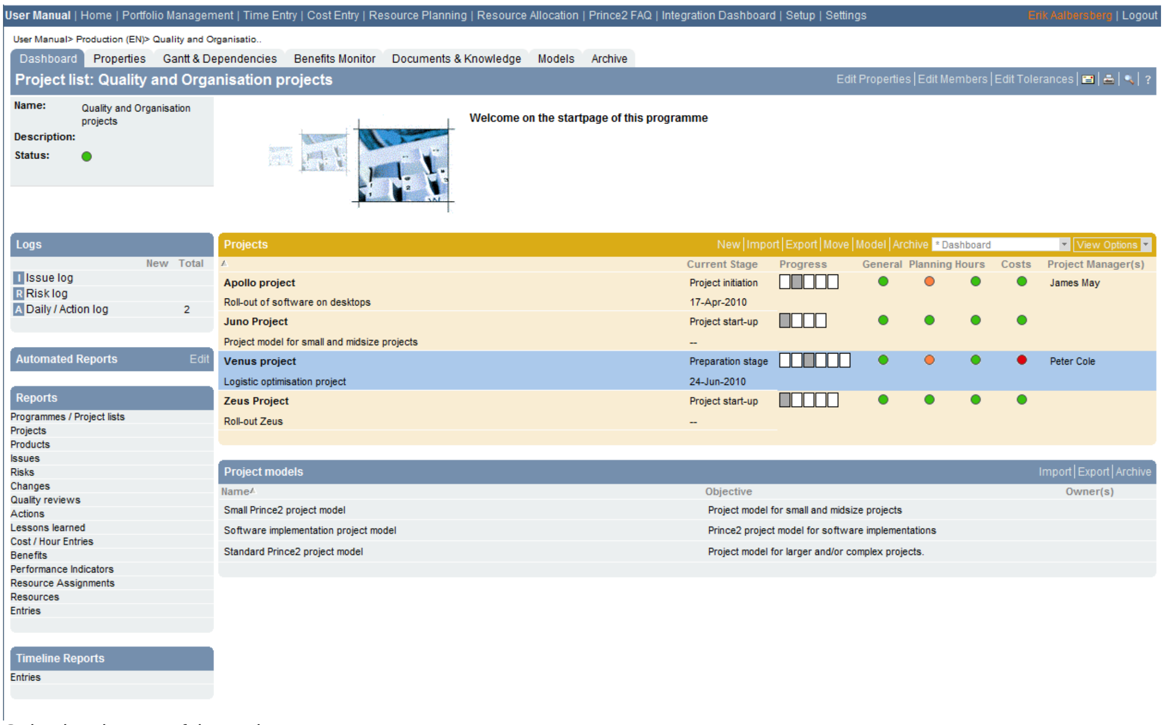
After the project has been finished and the project organisation has been disbanded the project can be archived.



Archive

1. Go to the **'Programme dashboard'**.

2. Select the project concerned by clicking it's row.



Selecting the row of the project

3. Click Archive to move the selected project(s) to the archive tab.

4. In a pop-up window, you are asked to confirm archiving the selected project (-model). After clicking **OK** the project (-model) is move to the archive.

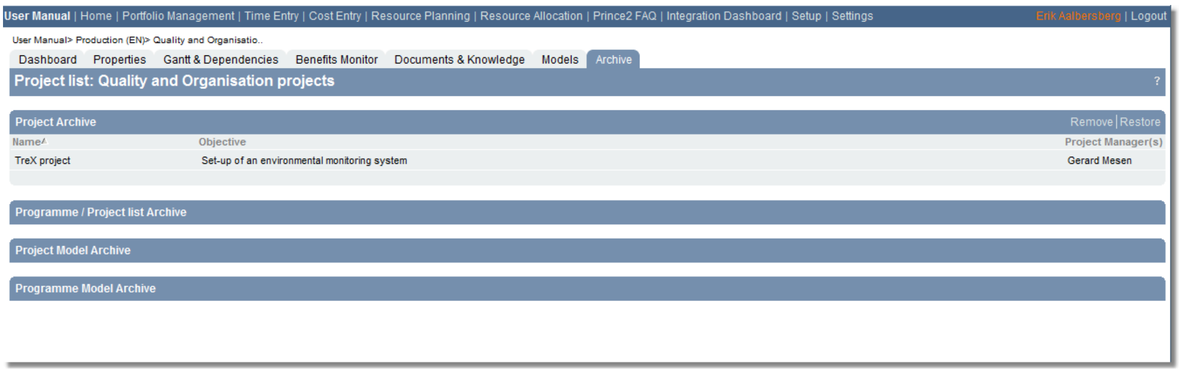
5. The archive can be found at the tab **'Archive'** on the programme / project list level. Note that each programme or project list has its own archive.

6. Restoring a project or project model can be done from the **'Archive'** tab.

3.1.4.2 Removing projects and project models

Removing projects and project models requires two steps; first you need to archive the project (model) and thereafter you can remove the project (model) from the archive. How to archive a project (model), see chapter Archiving a project (-model) 76.

1. After archiving a project (model), go to archived project (model) by clicking the **'Archive'** tab.



Archive tab

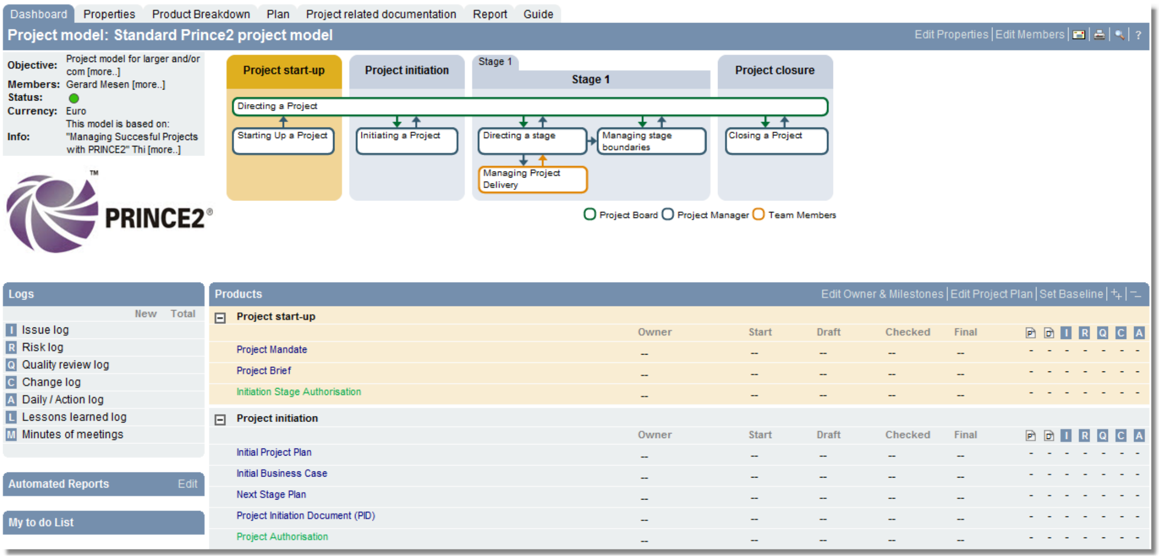
2. Select the project (model) concerned by clicking it's row.

3. Click ‘**Remove**’ behind the project (model) and confirm with ‘**OK**’.

***Remember**: Once projects or project models have been removed from Principal Toolbox it is not possible to roll back this decision.*

3.1.5 Managing project models

In the Principal Toolbox, all projects that are created are based on a project model. A project model is an extensive template for projects. It contains products, templates added to these products, lessons learned, and automated reports. This way, it is possible to have standardised projects throughout the organisation, and project managers always have the right templates available. Right from the moment a project is created, automated reports (if available in the project model) are available for reporting purposes. Below, an example of the dashboard of a project model is shown.



Part of the dashboard of the PRINCE2 project model. The dashboard of a project model is identical to a project dashboard.

It is possible to have multiple project models within your organisation. For instance, a default PRINCE2 project model for general use and more specialised project models with specialised content. For instance, a project model for sales or one for software implementation. For these purposes, you could build a product breakdown (see the section about product breakdown 34) that matches most situations for these specialised projects.

In the next sections, you will find information about

- Editing project models 79
- Creating project models 80
- Moving project models 80

How to create automated reports is explained in the Automated reports 128 section.

3.1.5.1 Editing project models

> ***Note:*** *Project models can be edited by the manager of the project model, or by the system administrator.*

Project models can be edited in the same way projects are edited in Principal Toolbox. So, it is possible to add templates, documents, automated reports, a product breakdown, issues, risks, lessons learned, etcetera.

Any data you enter into the project model, except for user names (owners of issues, products, etc.) are copied into projects created with that project model.

To prevent your original project model from being polluted, or your templates etc. from being lost, it is recommended to work with a temporary project when you want to create or change a project model. This way, you can enter example data to check views and automated reports, without affecting the original project model. Take the following steps:

1. Navigate to a programme / project list where you can create a temporary project. If there is no such programme or project list, create it or discuss it with the system administrator.

2. Create the temporary project, based on the project model that best approaches your desired end result.

3. Change the project to match your desired model.
   a. Optionally, add a product breakdown for projects with similar end results.
   b. Add the default management products that are used in your organisation. Use the *blue* products for management products.
   c. Add green project board products to mark decision points, go / no go decisions in your projects.
   d. Set up stages, work packages and add the appropriate (management) products to the stages and work packages.
   e. From the project dashboard, add templates to products.
   f. Add automated reports 128 to your project dashboard.

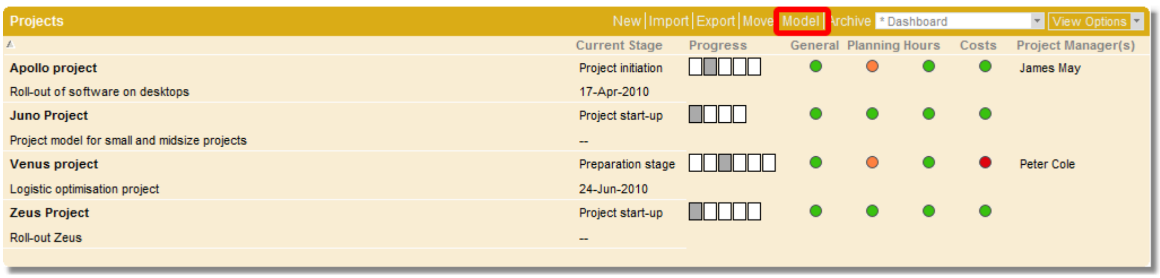
4. When finished editing the project, navigate back to the programme / project list dashboard. Create the project model as described in the next section 80.

5. After finishing the project model, archive and then remove the temporary project.

Notes:
- All operational data in your project will be discarded when creating a project model. So milestone dates, deliverables, issues, risks, changes, quality reviews, cost and hour data will be removed.
- Any data in the project model itself will be copied into the project when you create a project based on that project model, except for any user names in your project.
- After creating a project, there is no link whatsoever between the project model and the project. So if you change any document templates, or automated reports in the project model, this will not affect the project.

3.1.5.2 Creating project models

New project models are always based on existing projects. A system administrator or programme / project list manager can create project models from any project. First select a project by clicking in the row of the project concerned. Use the **'Model'** button available at the programme / project list dashboard, as illustrated below.



Programme Dashboard

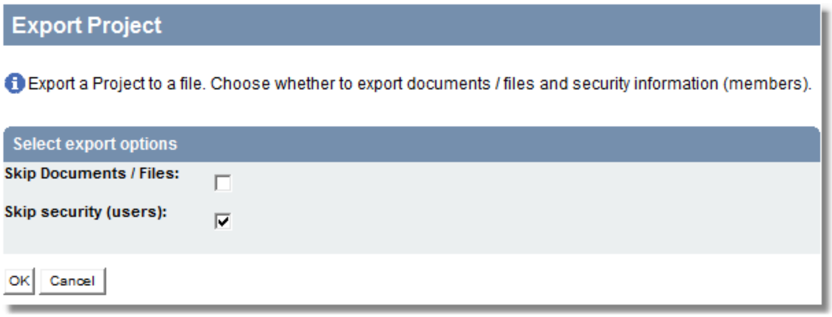
In the dialogue, give an appropriate name to the project model. After choosing **OK**, the project model will appear on the dashboard of the programme or project list underneath the 'Project model listing' header at the bottom of the page.

3.1.5.3 Moving project models

When creating a project model, it will be placed within the programme or project list where it was created. It will be available to the level it was created and - if they exist - any project lists or programmes below that level.

Moving a project model is done by first exporting it and then importing it into the right location. If you want to make the project model available to all programmes and project lists, go to the highest level in the Principal Toolbox and then open the tab 'Models'.

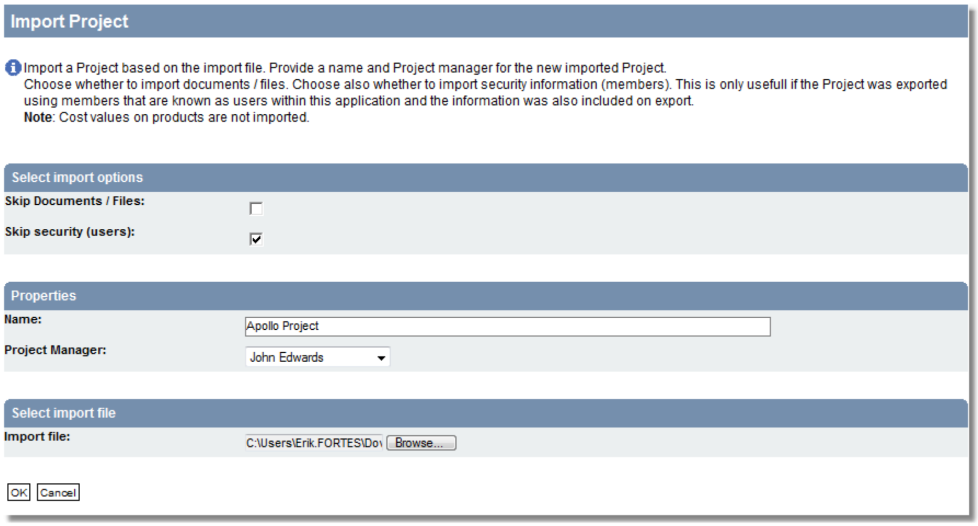
1. Export a project model by selecting it on the project list / programme dashboard. Click **'Export'**. In the dialogue, fill in a name for the project model and optionally a description.



Exporting a project model

2. Navigate to the programme / project list you want to add the project model to. In the 'Project model listing' header, click the **Import** button. Give the name for the project model and a description.

3. Select the manager for the project model from the user list.



Importing a project model

4. Locate the project model file you just saved and import it.

5. If you do not want to have the project model on two locations, navigate back to where you created the model. Archive the project model.

3.1.5.4 Enterprise models

Project models can be created in any project list or programme. The model will be available on the level of the containing programme / project list and on all sub-levels. To make a project model available throughout the Principal Toolbox you can publish it at the so-called enterprise level (the highest level) in the Principal Toolbox.

Two options are available to get the project model at the highest level.

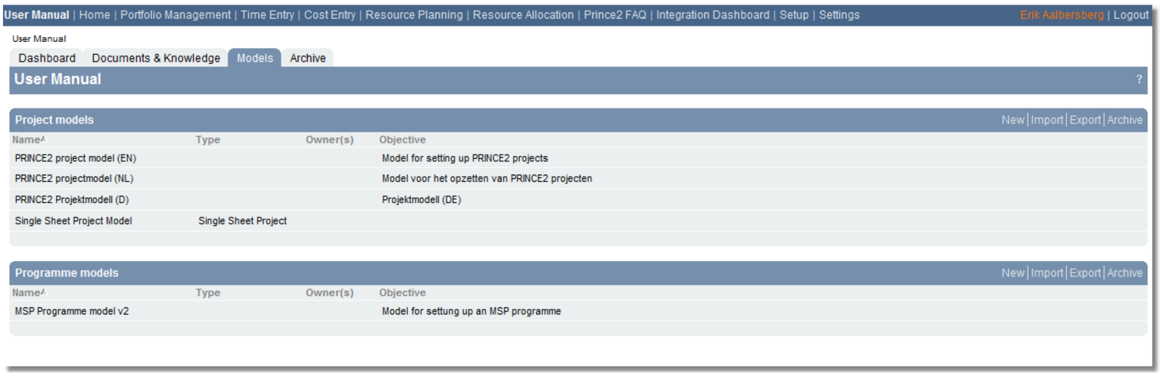
First option

1. The 'new project model' option.
   a. Go to the highest level of Principal Toolbox (enterprise level). Open the tab **Models.**
   b. Click **New** at project model listing.
   c. In the dialogue, define the name and description for the project model.
   In the lower part of the window, select the programme where the project model is located. Then select the project model you want to promote to enterprise model.
   d. Click **OK** and the model is added to the list of enterprise project models. The model is now

available within all programmes of Principal Toolbox and can be chosen when creating a new project anywhere.

Second option

2. With the export / import option.
   a. First export the project model you want to publish. The model will now be saved as a file. Save it at an appropriate location.
   b. Then navigate to the highest level of Principal Toolbox (enterprise level). Open the tab **Models.**
   c. Click **Import.** Choose the project model file and fill in the other fields in the dialogue.
   d. Click **OK** and the model is imported into the list of enterprise project models. The model is now available within all programmes of Principal Toolbox and can be chosen when creating a new project anywhere.



Enterprise models

3.2 Portfolio management (add-on)

The Portfolio Management module enables the collection of initiatives and a subset of an organisation's projects and programmes. Additionally, the module provides functionality to monitor progress of the projects and programmes within the portfolio, and to generate various portfolio related reports.

Various portfolio's can be created, in order to get meaningful collections of related programmes and projects, e.g. a portfolio of projects that have the same sponsorship or all projects that contribute to the same strategic goal(s).

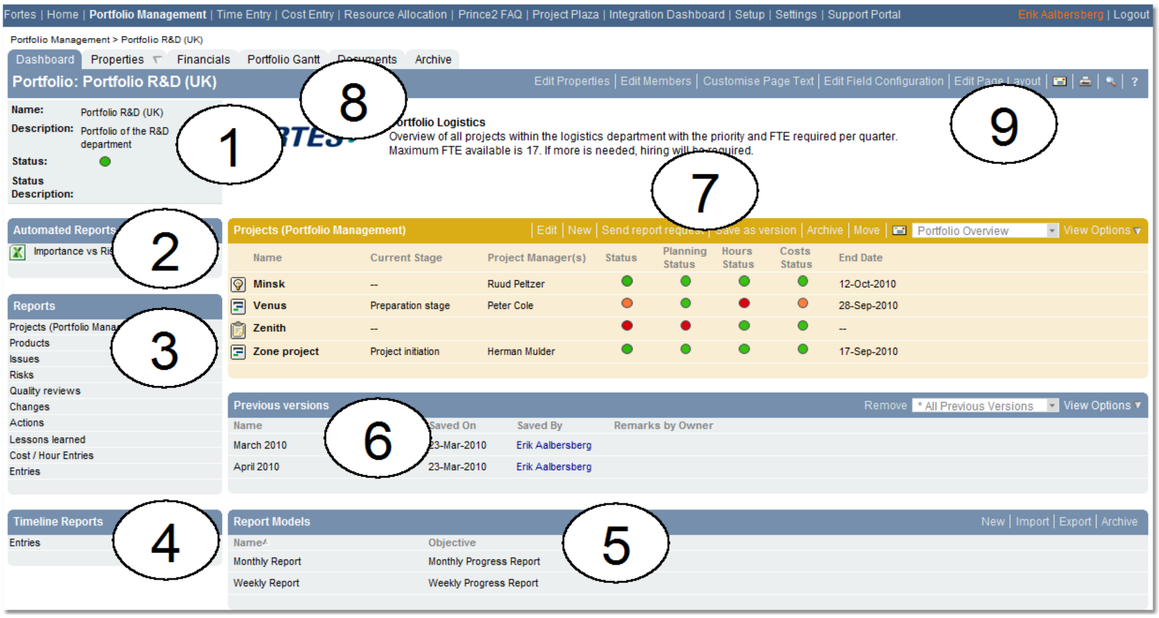
To work with portfolio management, the following activities are of importance:

- Defining new portfolios 84
- Administering portfolios 87
- Managing portfolios 90
- Creating a portfolio model 94

These subjects will be covered in the sections below.

3.2.1 Portfolio dashboard

The portfolio dashboard allows a portfolio manager to group portfolios in providing a clear overview.



Portfolio Dashboard

1. General portfolio properties
   This section displays basic information like, name, description, status and a status description. The information can be edited by the portfolio manager by using the **'Edit Properties'** button.

2. Automated Reports
   Displays a list of the Automated Reports 128 that are available on the selected portfolio.

3. Reports
   Shows the different categories of reports which can be used to show lists of projects, products, issues etc. for the portfolio items contained within the active portfolio.

4. Timeline Reports
   Displays a list of the timeline reports that are available on the selected Portfolio. Timeline reports allow the user to display data over a certain period, like cost information. The horizon and resolution of the table or graph can be set by the portfolio manager.

5. Report Models
   The reporting of project data to the portfolio manager is based on a report model. Each portfolio can have multiple report models to support different reporting cycles, for example: a monthly highlight report and a detailed reporting model for each quarter.

6. Previous Versions
   Lists all the previously saved versions of the Portfolio. This allows the portfolio manager to go back in time and compare the portfolio's status between versions. The latest status of the portfolio is saved by using the button **'Save as version'**.

7. Portfolio item actions
   This bar contains buttons for all the actions that can act on the individual (or a selection of) portfolio items. Some of the actions are **'Save as version'**, **'Send report request'** and **'New'**.

8. Tabs
   Each portfolio contains the same tabs. Which tabs are shown may depend on the organization's license: the presence of some tabs is linked to the availability of a certain module. The purpose of each tab:

   Dashboard : as per the detailed description above.
   Properties : lists all the basic information of the Portfolio, including any custom fields.

Financials : the financial overview tab displays the entered budgets, actual costs and the forecast.
Portfolio Gantt : shows all the portfolio items in a Gantt based on their start and end dates.
Documents : a common repository for all documents relating to the portfolio and their items.
Archive : lists all the archived portfolio items, and allows for items to be deleted or recovered from the archive.

9. Portfolio actions
   This bar contains a number of actions which act on the active portfolio.

   Edit properties : allows for editing the name, objective, the status and status description of the portfolio.
   Edit members : to change who gets full or read access to the portfolio
   Customize Page Text : for customizing the introductory text on the portfolio's dashboard
   Edit Field Configuration : the field configuration determines how data needs to be synchronized between project and portfolio item.
   Edit Page Layout : allows for changing the page layout of the portfolio item, letting the portfolio manager determine what fields are important and in what grouping to display them.

3.2.2 Working with portfolios

3.2.2.1 New portfolios

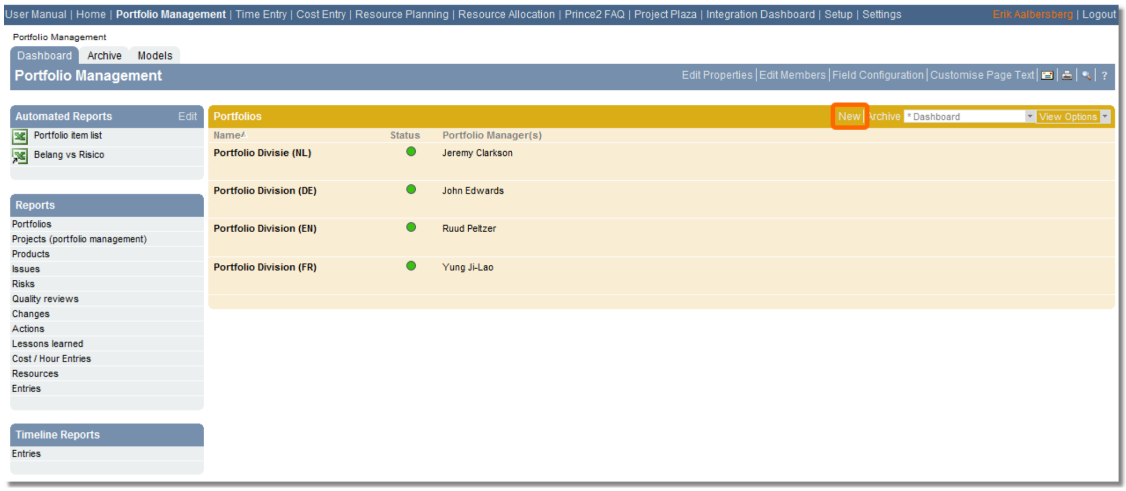
3.2.2.1.1 Defining new portfolios

The portfolio management module allows you to manage your business projects and ideas in portfolios. In order to do this, one or more portfolios need to be defined. For example a portfolio for every business unit or regional department in your organization, or a portfolio could consist of all projects that contribute to a strategic objective of your organization.

Defining a new Portfolio

1. Navigate to the Portfolio Management module in the dark blue header on the top of the screen. In the main window the Portfolio Management module is displayed, with three tabs: “Dashboard”, “Archive” and “Models”. The tab “Dashboard” is opened by default.

2. Click **New** to define a new portfolio. A popup window will appear in which de details of the new portfolio can be entered.



Portfolio Management module

3. Click **OK**. You will now return to the Portfolio Dashboard where all Portfolios are listed, including the new Portfolio you just created.

3.2.2.1.2 Portfolio items

When opening the Portfolio Management module, which is found in the top blue bar at the top of the screen, an overview of all portfolios is shown. Click on the name of one of the portfolios to open it.

A portfolio contains portfolio items of which there are various types:

- **Initiative**: a business idea that may well be turned into a project in the future
- **Single Sheet Project**: a simple type of project without detailed plan
- **Project**: a standard project with a plan, which is managed using the project management side of the Principal Toolbox

A portfolio item can be used to store management information like the budget, information about resources, planning information, and the goals of the project. How to create a portfolio item is explained in this section: Creating portfolio items 85.

Each type of portfolio item has its own icon:

Initiative: 

Single Sheet Project: 

Project: 

The projects or initiatives can be represented by a project sheet. Please refer to 'Defining a project sheet' for more information about project sheets.

3.2.2.1.3 Creating portfolio items

From inside a portfolio, new Ideas, Single Sheet Projects and regular Projects can be created which become part of that portfolio. A regular Project that is created and started from a Portfolio will automatically appear as a project on the Project Management side of the Principal Toolbox. However, a Project that was started from the Project Management module, will not automatically be associated with a Portfolio. To put a link in place between an existing Project and a new Portfolio item, please refer to 'Modifying the project reference' 88.

When using the Portfolio Management module it's good practice to always create and start projects from within a Portfolio. This way it's guaranteed there's always a link between each Portfolio item and its corresponding Project.
This way of working can be enforced by the Principal Toolbox. By enabling this setting it will prevent

any project from starting without having been assigned to a portfolio.

To enable this setting:
1. Enter **Setup** and underneath settings click on **Principal Toolbox**
2. Change the setting 'Projects can be started from within portfolios only' to **Yes**

Next follow detailed instructions on the various ways projects and initiatives can be created and started.

Creating an Initiative

1. Open a portfolio and click on **New** to create a new entry in the portfolio.

Starting a project on the portfolio

2. Enter a name for the Portfolio Item, and the objective and remarks (optionally).

3. Assign a **project manager** to the new portfolio item (in case the portfolio item is converted to a project later on, the project will be automatically assigned to the project manager specified here).

4. **Do not start a project**: an Initiative is just an idea without an actual project being underway.

5. Click on **OK** to create the portfolio item.

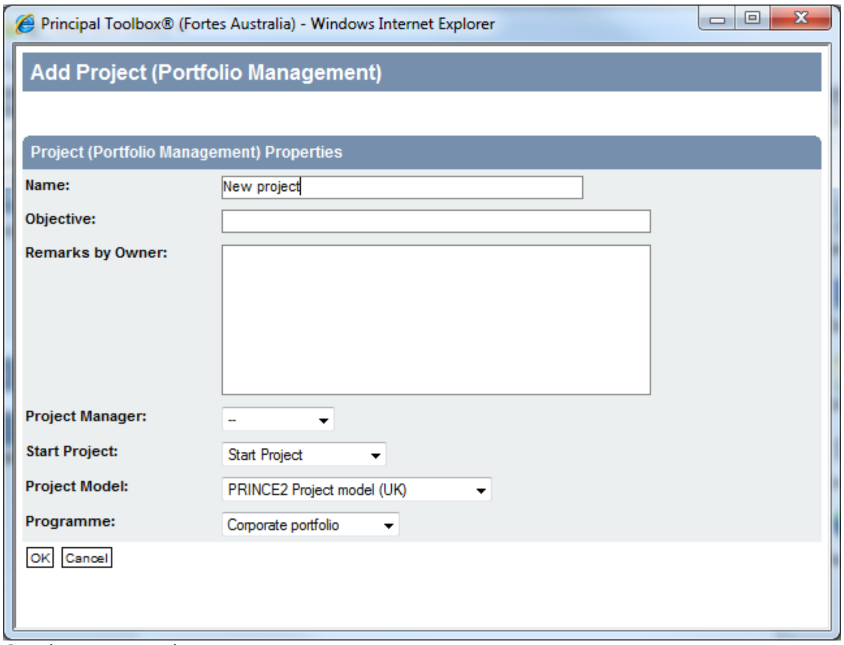
> ***Note:*** *in case an existing Project needs to be associated with the newly created Initiative, then please follow the steps above followed by the instructions in Modifying the project reference* 88
> .

Starting a Project when creating an Initiative

1. Follow the same procedure as when creating an Initiative (see above), but choose for **Start Project** when entering the details.

2. Next, choose the Project Model the new project should be based on, and choose a Programme the new project will be made part of.

3. The new project will automatically appear within the Project Management module. The Project Manager will have full access to the new project and can start entering a plan and team members as required.



Starting a new project

> ***Note:*** *The newly created project will appear in the Project Management Module of the Principal Toolbox. It will be assigned to the project manager (as chosen when creating the Initiative) and is associated with the portfolio item.*

Starting a Project from an existing Initiative

1. Open the portfolio item (initiative) and click on the button Start Project to start a project

2. Choose which Project Model to use, and in which Programme the project should be created

3. After pressing **OK** the Project will be created. The icon of the portfolio item will have changed from in to depicting that the Project has started.

Starting a Single Sheet Project

1. To create or start a Single Sheet Project one follows the same procedure as when starting a regular Project, but when selecting the project model specifically choose the Single Sheet Project model.

2. Then choose the programme in which to create the project and press **OK**

3. The Initiative is now associated with a Single Sheet Project that is also visible to the Project Manager from the Project Management module.

> ***Note:*** *the Single Sheet Project model is a simplified version of the regular project models.*

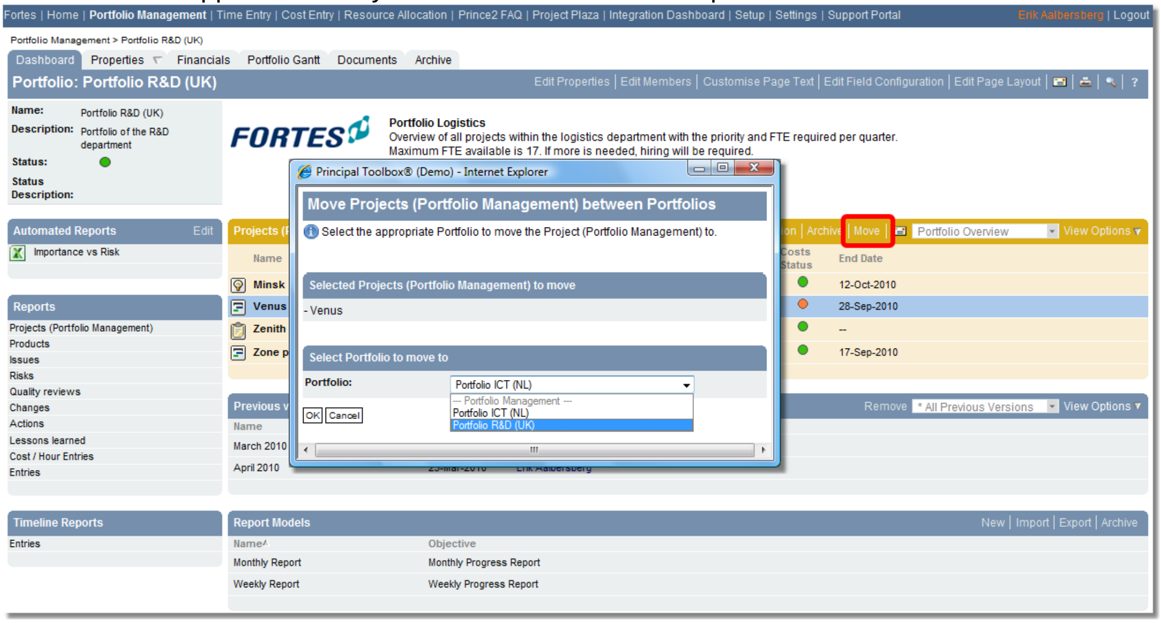
3.2.2.2 Portfolio administration

3.2.2.2.1 Moving portfolio items

Portfolio items, whether they're Initiative or Projects, can be moved between Portfolios. This is achieved as follows:

1. Inside the portfolio that contains the item that needs moving, highlight the portfolio item and press **'Move'**.

2. The window that appears allows you to select the destination portfolio.



Moving a project

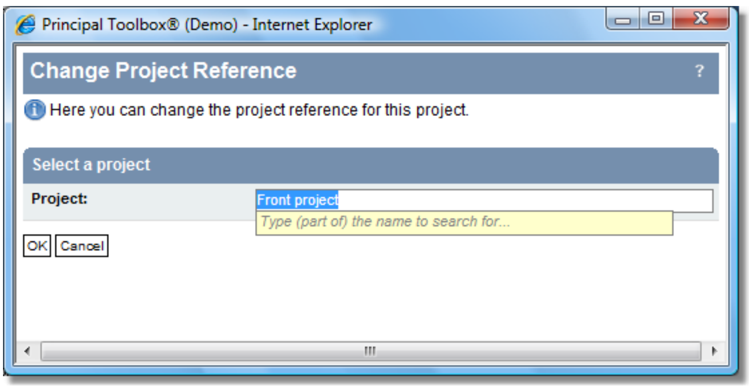
3.2.2.2.2 Modifying the project reference

Projects that are underway but have not been assigned to a portfolio, are not visible from the Portfolio Management module. They can be added to a portfolio by creating a new portfolio item and manually link it to the existing project. Follow these steps to establish the link:

1. Open the portfolio item (initiative) and click on the button |Edit Project Reference|

2. Select the project that the portfolio item needs to be linked by typing the first few characters and choosing the correct one

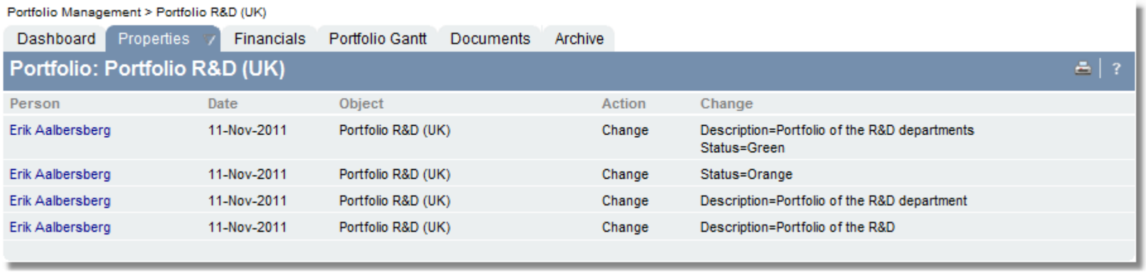
3. Click '**OK**' to establish the link



Editing the project reference

3.2.2.2.3 History log

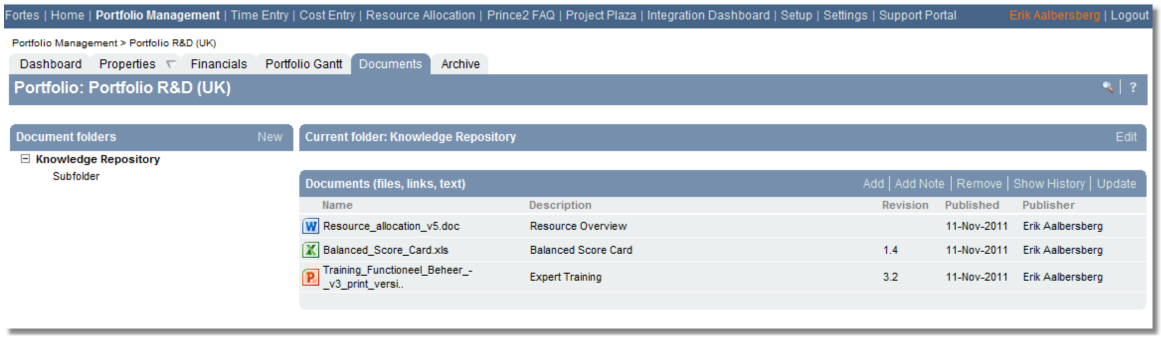
One of the tabs off the dashboard of each portfolio item is labeled **History**. On this tab a history is recorded of all changes that have been made to the portfolio item through time. It makes it possible to check who made which changes when.



Historie Tab on a portfolio item

3.2.2.2.4 Portfolio documents

Documents can be attached to the portfolio items or to the portfolio itself. The latter may be useful in cases where the document is applicable to all (or most) portfolio items.



Documents on the portfolio

To attach, update or remove documents from the portfolio, navigate to the Documents tab from the portfolio dashboard. This will open the document library and show all the documents stored within the Portfolio. Where each portfolio has a library, the Enterprise level also has a library which can be used for centrally storing documents.

For more information on document management with the Principal Toolbox, please refer to Document management and approval 63.

3.2.2.2.5 Portfolio archive

A portfolio and each individual items can be archived by pressing the button **'Archive'**. Those portfolios or portfolio items that are selected when pressing Archive will be moved from the active list in to the archive.

The archive and all the archived items are accessible through the Archive tab on the dashboard. The archived portfolios and items can be restored from the archive when required.

Please be aware that archiving a portfolio or one or more of its items does not also archive the projects that are associated with them. If the projects need to be archived as well, this needs to be done from the Project Management module.

3.2.2.2.6 Versioning

To keep a record of historic portfolio data, the Principal Toolbox allows the user to make a snapshot of a portfolio in time. By doing so, the current version of the portfolio is kept and at a later time, it can be compared to other snapshots or to the current version of the portfolio.

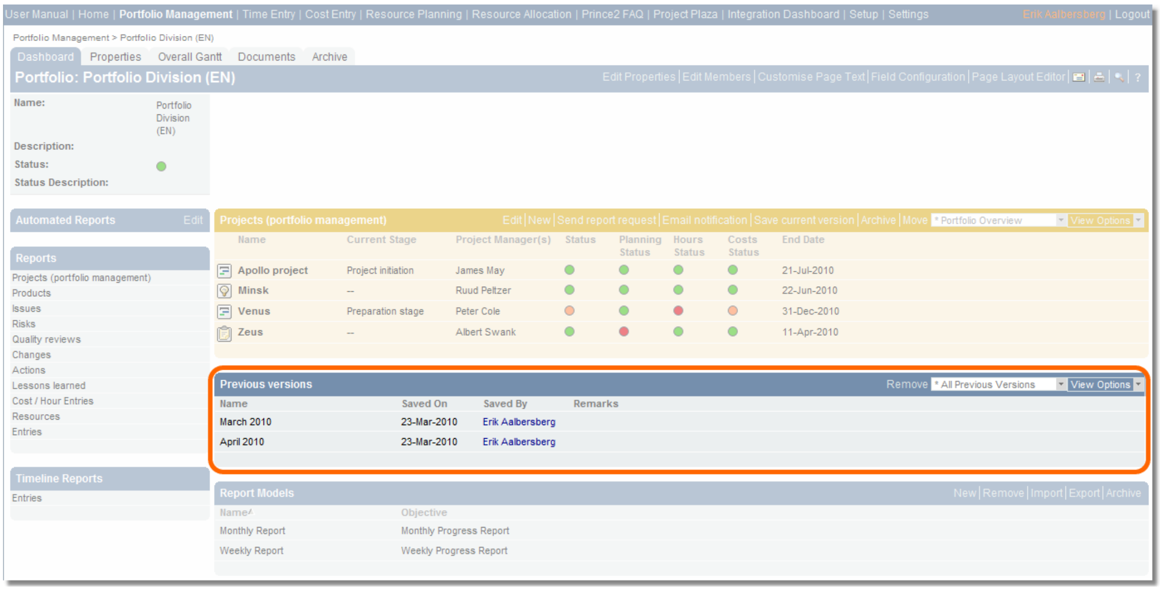
Creating a snapshot

1. Open the dashboard of the portfolio

2. Use the **'Save as version'** button to create a snapshot of all portfolio items within the portfolio

3. Give the version a name and optionally some notes and press **OK**.

The stored versions of the portfolio are displayed on the dashboard under the 'Previous versions' section. A saved version can be opened and referenced by clicking on its name.



The 'Previous versions' section on the portfolio dashboard.

***Note**: it is possible to generate reports based on data of previous versions of portfolios. That way it is possible to compare and analyze the data through time.*

3.2.2.3 Managing a portfolio

3.2.2.3.1 Generating reports

To keep on top of all projects and items within the portfolio, various reporting capabilities are available.

- **Automated reports:** these are reports based on Excel or Word. The reports allow for flexible and powerful ways of extracting and summarizing information about the portfolio. Please refer to Automated Reports 128 for more information on setting these type of report up.
- **Reports:** these type of reports are contained in the Principal Toolbox and can be used to show table structured overviews of the different entities in the tool, for example products, risks, issues or cost entries.
- **Timeline reports**: displays an overview of data across a period of time. For example the costs per month over the duration of the project, or the number of hours a resource has been allocated to the project for the next period. More information on setting up timeline reports can be found in Timeline reports 147.

3.2.2.3.2 Requesting reports

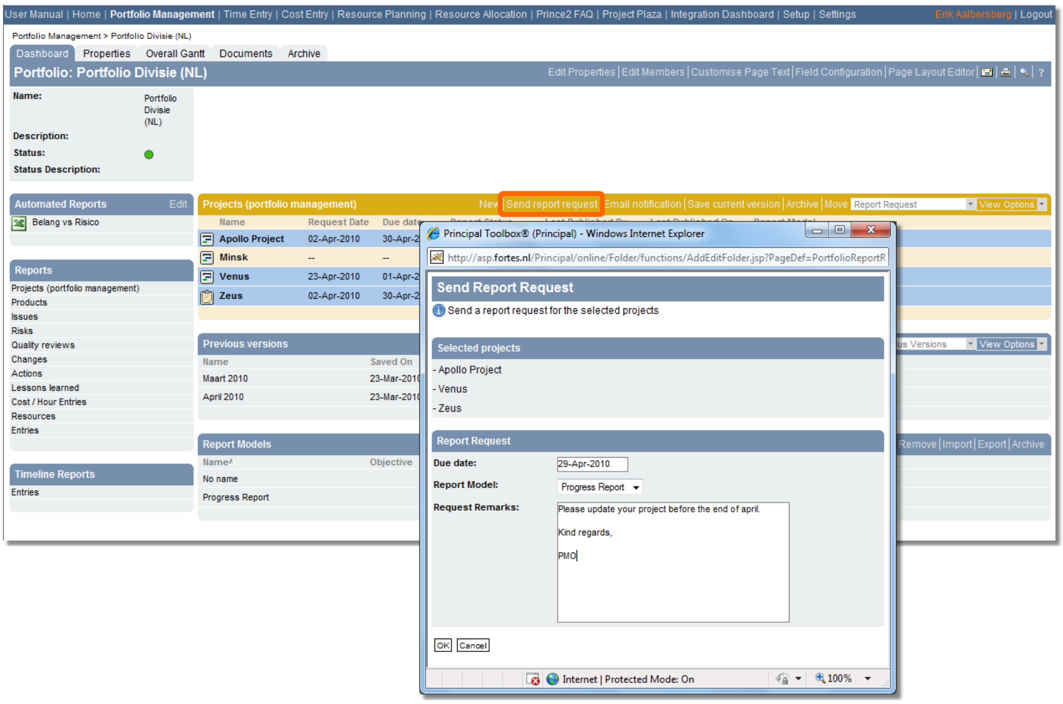
The Portfolio Management module allows one to introduce a periodic reporting cycle. The report is requested from the Portfolio side and appears on the project where the project manager can fill it out. Once the Project Manager publishes the report, it updates the information within the portfolio which allows the portfolio manager to stay up to date with the project status. For setting up such a report model, please refer to the section 'The reporting model 95'.

When a report model has been set up, it can be used to request status information on the projects that are part of the portfolio.

Requesting a report
To send a reporting request to the project manager, please follow these steps:

1. In the opened portfolio, select one or more projects (portfolio items linked to projects). Selecting more than one project at a time can be achieved by using the shift or control button while selecting. Once selected, press the **'Send report request**' button. A window will appear in which the report properties can be chosen.

2. Specify the due date for the report, followed by the report model it should be based on, and if required, send some additional instructions or remarks with the report request.

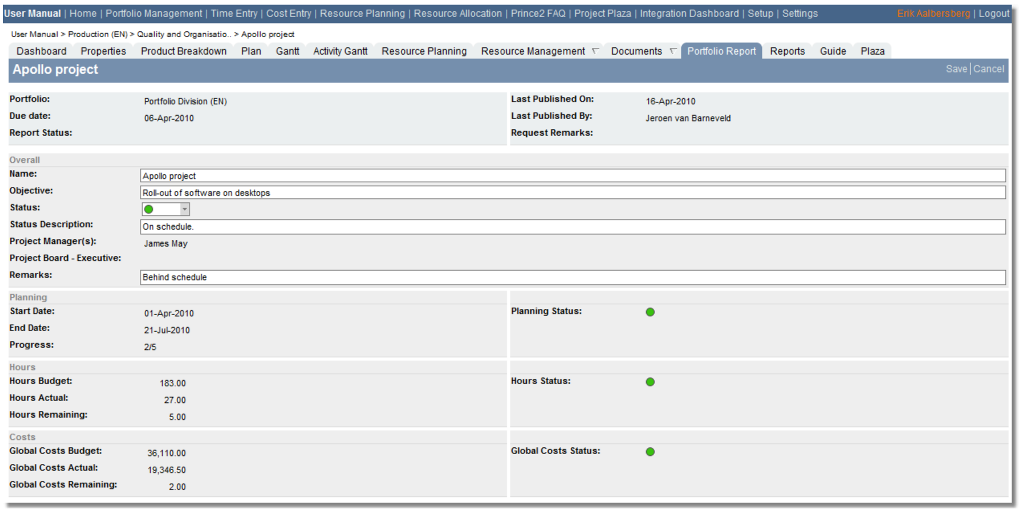


The report request will be send to the selected projects

3. If required, the project manager can be send an additional email as a notification that a report request has been submitted. To have an email sent, just tick the box **'Send notification by e-mail'** .

Writing and submitting a portfolio report
Once the report request has been submitted, the report itself will appear on the **'Portfolio Report'** tab of the project. To fill the report out, the project manager follows these steps:

1. From the project dashboard, the project manager opens the **'Portfolio Report'** tab and presses the **'Edit'** button.



The portfolio report can be filled out by the project manager, after which it can be submitted to the portfolio manager

2. The project manager then fills out all the fields that are editable. Not all fields will be editable: some may be automatically calculated, like financial information.

3. When done, the project manager presses the **'Save'** button, followed by the **'Publish to Portfolio'** button.

Monitoring the report status

From the portfolio, the portfolio manager can monitor the status of the report requests that were sent out. (Note: it may be necessary to add the field 'Report Status' as a column to the active view on the dashboard).

The status of the latest report request is identified by these icons:

Report request pending; hasn't been submitted yet

The report request was received and the report has been submitted

Report request pending; report submission is overdue

As soon as a portfolio report has been submitted by the project manager, the data on the portfolio item is updated with the latest data as provided by the project manager.

The dashboard shows the status of the report request

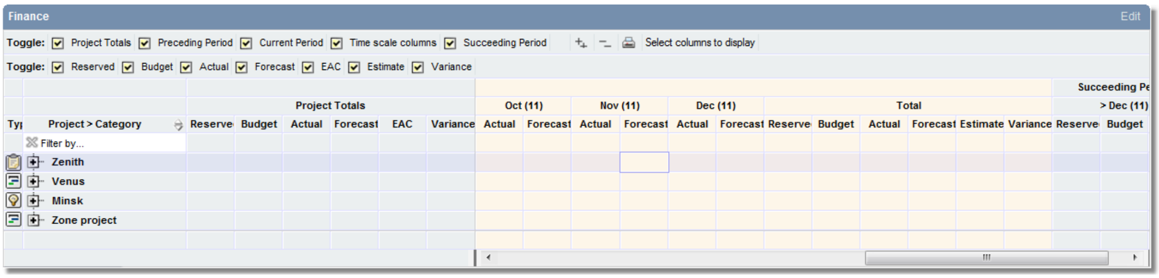
3.2.2.3.3 Financials

Each portfolio can be used to generate financial overviews based on the individual portfolio items. The financial overview gives insight into budgets, actual and committed costs, and the latest financial forecasts. The financial overview is found in different places within the Principal Toolbox. These are:

- The 'financials' tab on each portfolio item
- The 'financials' tab on each portfolio, which gives an overview of all portfolio items contained in the portfolio

- The 'financials' tab on the portfolio report, which is found on the project once a report has been requested (it's the information entered here that's used to populate the tabs on the portfolio and its items).

The financial overviews can be configured in many ways to suit different needs. Please check 'Financial configuration' 98 for more details on how to configure the financial overview.



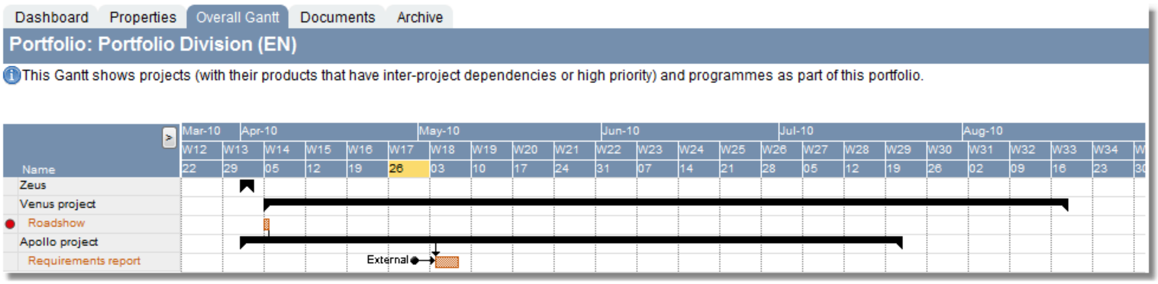
The financials overview on the portfolio

3.2.2.3.4 Notifications

Email notification 
Use this button to send an email to the project manager of the project from within the portfolio. For example, this could be used to remind the project manager to fill out the pending portfolio report.

3.2.2.3.5 Portfolio Gantt

Each portfolio dashboard contains a tab 'Portfolio Gantt'. The Gantt chart shows the start, end-date and duration of all portfolio items within the portfolio.



The portfolio Gantt

Using the Gantt, dependencies between portfolio items can be defined. In order to do so, follow these steps:

1. Press the **'Edit'** button

2. Click and hold the button down on one of the bars.

3. Then drag the cursor to one of the other bars to make an arrow appear.

4. Drop the arrow onto one of the other bars to create the dependency.

> ***Note**: to remove a dependency, right-click on the arrow and choose one of the 'disconnect' options that appear.*

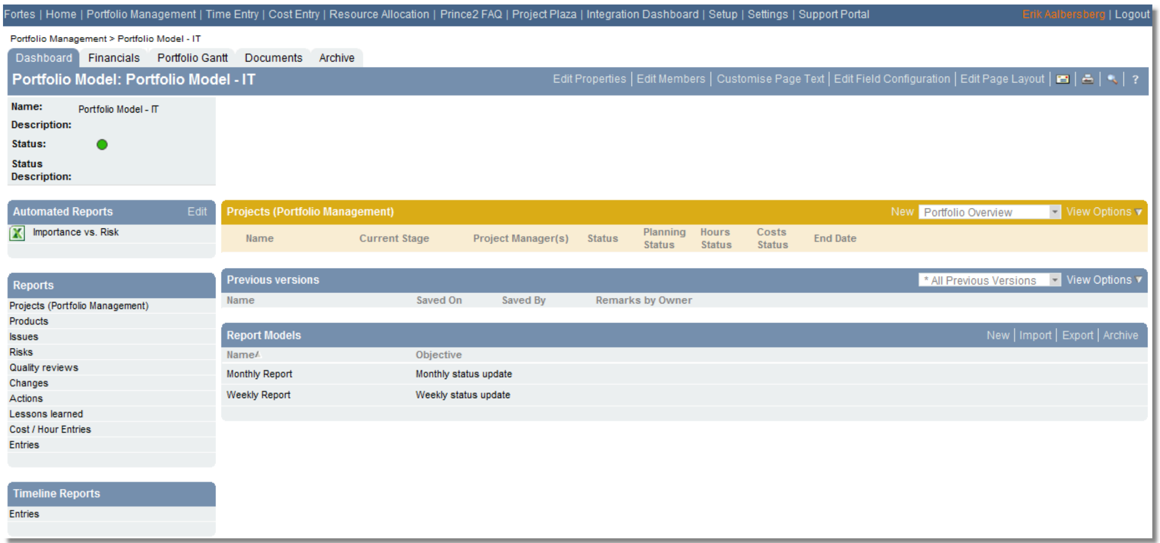
From within the Gantt, the start and end date of the portfolio initiatives (not currently active projects) can be changed as well. Just click on the start or end of one of the bars, and drag it to the required date. The same can be done by entering the dates on the left-hand side in the date fields.

3.2.3 Portfolio model

Each portfolio can be based on a portfolio model. Using a model ensures portfolios are configured in one (or more) identical ways.
Items which are part of the model:

- The page lay-out of the portfolio items
- The reporting model
- The automated reports (please see Automated reports 128 for more information)
- The field configuration
- The financial configuration

> ***Note**: all of the above items can also be set on each individual portfolio after it has been created*



Example portfolio model

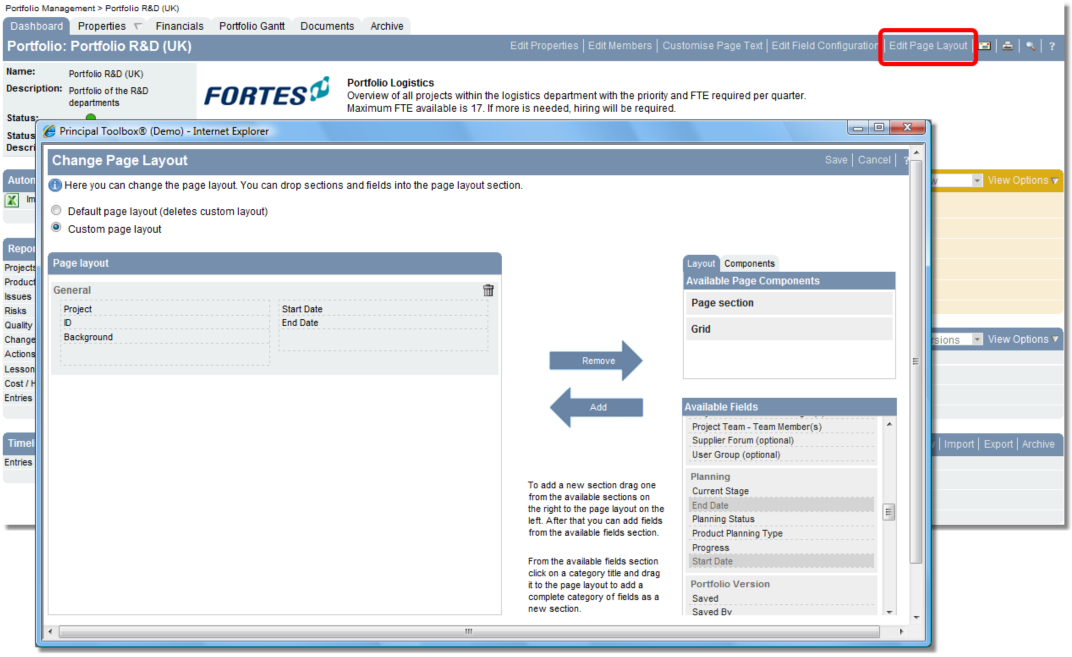
3.2.3.1 Defining a project sheet

The page lay-out of the project sheet, which is shown when opening a portfolio item, can be customized for each portfolio or portfolio model. The project sheet can be used in displaying the basic project or initiative properties, including custom fields and status information. The page lay-out is defined by:

1. From the Portfolio Management dashboard, open a portfolio model or one of the existing portfolios.

2. Press the button **'Edit Page Layout'**.

3. A new windows opens of which the left-hand allows for defining the layout, whilst the right-hand side contains a list of all fields and properties that can be dragged onto the layout side.



Editing the page layout

3.2.3.2 The reporting model

Portfolio reports allow one to define a reporting cycle which allows data to be published from project level to the portfolio. To allow for this cycle to take place, a reporting model needs to be defined which specifies what information needs to be captured.

Creating a new reporting model

Each portfolio can contain multiple reporting models. Each model can be used for different reporting cycles. For example, one model could be used for a monthly reporting cycle and another one, more detailed report, for a quarterly cycle.

To create new reporting model, follow these steps:

1. From within the portfolio model (or from an existing portfolio), press the button **'New'** which is located in the header bar 'Report Models'.

2. In the new window that appears, enter a name and an objective for the new reporting model.

3. Press **'Save'** to save the new reporting model.

Configuring the reporting model

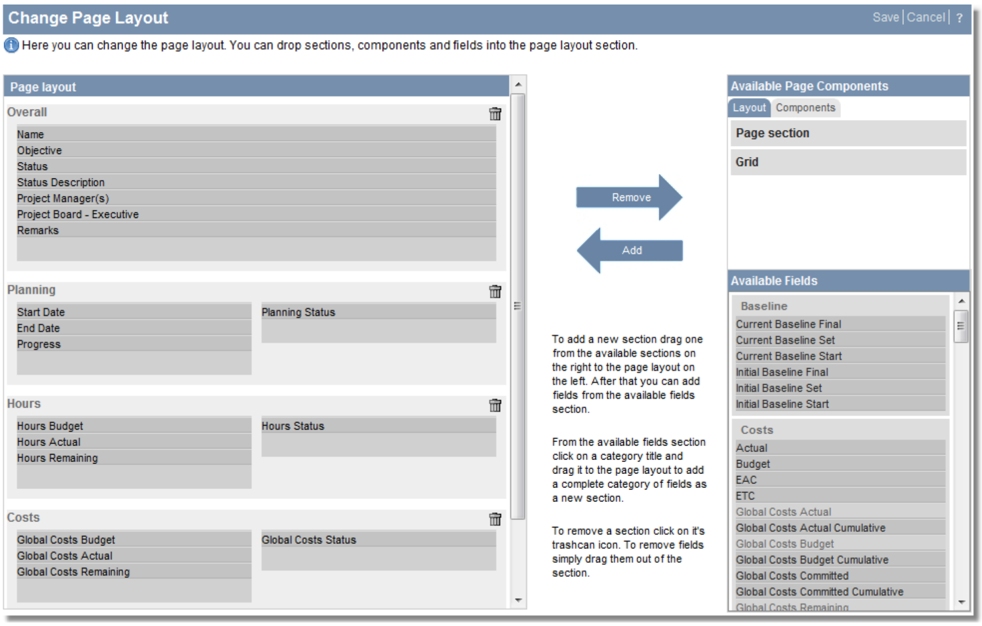
The newly created reporting model uses some default settings. To customize the data that is to be captured follow these steps:

1. From within the portfolio model (or from an existing portfolio), click on the name of the reporting model that needs configuring.

2. Click on **'Model configuration'** and select the sections that are to be used in the report (property section and / or finance section).

3. The 'Properties' section can be configured by pressing the **'Edit Page Layout'** button.

4. The new window that appears contains three sections: the new page layout (left-hand side), the layout components (right-hand side, top half), and a list of the available fields and properties (right-hand side, lower half). The page components and fields situated at the right-hand side can be dragged over the the left-hand side to build a custom page layout to be used in the reporting model.



By dragging fields and page components from right to left, a new page layout can be defined.

5. Press the **'Save'** button to save the new page lay-out

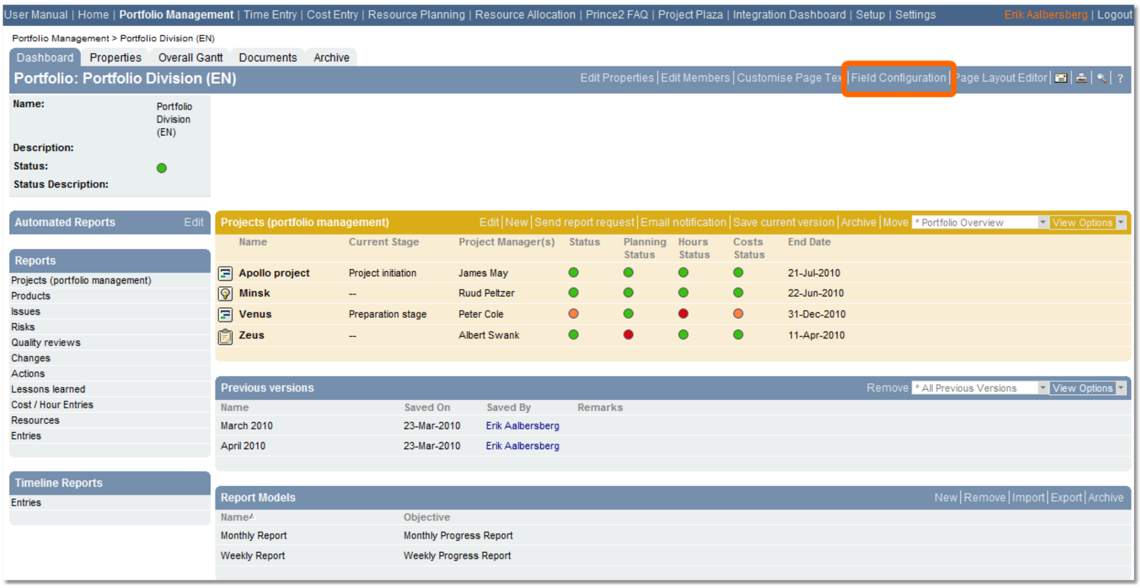
6. Besides the 'Properties' section, the 'Finance' section can be customized separately. Please refer to 'Financial Configuration' 98 for more information.

3.2.3.3 Field configuration

Fields and properties which are used on the project sheet to show information about the portfolio item are not automatically linked to the corresponding fields on the project. It is possible to set the behaviour between these fields using the 'Field Configuration' button. Customizing the behaviour between fields is mostly applicable to custom fields, although it can be changed for some pre-defined fields as well.

Custom fields are added at project level and automatically appear on the Properties tab of the project and the project sheet of the portfolio items (unless a custom page lay-out has been defined, which means they have to be manually added). Although the fields at project and portfolio level appear to be the same, since they're carrying the same name, their behaviour and therefore content may differ.

The behaviour of these fields is defined within the portfolio or on the portfolio model.



The button 'Field Configuration' is found on the portfolio or the portfolio model, as highlighted above.

The following behaviours can be set for both the project and portfolio fields:

- Fields can be made available or be hidden
- Fields can be made editable or read-only
- Synchronization can be set: either off, or one-directional from project to portfolio or the other way
- Or the fields can be set based on a customized calculation (behaviour set to 'custom')

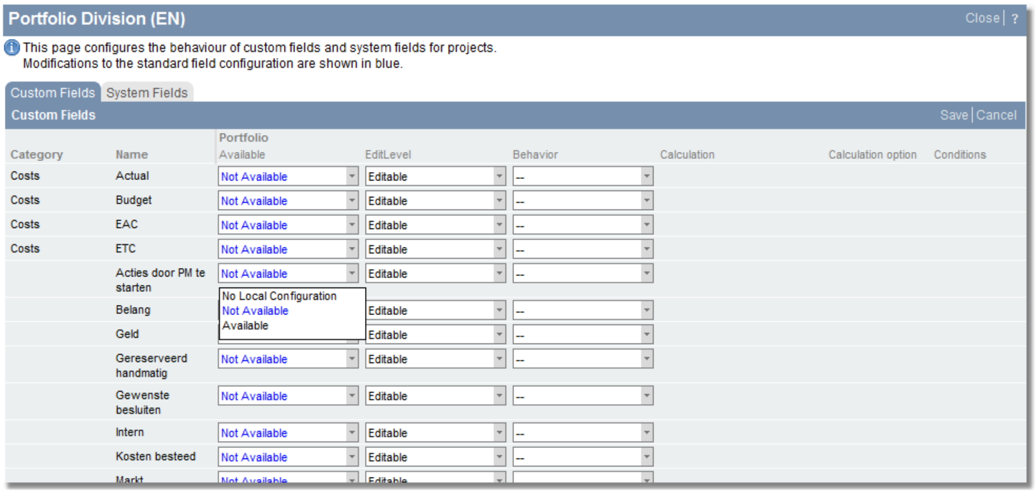
> ***Note**: Synchronization only works one way! It's either synchronized from project to portfolio or from portfolio to project, but not both ways.*

> ***Note**: Only use 'custom' behaviour when told to by Fortes Solutions.*

Changing the field configuration

1. From within the portfolio model (or an existing portfolio) press the button **'Field Configuration'**. A new window will appear which contains a list of all project and portfolio fields and their behaviours.

2. Press **'Edit'** to change the settings of the fields.



Field configuration

3. Choose one of the following combination of options on the project or portfolio side:

Settings	Options	Resulting behaviour
Available	No Local Configuration	No configuration applicable
	Not Available	The field will not be available for use at portfolio and / or project level
	Available	The field will be available for use at portfolio and / or project level
Edit Level	No Local Configuration	No configuration applicable
	Not Editable	The field is not editable at portfolio and / or project level
	Editable	The field will be editable at portfolio and / or project level
	Editable before project start	The field will be editable at portfolio level up until the moment the corresponding project has been created (this option is only available on the portfolio side)
Behaviour	No Local Configuration	No configuration applicable
	Synchronized	The field will be synchronized from portfolio to project level, or the other way around (one way only)
	Synchronized after project start	The field will be synchronized from project level to portfolio level as soon as the corresponding project has been created.
	Custom	The behaviour of the field is defined by a custom calculation as provided by Fortes Solutions

4. Press **'Save'** to save the altered field configuration.

3.2.3.4 Financial configuration

Within the portfolio, the individual project sheets, and within the portfolio report on the project, financial overviews can be shown and filled out. The financial overview displays budgets, actual and committed costs, and a forecast.

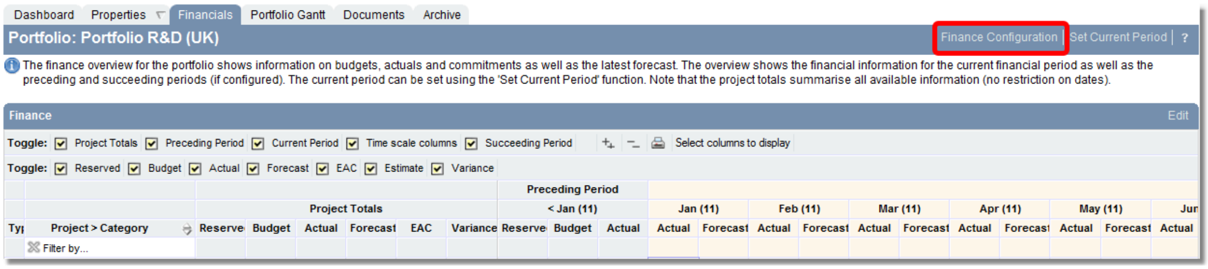
The following items of the financial overview can be configured to suit different needs:

- The behaviour and the resolution of the fields Budget, Actual, Committed and Forecast.
- The financial period that should be displayed (current period, previous period and the period following the current one)
- The financial categories that should be displayed
- Other display options

Configuration

1. From the Portfolio Management dashboard, open a portfolio model or one of the existing portfolios.

2. Open the 'Financials' tab and press the button **'Finance Configuration'.**



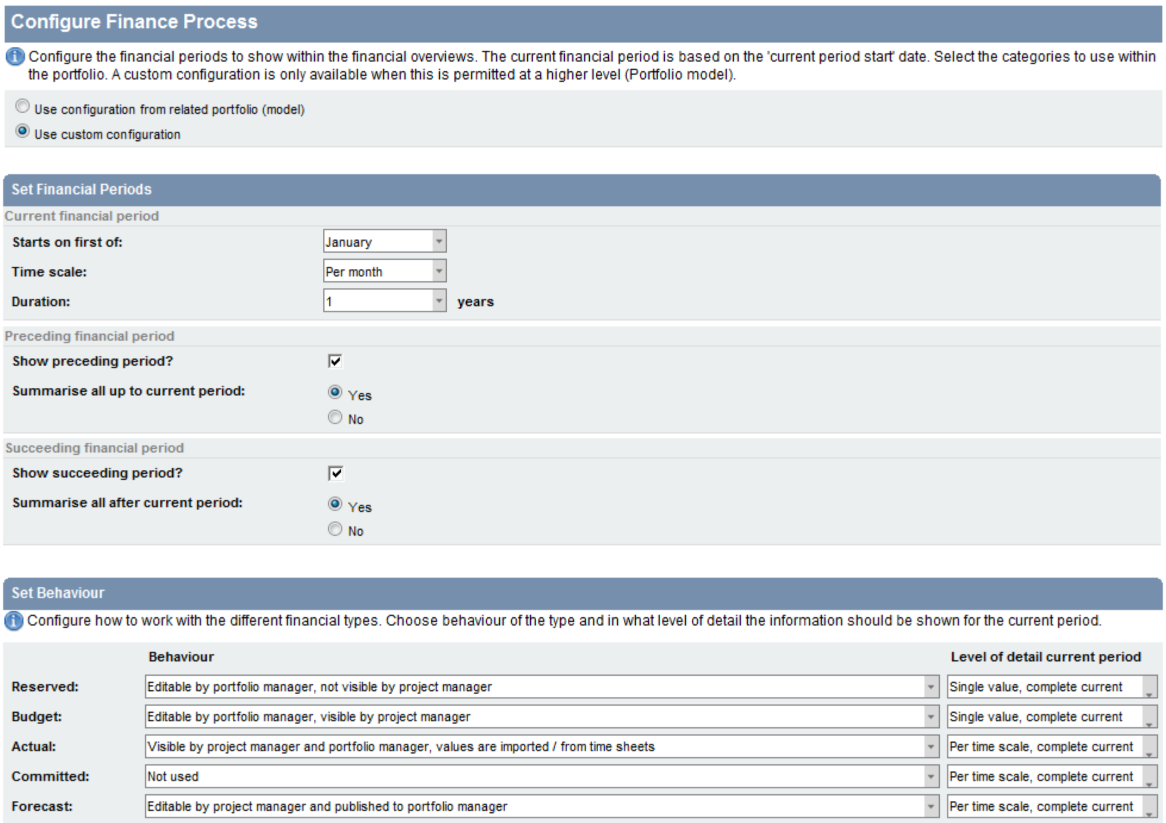
Finance Configuration

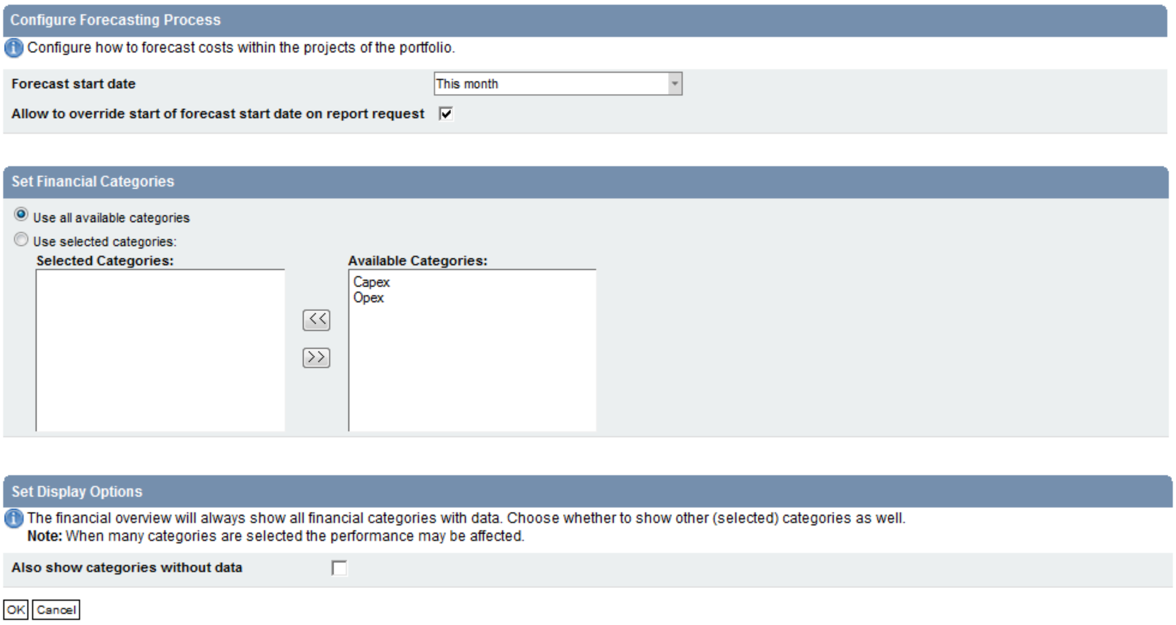
3. The window that opens allows the financial configuration to be changed

4. Select **'Use custom configuration'**, which will bring up more settings

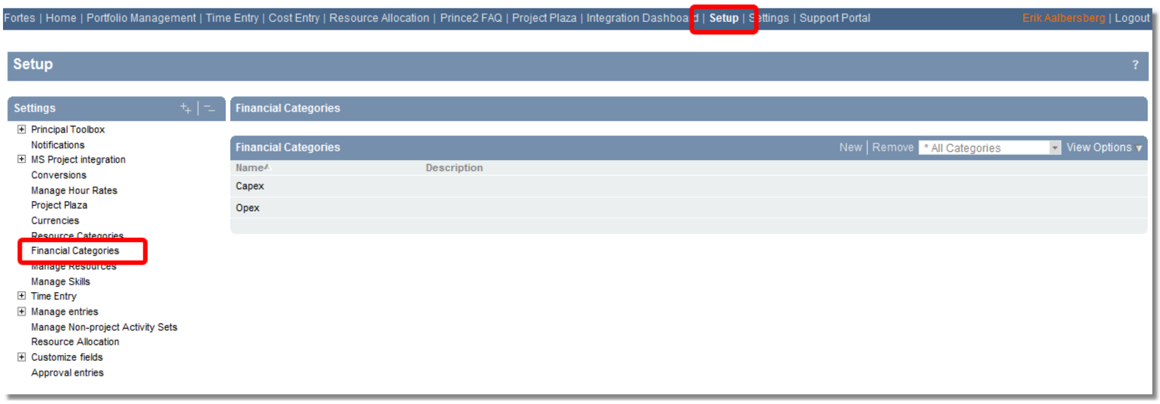
5. The following items can be configured:

Financial periods	:	Set the current financial periods, and whether to show the preceding and / or next financial period
Behaviour	:	Change who can edit which fields at which point in the process
Forecasting process	:	Define which part of the period should be displayed for forecasting purposes
Financial categories	:	Determine which financial categories will be available for use
Display options	:	Choose whether to show financial categories which have no data attached





6. Adding new financial categories is done from the **'Setup'**, in the 'Financial categories' section. This can only be done by an administrator.



Creating financial categories

3.3 Resource Allocation (add-on)

Resource Allocation supports the process of planning and managing resources on projects. The process can be carried out in different ways:

- Resources are requested at project level
- Resources are requested at product level
- Or a hybrid option: both at product and project level

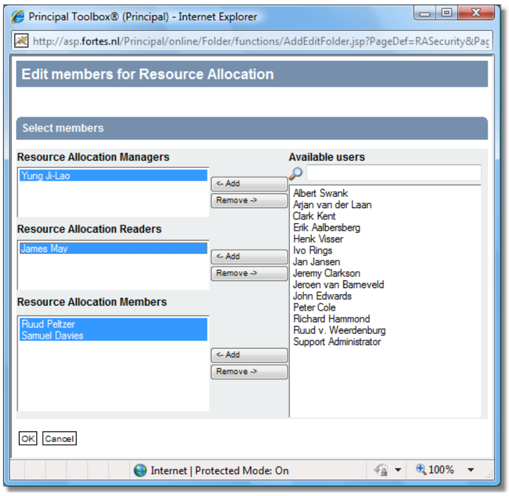
Two roles are associated with this process:

- The **project manager** can request resources to staff his or her project. Resources can be requested as skill, or, if the project manager has a specific preference, as 'named' resources.

- The **resource allocation manager** (or '**resource manager**' for short) is the manager of one or more resource pools. As such, the resource manager registers resources, resource availability and resource skills. Furthermore, the resource manager manages resource requests from project managers by allocating resources to specific projects.

How to set up a resource pool, the resources, skills and the availability of the resources, is explained below.

Note: *A user can be given resource manager rights in Principal Toolbox by an administrator. To do so, navigate to the Resource Allocation module and click on Edit Members.*



Edit members for Resource Allocation

3.3.1 Managing a resource pool

A resource pool and pending resource allocation requests are managed by a resource allocation manager.

1. Navigate to the resource pool that you would like edit.

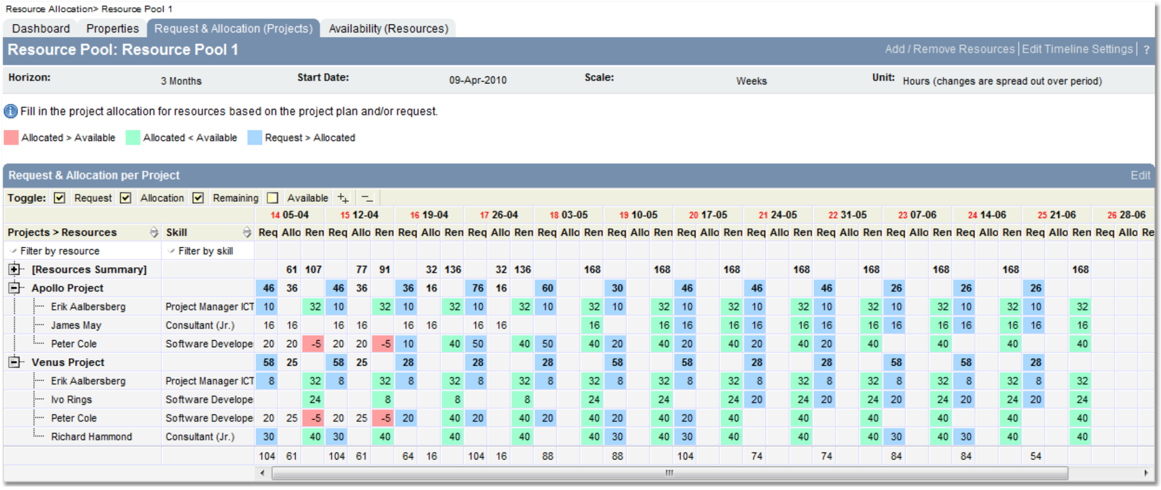
2. Navigate to the “Resource Allocation” tab. In the “Request & Allocation” section, a grid is shown with requested, allocated, remaining and available hours per period for each resource.

   The cells in this grid are color coded to provide a quick overview:

   - **Blue cells** indicate resource requests that are not yet (fully) fulfilled with allocated resources.

   - **Green cells** indicate remaining hours that can be allocated to projects or non-project related activities.

   - **Red cells** indicate over-allocation of a resource in a specific period.



Overview of the entire resource pool

> ***Note:*** *The columns with planned, requested, and allocated hours can be toggled on and off by checking or unchecking the checkboxes directly underneath the header of the Request & Allocation section.*

> ***Note:*** *If needed, the timeline setting of the grid can be edited. To do so, click on* ***Edit Timeline Settings****. Set the horizon and start date according to your preferences.*

3. Click **Edit** in the header of the “Request and Allocation” section to change allocation details of resources to various projects.
   Click on the ‘**+**’-sign in front of a project to expand that project and look at the details per resource. Alternatively, click on the ‘**+**’-sign in front of the top row “[All resource]” to view all resources in the resource pool without sections per project.

4. To allocate a resource, or change an existing allocation, edit the values in the “Allocated” columns for each resource per period.

> ***Note:*** *In case of a requested skill instead of a specific ‘named’ resource, first select the resource with the requested skill as primary or secondary skill that you want to allocate before entering the allocated hours.*

5. Click **Save** to save your changes. This will automatically send new or changed allocation details to the appropriate Project Managers.

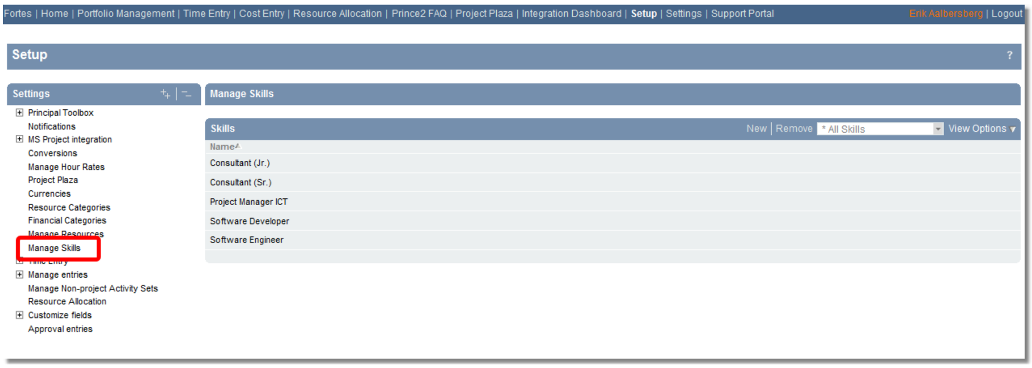
3.3.1.1 Setting up a resource pool

Before you are able to request and allocate resources you will have to define one or more resource pools. To do this, you will have to define skills and then appoint these skills to resources. After you have done that, you can add resources to a resource pool.

Adding, removing and editing skills

In order to be able to define resources and their skills, a set of skills needs to be defined first. Skills have to be defined only once and can be used for multiple resources and resource pools. This allows you to report on skills over multiple resource pools.

1. Navigate to the **Setup** in the dark blue header on the top of the screen.
   On the left-hand side of the screen you'll find many options including '**Manage Skills**'.

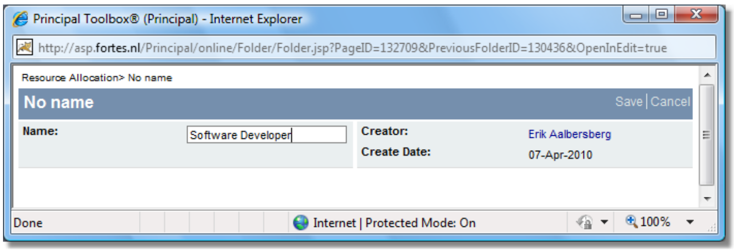


Manage Skills at Setup

2. To add a new skill: Click **New** to add a skill (a popup window will appear in which the name of the new skill can be specified)

3. To remove previously defined skills: Select a skill (or select multiple skills by using the ‘Control’ -key) and click **Remove**.

4. To edit previously defined skills: Click on the name of the skill to be edited (a popup window with the skill details opens). Click **Edit** to edit the skill name.

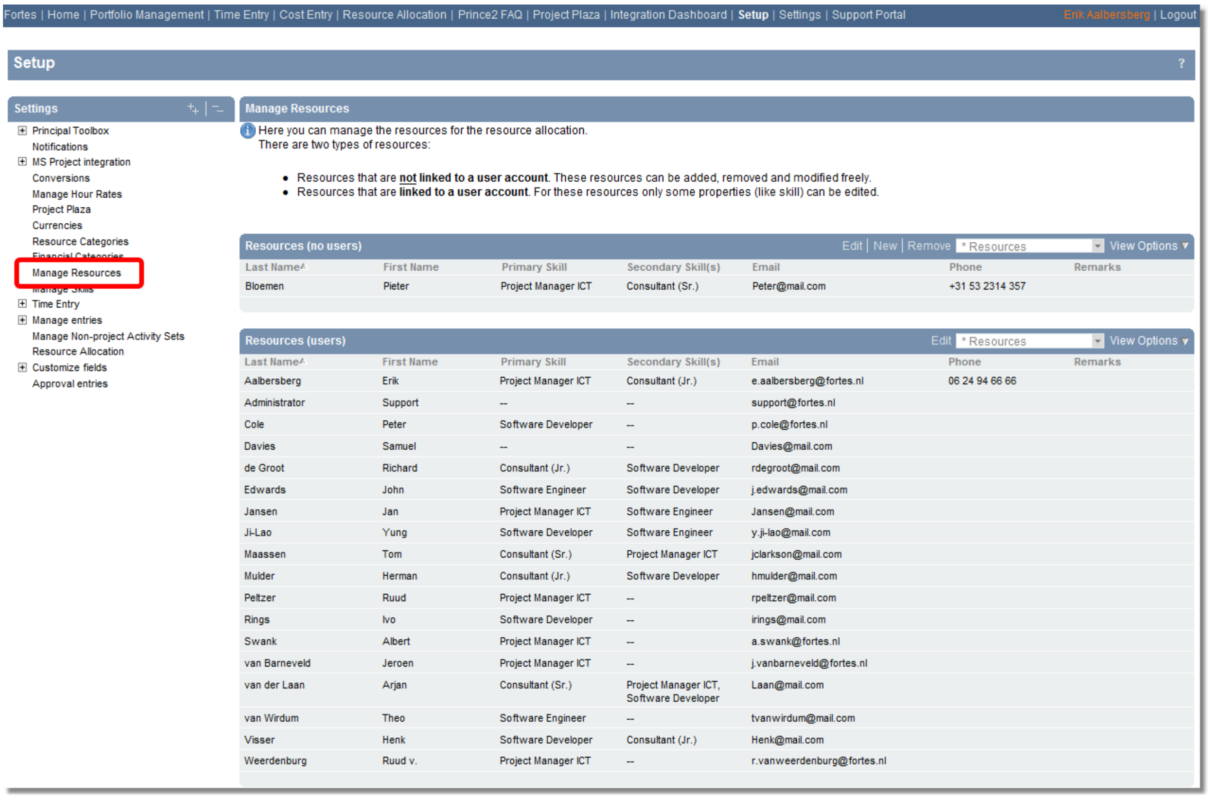


Adding a skill

Adding new resources in Principal Toolbox

Before resources can be appointed to a resource pool, resources and their skills need to be defined in the Principal Toolbox. Users are automatically available as resources, additional resources can be defined by a resource manager as follows.

1. Navigate to **Setup** in the dark blue header on the top of the screen. The left-hand side of the screen contains a link to '**Manage resources**'.



Manage Resources at Setup

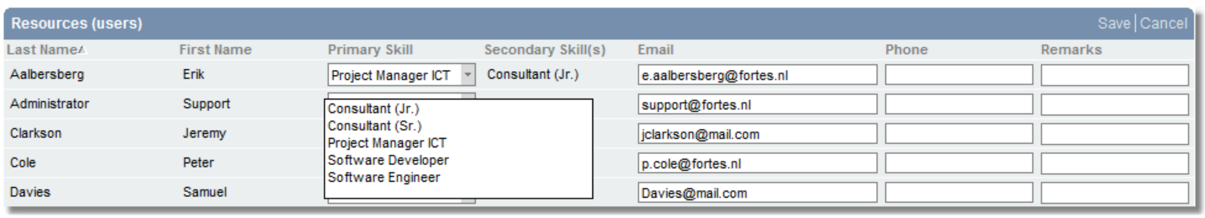
2. The screen contains two sections: one for 'no users' and one for 'users'. Click '**New**' in the 'no users' section to set up a resource which is not is associated with an user account in the Principal Toolbox.

Creating a new resource (no user)

3. A new window will appear. Enter the details of the new resource and click **Save**. The new resource will be listed in the section 'Resources (no users)'.

Appointing primary and secondary skills to resources

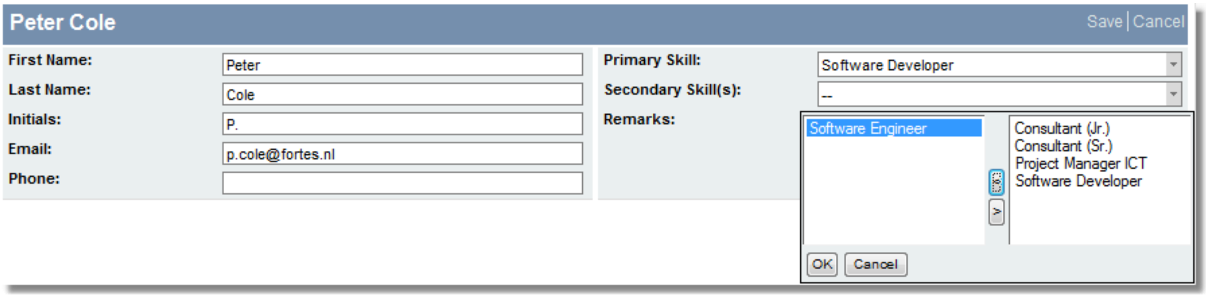
1. To appoint primary skills to resources (both users and non-users) click on **Edit**. Select the desired primary skill and click on **Save**. (Alternatively, to edit both primary and secondary skills of a resource, follow the steps below.)



Appointing a primary skill

2. To appoint (a) secondary skill(s) to resources (both users and non-users), click on the name of the

resource you want to appoint skills to (a new window will appear in which the resource details are listed)



Appointing a secondary skill

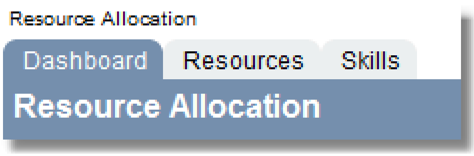
3. Click **Edit** to modify the resource details, including the primary and secondary skills.

4. Click **Save** to save the modifications, and click **Close** to return to the main window.

Creating a resource pool and appointing resources to a resource pool

A new **resource pool** can be created by the resource manager.

1. Navigate to the "**Dashboard**" tab of the Resource Allocation module.



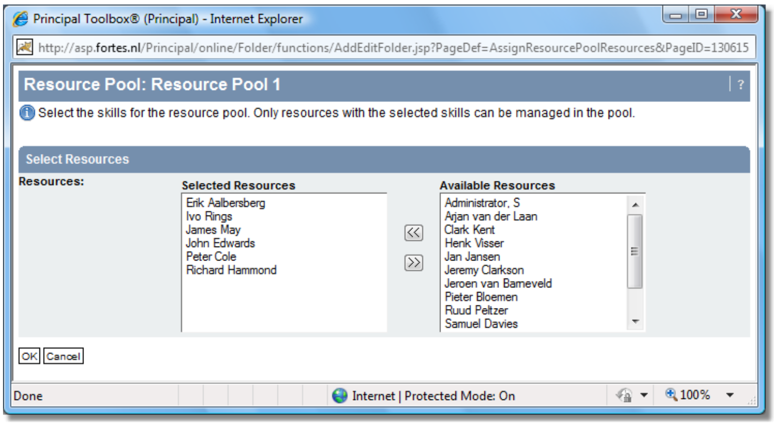
Dashboard tab

2. Click **New** to create a new resource pool. Specify the name and, optionally, a description for the resource pool and click **OK**.

3. To appoint resources to a resource pool, click on the name of the resource pool (in the tab "Dashboard") that you want to add resources to.

   Note: *a resource can be appointed to multiple resource pools.*

4. Click on the tab "**Resource Availability**" and click on **Add / Remove Resources** (a popup window with the available resources and already appointed resources will appear).



Adding resources

5. Select (a) resource(s) on the right and click “**<<**” to appoint the selected resources to the resource pool.

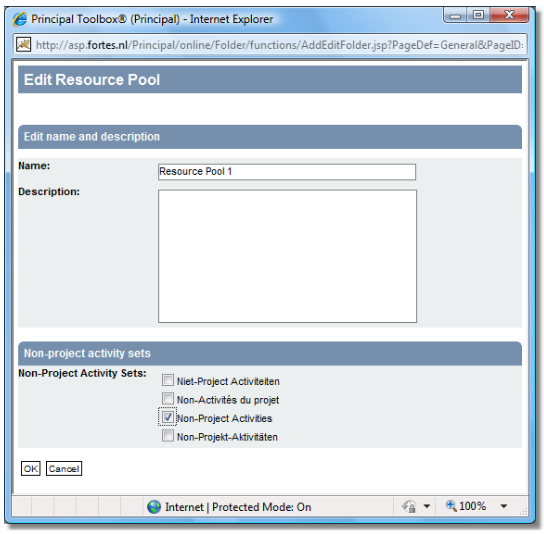
6. Click **OK** to save your changes.

3.3.1.2 Non Project Activities

To allow for allocation of a resource to non-project activities (and thus diminishing the resource’s available hours for project allocation), one or more predefined sets of non-project activities need to be assigned to a resource pool.

1. Navigate to the Resource Pool.

2. In the tab “Dashboard”, click **Edit Properties** to edit the main properties of the resource pool. A popup window will appear in which the properties of the resource pool can be edited.



Select a non-project activity set

3. Select the right non-project activity set(s) to be assigned to the resource pool and click **OK** to return to the main window.

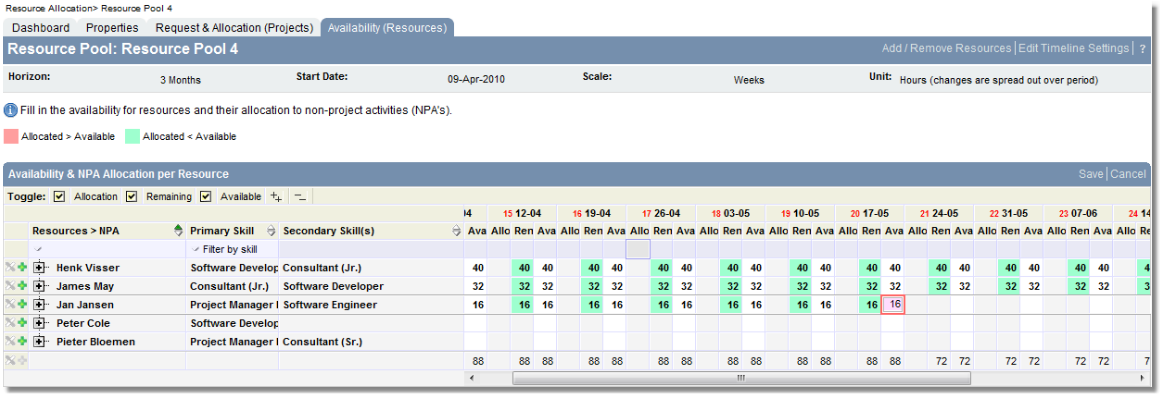
Creating non-project activity sets 159 is part of the **'Setup page'**. For more information click on System Administrator: Setup & Settings 157

3.3.1.3 Managing resource availability

The resource availability can be managed by the resource manager.

1. To edit availability of resources in a resource pool, click on the name of the resource pool.

2. Click on the tab “**Resource Availability**”. A grid with the allocated hours, remaining hours and available hours is shown.

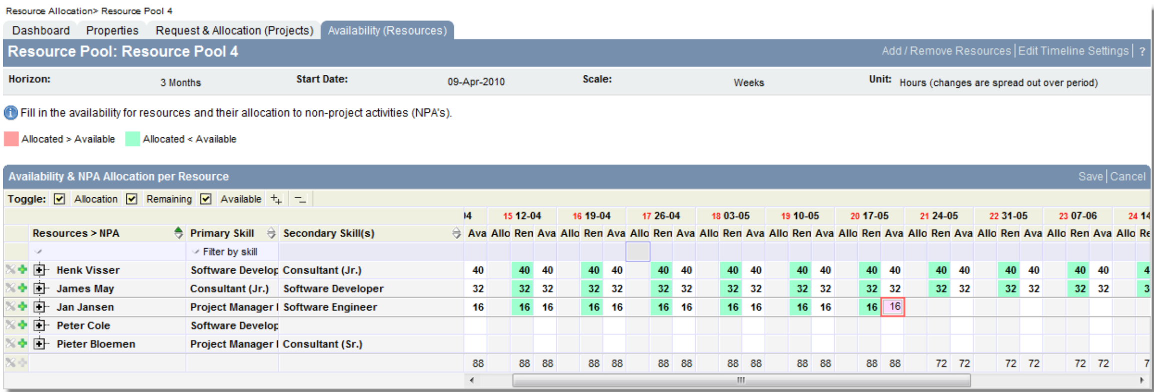


Adding the resource availability

> ***Note:*** *The columns with allocated, remaining and available hours can be toggled on and off by checking or unchecking the checkboxes directly underneath the header of the resource availability section.*

> ***Note:*** *If needed, the timeline setting of the availability grid can be edited. To do so, click on* ***Edit Timeline Settings****. Set the horizon and start date according to your preferences. It is also possible to set the scale and unit.*

3. Click **Edit** in the title bar of the Resource Availability Section. In the table in the Resource Availability section, the available hours can be entered for each resource in the columns “ **Available**” per period. Only specify the hours that each resource is available to be allocated to projects



Adding non-project activities

4. To allocate a resource to non-project activities:

   a. Add a new row for the resource that needs to be assigned to non-project activities by clicking on the ‘**+**’ sign in front of the resource’s name. A new row appears with a blank activity field.
   b. Click on the blank activity field and select the right non-project activity.
   c. The hours to be allocated to the selected non-project activity can be entered in the columns “Allocated” per period.

d. Repeat steps 5a through 5c for each additional non-project activity.

5. Click **Save** to save your changes.

3.3.1.4 Managing requests and allocations

The owner of a resource pool (a resource manager) is responsible for evaluating all resource requests that are coming in, and turning them into allocations.

1. From within the Resource Allocation module, open the resource pool that needs managing.

2. Open the **'Request & Allocation (Projects)**' tab from the dashboard.
   It will display a planning board with requested and/or planned, allocated and remaining hours for each resource.

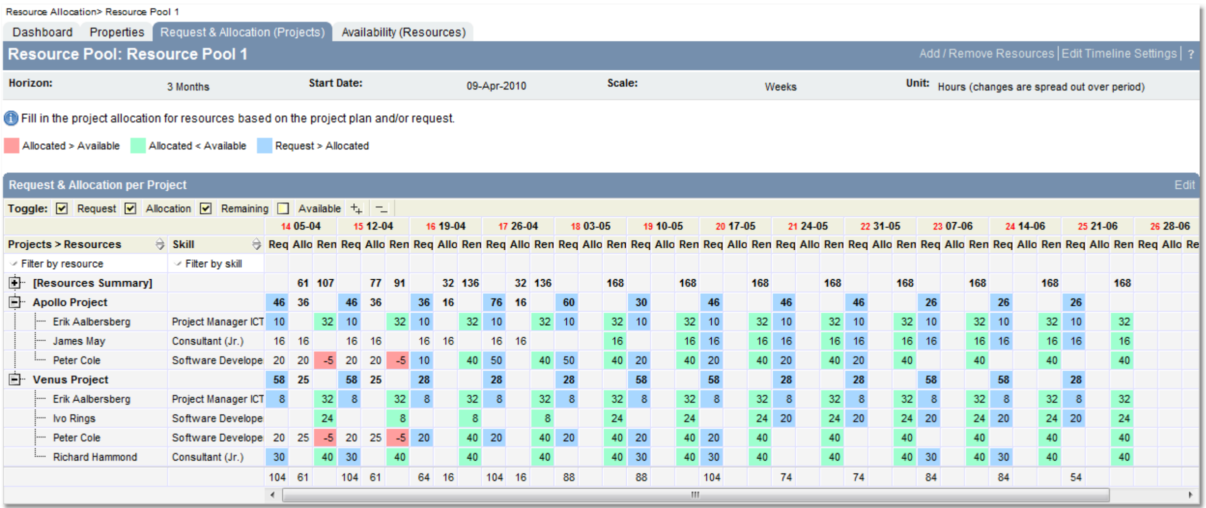
   ***Note**: depending on the chosen resource allocation process, the button 'Edit Timeline Settings' allows for changing whether planned and/or requested hours are being displayed. To make the change, set the **'Resource Allocation Process'** to one of **'Project request driven'**, **'Project demand driven'**, or **'Hybrid'**.*

   The individual cells in the planning board are colour coded to give an immediate impression:

   - **Blue:** shows all requests for resources which haven't been (completely) satisfied by resource allocations

   - **Green:** depict remaining hours available to be allocated against projects and non-project activities

   - **Red:** alarm the resource manager to the fact that resources have been allocated over and above their availability



The planning board is used to manage the requests for resources

***Note**: the columns with requested, allocated, remaining and available hours can each be hidden by toggling the checkboxes*

***Note**: using the button 'Edit timeline settings', the period covered by the planning board, and its resolution can be changed*

3. Press the '**Edit**' button in the **'Request and Allocation per Project'** section of the screen to edit the allocation of resources.
   Use the **'+'**-sign to check the details per individual resource on a project. By expanding the **'Resources Summary'** it'll show the total allocation per resource independent of the projects.

4. To change the allocation of a resource, fill out the values in the **Allocation** column. This can be done for each separate period. The period is determined by the timeline settings.

   ***Note**: when a skill has been requested, instead of a specific named resource, the resource manager will have to select a named resource with the specified skill before allocating hours.*

5. Press **'Save'** to keep all changes. The allocations are published to the projects and are now available to the project managers.

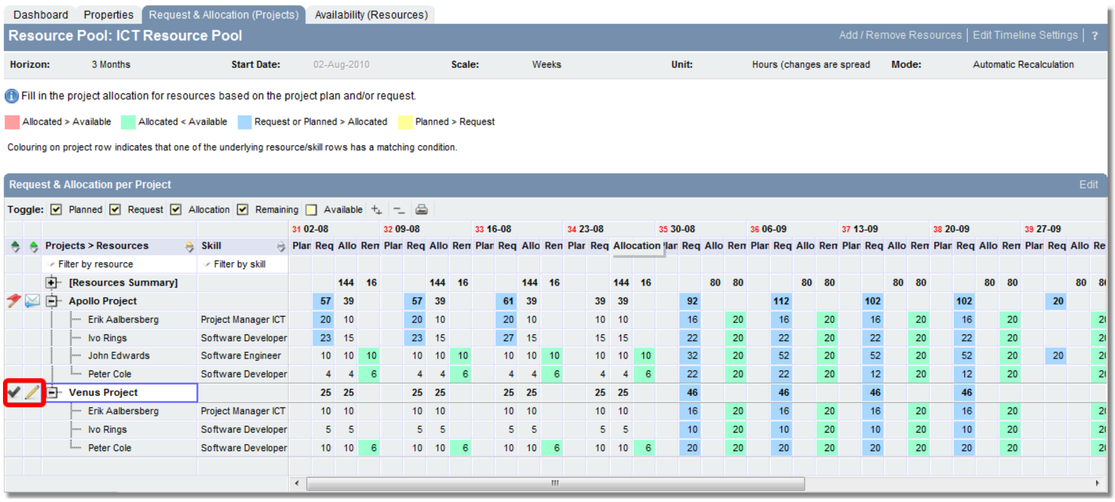
Discussions between project manager and resource manager

Using the Principal Toolbox it's possible to discuss requests and allocations between project manager and resource manager. The discussion is initiated by the resource manager and works like a chat service. It's used as follows:

1. From the resource allocation module, open a resource pool and navigate to the **'Request & Allocation'** tab.

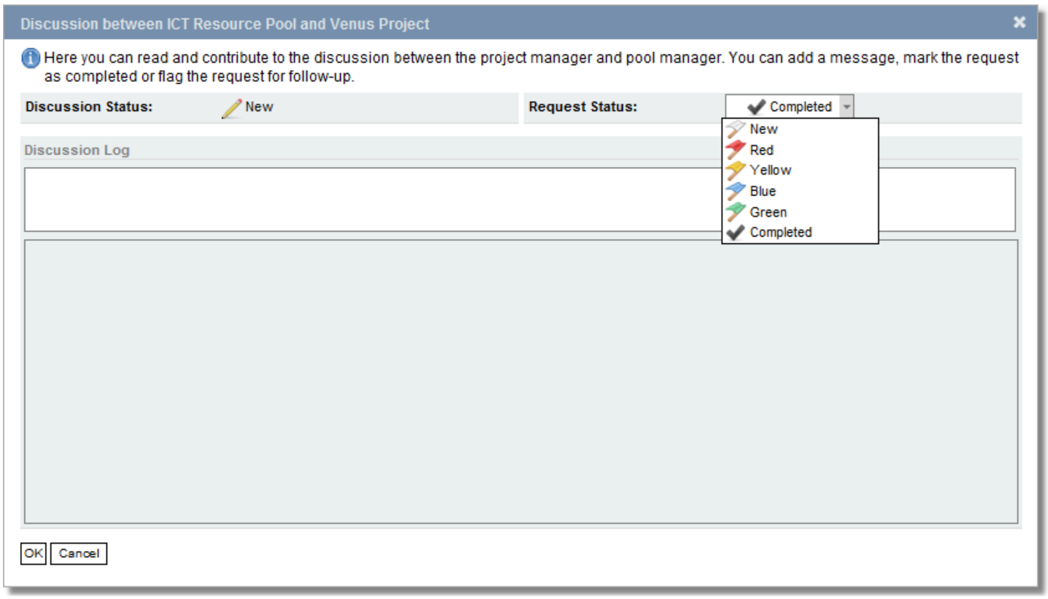
2. Press the **Edit** button of the planning board.

3. Press the Pencil icon next to the project for which a discussion is to be started



Opening a discussion log

4. A chat session is opened in which the resource manager can enter a message for the project manager.



Discussion log

5. After pressing **'OK'** a message will be sent to the project manager.

6. The project manager receives the message in the **Resource Allocation** tab on the project. A response can be given by clicking **'Edit'** and sending it by using the Envelope button.

Discussion log on projects

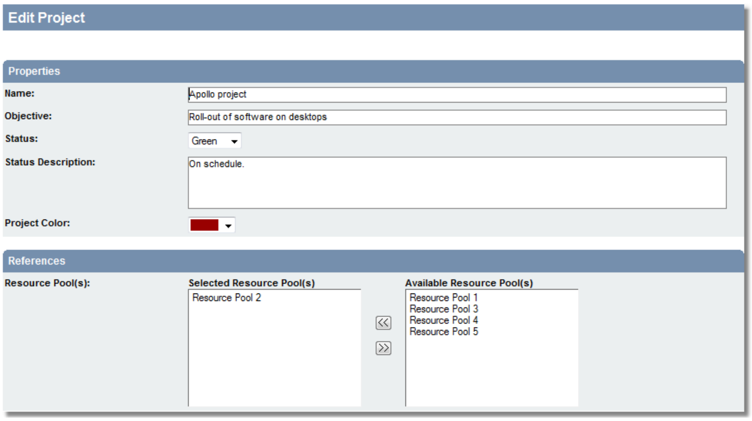
3.3.2 Managing resources on projects

Using the Principal Toolbox resources can be requested to work on projects. Requests can be submitted for the project as a whole or by individual product. When done by individual product it's called a 'demand' rather than a 'request'. Depending on the organization's requirements one of these planning processes can be chosen, or a hybrid model can be used.

3.3.2.1 Requesting resources

Before a project manager is able to request resources from a resource pool, a pool or multiple pools have to be linked to the project.

1. Go to the project and click on **Edit Properties**. A pop-up will appear where you can link a resource pool to a project.



Add a resource pool to the project

2. By using the "**<<**" the project manager is able to add more resource pools.

3. Click **Ok** to save your changes

The project manager is now able to request resources from the resource pool.

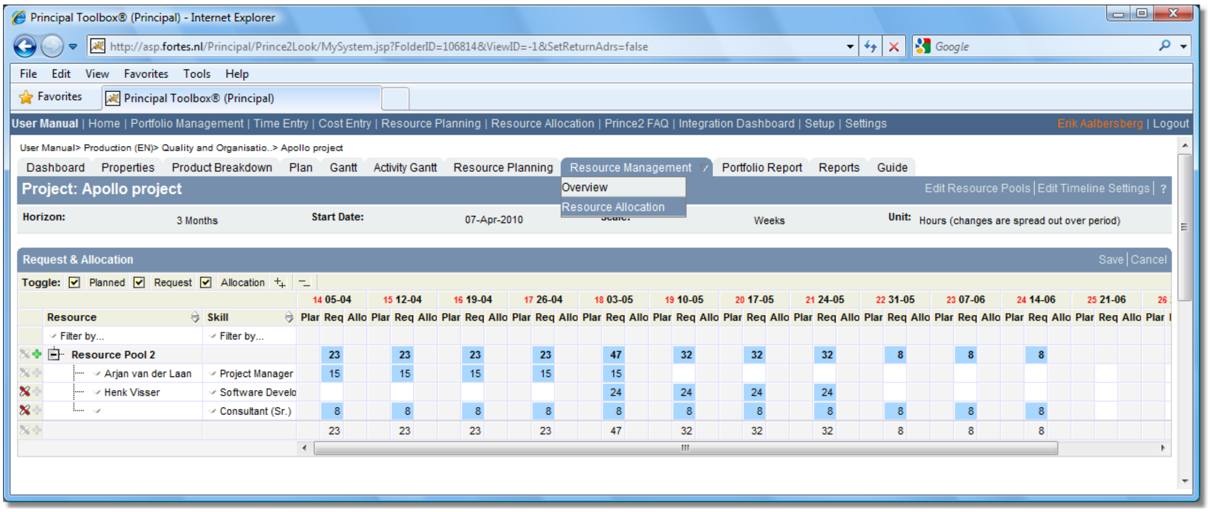
1. In a project, navigate to the "Resource Management" tab, section "Resource Allocation". In the "Request & Allocation" section, a grid is shown with planned, requested, and allocated hours. Blue cells indicate resource requests that are not yet (fully) fulfilled with allocated resources by the resource allocation manager.

   Note: *The columns with planned, requested, and allocated hours can be toggled on and off by checking or unchecking the checkboxes directly underneath the header of the Request & Allocation section.*

   Note: *If needed, the timeline setting of the grid can be edited. To do so, click on* ***Edit Timeline Settings****. Set the horizon and start date according to your preferences. It is also possible to set the scale and unit.*

2. To assign one or more resource pools to the project (only needs to be done once for every project, or whenever changes are required), click **Edit Resource Pools** in the Request & Allocation header. A popup window will appear in which one or more available resources pools can be assigned to the project.

3. In the header of the "Request & Allocation" section, click **Edit** to start requesting resources for the project.



Requesting resources on a project

4. To add a row in which a resource or skill request can be entered, click on the '**+**'-sign in front of the appropriate resource pool. To request a resource, perform one of the following steps:

    a. To request a specific 'named' resource, select a resource name from the drop down menu in the resource name field underneath the appropriate resource pool. Optionally, select the skill that the resource is requested for in the drop down menu in the skill field next to the resource name field.
    b. To request a skill instead of a specific resource, select a skill name from the drop down menu in the skill field underneath the appropriate resource pool. The resource manager will allocate a resource with the desired skill to match the request.

5. Click **Save** to save your changes. This will automatically send new or changed requests to the Resource Allocation Manager.

3.3.2.2 Planning resources

Instead of, or complimentary to requesting resources at project level, resources can be **'planned'** at product level. To do so, follow these steps:

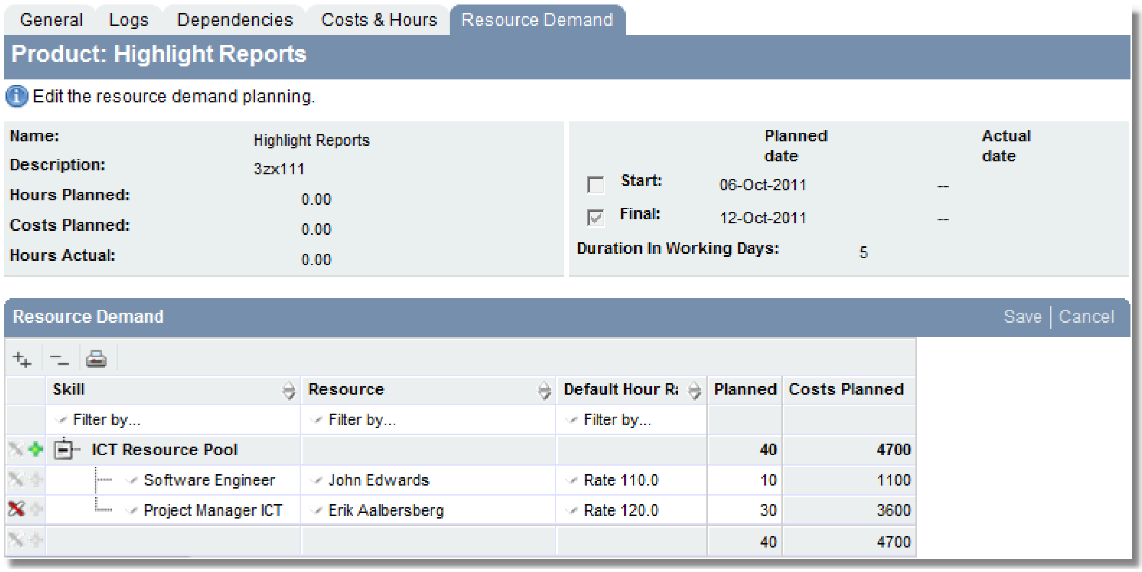
1. Open one of the products on the project and navigate to the tab **'Resource Demand'**.

2. Within the section **'Resource Demand'** press the **Edit** button.

3. Using the planning board, resources can be planned by Skill, named Resource, or both.

4. Additionally the hourly rate can be chosen as it may be specific to the project.

***Note**: as soon as a resource registers hours against a project, using the time entry module, the default hourly rate as defined for the resource will be used. If this default rate is different from the rate as chosen when demanding resources, the project manager will have to explicitly change the rate that is used when the resource enters time against the project. Please see 'Letting project managers choose hourly rate'* 125 *for instructions on how to set the appropriate rate.*



Resource planning on product level

An overview of all planned resources on the project is found on the '**Resource Allocation**' tab, under the header **'Resource Management'**. To only view planned resources (and not the requests) the timeline settings have to be changed. Press the **'Edit Timeline Settings'** button to set the Resource Allocation Process to **'Project Demand Driven'**.
Any hours planned against the product will be evenly distributed across the duration of the product, which is defined by its start and end dates.

3.4 Time registration (add-on)

Registration of hours using the Principal Toolbox is done by using the module 'Time Entry'. Users of the Principal Toolbox who are assigned to so-called Time Registration groups will receive a timesheet which they can then use to register the hours worked against projects and non-project activities, like leave. Using these timesheets, actual cost entries can be allocated against projects and non-project activities according to pre-defined hourly rates.

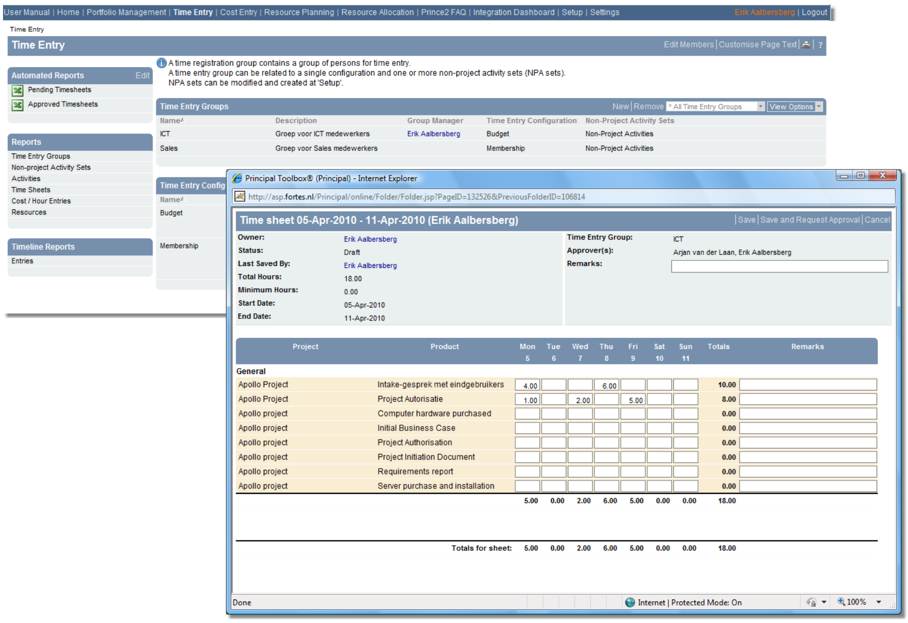
3.4.1 Generating, submitting and approving timesheets

The process contains the following steps, which are explained in the next sections.

1. Creating a time entry configuration 114
   With this step, you define which products are shown on users' time sheets, and whether or not they have a free choice of products on their time sheet. Different configurations can be used for different departments.

2. Creating non-project activity sets 159
   These sets can be used to define activities that are not part of projects. These could be operational duties, and non-productive hours, like sick leave, holidays, leave. For different departments, different sets can be created.

3. Creating time entry groups 118
   These groups define departments / teams. Members of a group share configuration, non-project activity sets and the approvers of the weekly time sheets.



Add-on 'Timesheets'

See also [Registration of actual hours](#) 56 for more information about using timesheets.

3.4.1.1 Creating a time entry configuration

The time entry configuration defines:

- which products are shown on time sheets:
  - o *"membership" based*: only products of which the user is owner, reviewer or participant are shown on the time sheet, regardless of budget.
  - o *budget based*: only products that have a budget assigned are shown, but then to all members of a project.

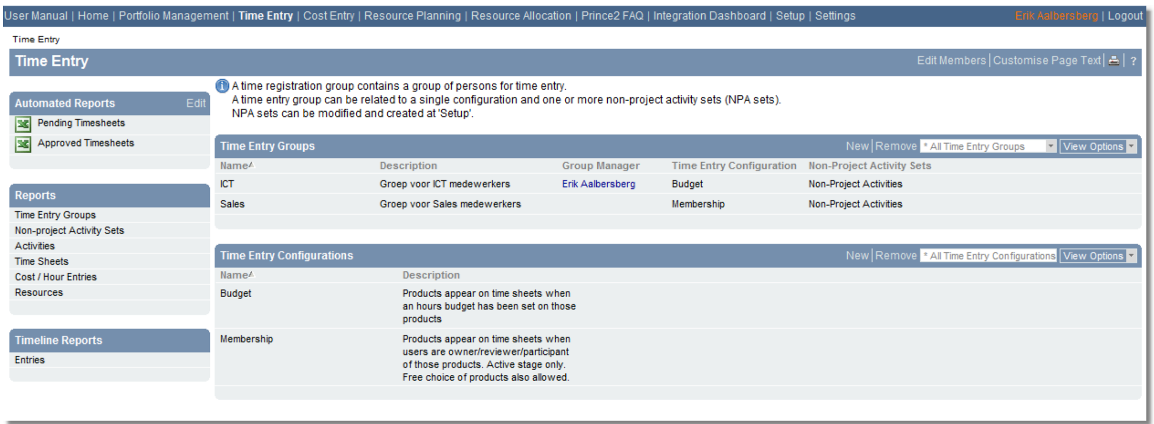
- whether only products from active stages are shown, or all products from the project

- whether users are allowed to choose products of projects they are not a member of.

Creating a time entry configuration

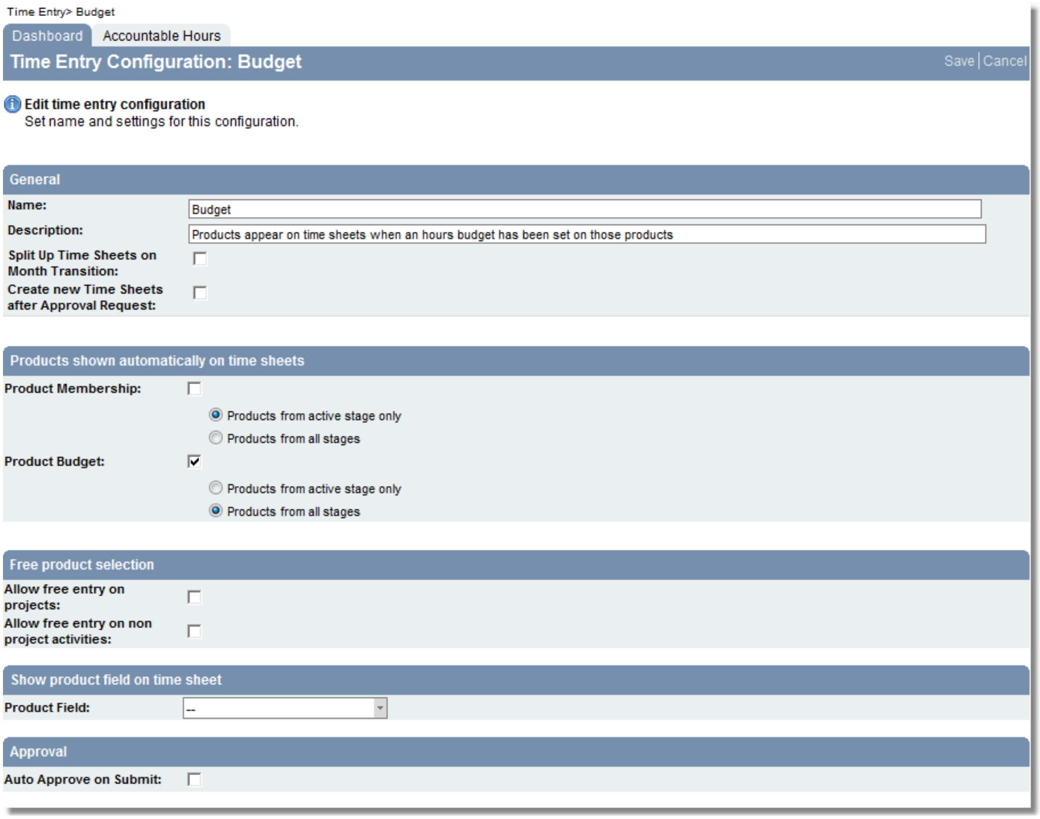
There are multiple ways to create time entry configuration. The default way to define a time entry configuration is described below.

1. In the dark blue page header, click on **Time Entry**.



Time Entry Page

2. On the **Dashboard** tab that appears, click **New** in the header **Time entry configurations** to create a new time sheet configuration.



Time Entry Configuration

3. Fill in the following information:

Name	:	Name of the time entry configuration.
Description	:	Description of the time entry configuration.
Product membership	:	Select which products will be automatically available for time entry.
Product budget	:	Select which products will be automatically available for time entry.
Allow free entry	:	Select if users may select products free.

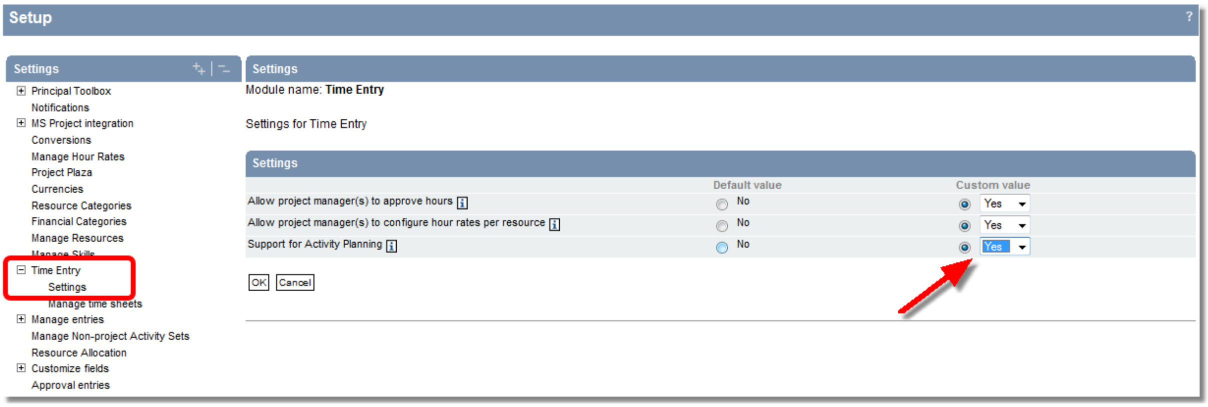
4. Click **Save** to store the time registration configuration.

5. Now you can close this dialog, by clicking **Close**.

Time entry configuration with Planning Item Filters
Another way to create a time entry configuration is by using so-called 'Planning Item Filters'. These configuration options are bit more flexible and offer more filter options.

1. To enable the 'Planning Item Filters' navigate to **Setup** and click on **Time Entry** and **Settings**.

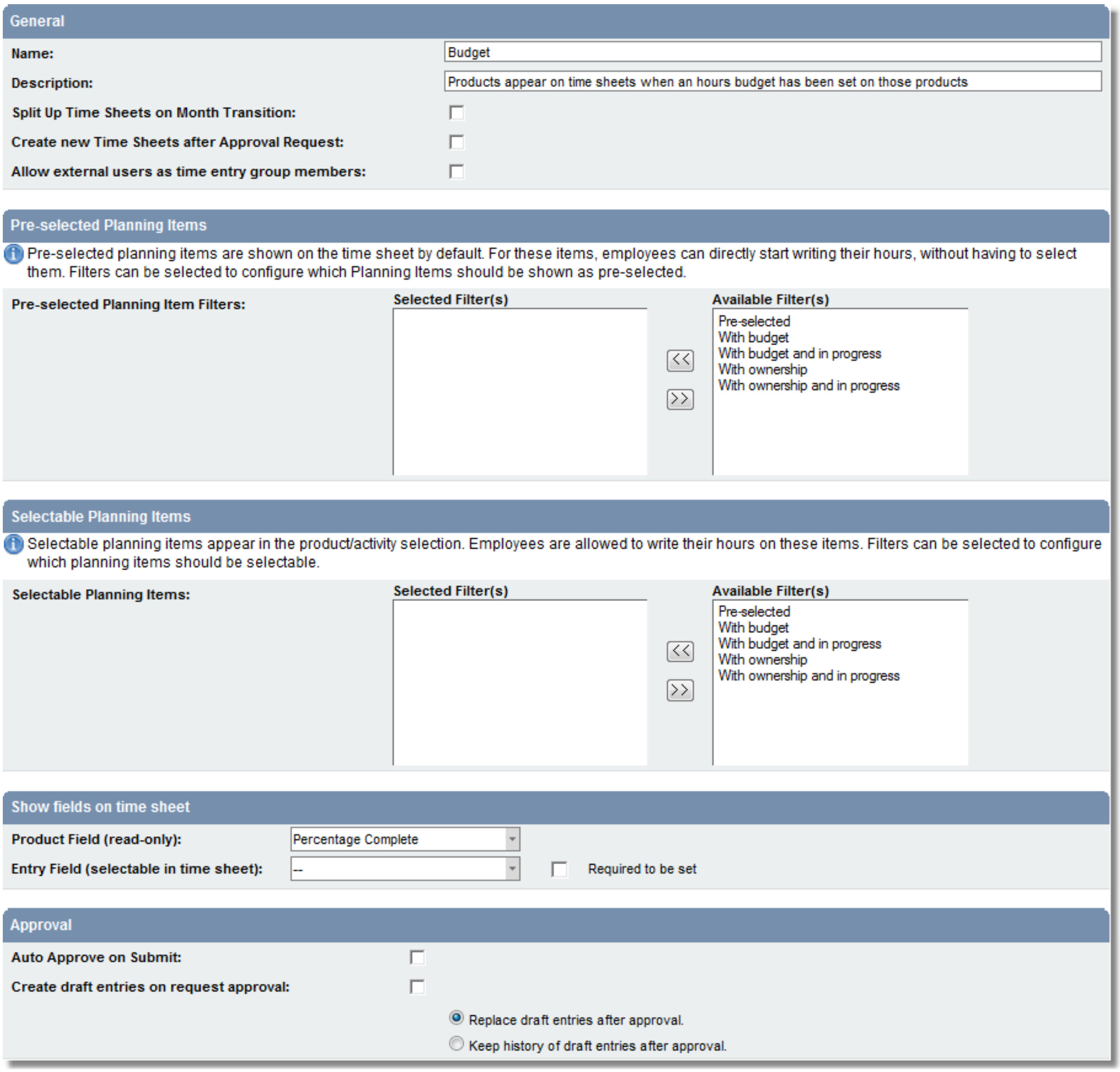
2. Click on **Edit** to enable the **'Support for Activity Planning'.**



Enable Support for Activity Planning

3. Go back to **Time Entry** in the dark blue bar.

4. Click on **New** in the header **Time Entry Configurations** to create a new time entry configuration.



Time Entry Configuration with planning item filters

5. Fill in the following information:

Name	:	Name of the time entry configuration.
Description	:	Description of the time entry configuration.
Pre-selected Planning Item Filters	:	Select which products will be automatically available for time entry. Every option contains filters that will determine which products will be displayed on the timesheet. The following options are available: • Show all products by default. • Only show the products with a budget (With budget). • Only show the products with a budget and in progress (With budget and in progress). • Only show the products with an owner assigned (With ownership). • Only show the products with an owner assigned and in progress (With ownership and in progress) • Show all products/activities with the field 'Pre-selected on Timesheets' selected on the product page. By selecting this field on all products it is possible to determine per product wether it should appear on the timesheet.
Selectable Planning Items	:	Select which products can be selected on the timesheet by the users. The same options are available as described above.
Show fields on time sheet	:	• Product field (read-only): select which information about the product will be displayed on the timesheet (i. e. the number of risks, the number of issues, etc.) • Entry Field (selectable in time sheet): select on which entry field data can be entered in the timesheet.
Approval	:	• Select the option 'Auto Approve on Submit' if the Department Manager doesn't need to approve the hours. For more information about the approval process please take a look at: Configuring the approval process 120. • Create draft entries on request approval: use this option if a draft entry needs to be created when requesting approval.

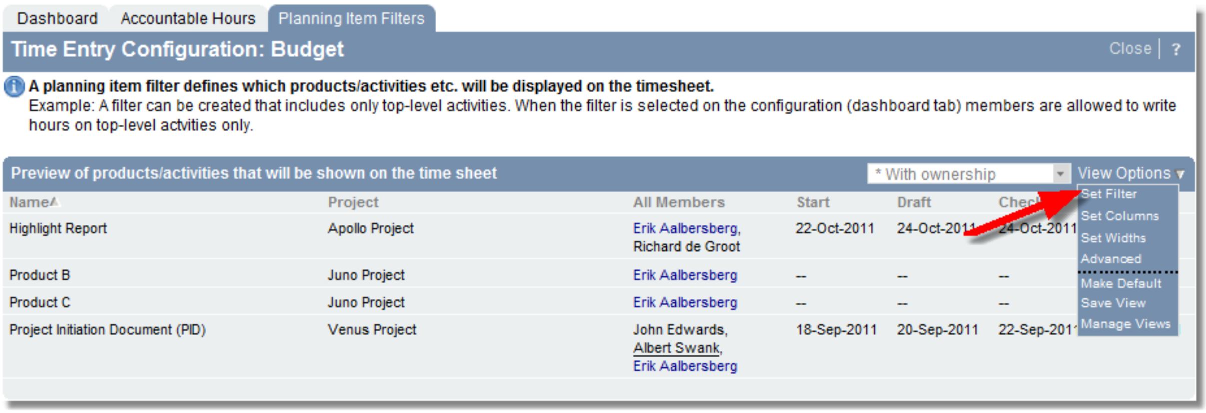
6. Click **Save** to store the time registration configuration.

7. Now you can close this dialog, by clicking **Close**.

Creating Planning Item Filters
It is also possible to create your own 'Planning Item Filter'. By creating you own filters you can determine which type of products should be pre-selected of selectable.

1. Click in the Time Entry Configuration on the tab **Planning Item Filters**

2. To create your own 'Planning Item Filter' click on **View Options** and select **Set Filter**.



Creating a Planning Item Filter

3. A list with available filters will appear. Configure the filter and click on **OK**.

4. To save the view click on **View Options** and **Save View**.

5. Enter the name of the view, select the type and click on **OK**.

6. The 'Planning Item Filter' is now available in the time entry configuration.

3.4.1.2 Creating time entry groups

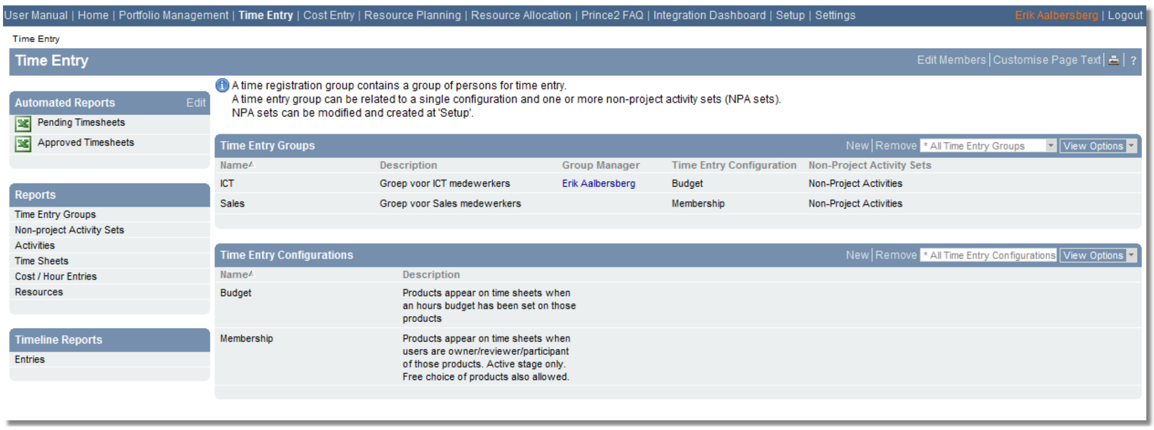
Now you can attach your created 'time entry configuration' and 'non-project activity sets' to a new 'time entry group'. This time entry group will be the entire population of time-writing users, or a department or team with different settings.

An important property of the time entry group is the approver selection. Per group, you define who is responsible for approving the time sheets of the members.

To define time entry groups:

1. In the dark blue bar in the top, click **'Time Entry'**.

2. On the 'Dashboard' tab, click **'New'** in the section 'Time entry groups' to create a new time sheet configuration.

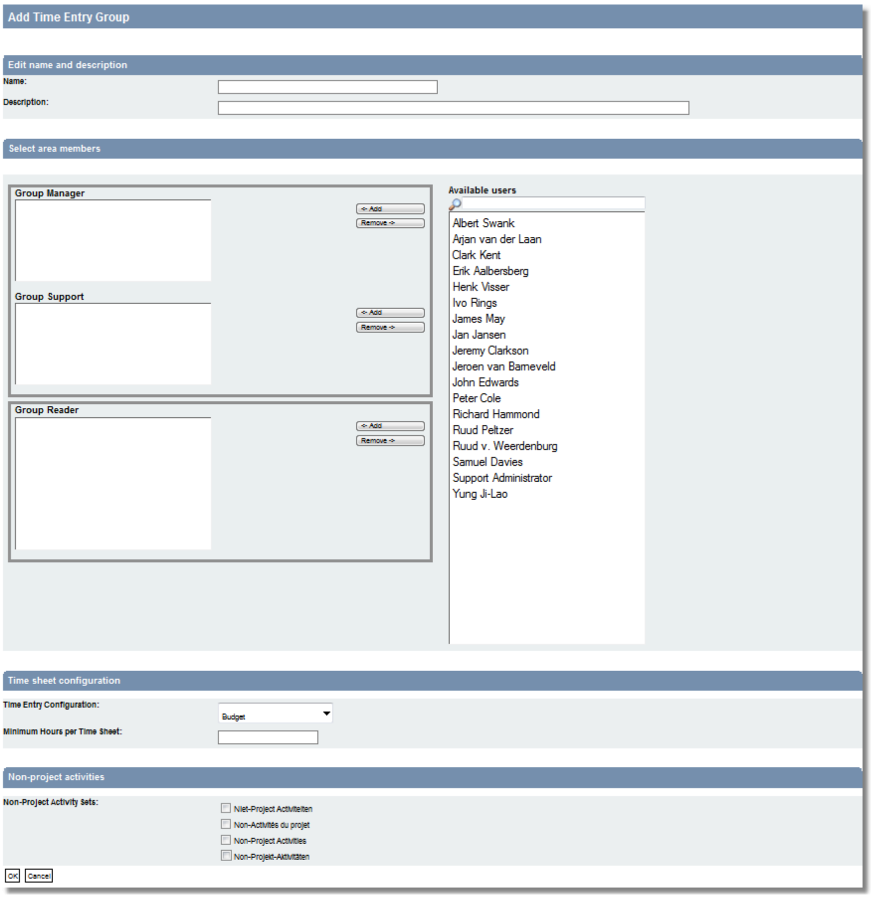


Time Entry

3. Then fill in the following information:

Name	:	Name of the time entry group.
Description	:	Description of the time entry group.
Group manager	:	Select the group manager who can edit the settings of the time entry group.
Selected time sheet configuration	:	Select which time sheet configuration is active for this entry group.
Selected set(s) of non-project activities	:	Select if users may book hours on created non-project activities.

4. Click **OK** to store the time entry group configuration.



Time Entry Group Configuration

5. When the time entry group is stored, it will appear in the listing of 'Time entry groups'. Now click the created entry to config the time entry group.

6. Go to the **'Members & Approvers'** tab to add members of this time entry group.

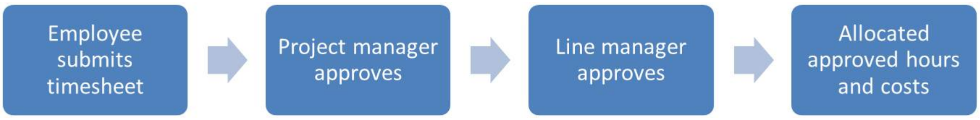
7. Click the **'Add / Remove'** button to add or remove group members and approvers. 

Members and Approvers of a Time Entry Group

3.4.1.3 Configuring the approval process

Approving timesheets can be set up in four different ways:

- Approval required by the project manager and line manager:



- Approval required by the line manager only

- Approval required by the project manager only

- No approval required: timesheets are automatically approved when submitted

The approval process can be configured in these various ways using a number of settings. The steps to configure each approval process follow below.

Approval by project manager only

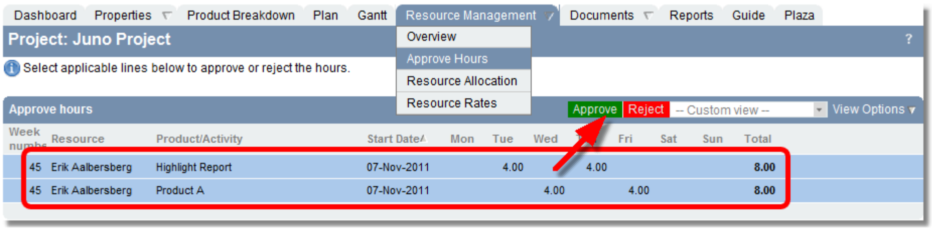
1. Navigate to **Setup**, **Time Entry**, **Settings**, and set the setting **'Allow project manager to approve hours'** to **'Yes'**.

2. Open one of the project models and on the dashboard press **'Edit Properties'**.

3. Within the section **'Time Entry'** tick the box for **'Approval of project hours by project manager'** .

4. The project manager will now be able to approve hours by project. To do so, the project manager

opens a project, navigates to the **Resource Management** tab, and opens the **'Approve Hours'** screen. The project manager will get an overview of all the hours that have been submitted against the project and which require approval.
A similar overview, but then across all projects, can be found on the project manager's dashboard on the tab **'Approve Hours'**.



Approval by line manager only
In case a line manager needs to be able to approve timesheets, the line manager needs to be made an **Approver** on one or more **Time Registration Groups**.

1. Open a **Time Registration Group** from within the **Time Entry** module

2. Open the tab **'Members & Approvers'**

3. Add the line manager to the **'Group Approvers'** section by using the appropriate **'Add'** button.

4. Any submitted timesheets by members of this time registration group will now appear on the personal dashboard of the line manager, ready to be approved (or rejected).

Automatic approval
Enabling **Auto Approve on Submit** will remove the need for line manager to approve timesheets. This setting is changes as follows:

1. Navigate to the **Time Entry** module

2. Open one of the **Time Entry Configurations** and enable the setting '**Auto Approve on Submit**'

3. The setting is now enabled for all **Time Entry Groups** that rely on this particular **Time Entry Configuration**.
   Note: this setting will now prevent line manager from approving timesheets, even in those cases where they've been listed as **Approvers** on **Time Entry Groups**.

Configuring the right approval process
With the above knowledge in mind, the approval process can now be configured as required.

Approval by project manager and line manager

1. Enable the option to have project managers approve hours (see above for instructions)

2. Set the line manager up to approve hours (on the Time Registration Group)

3. Check that the applicable **Time Entry Configuration** is not set up for **Auto Approve**

Approval by line manager only

1. Set the line manager up to approve hours (on the Time Registration Group)

2. Check that project managers are not allowed to approve hours (see above for instructions)

3. Check that the applicable **Time Entry Configuration** is not set up for **Auto Approve**

Approval by project manager only

1. Enable the option to have project manager approve hours (see above for instructions)

2. Enable the **Auto Approve** on the applicable **Time Entry Configuration** (this will ensure that line managers are skipped)

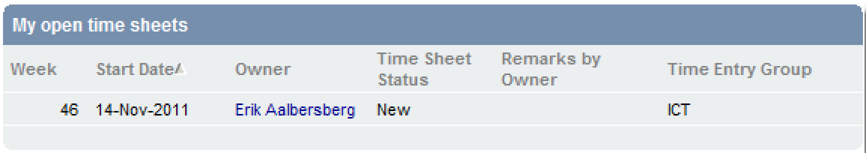
Automatic approval

1. Enable the **Auto Approve** on the applicable **Time Entry Configuration**

2. Check that project manager are not allowed to approve hours (see above for instructions)

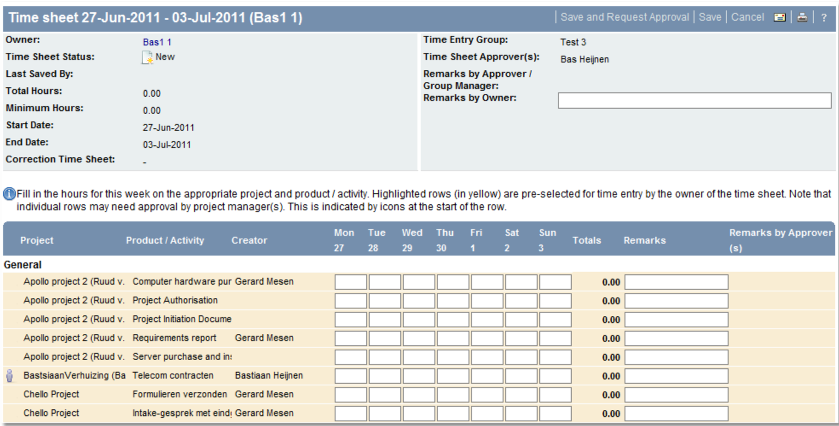
3.4.1.4 Submitting timesheets

Any timesheets that need filling out will appear on the personal dashboard of the employee on the tab **'My Time Sheets'**.



My open timesheets on the homepage

Any open timesheets will be displayed as a listing. Click on the start date of the timesheet to open it. The following window will open:



A timesheet

When finished entering hours, press **'Save'** or **'Save and Request Approval'**. The latter option will only be available when an approval process has been set up.

After requesting approval, the project manager and / or the line manager will get the request for approval on their personal dashboard as a reminder. Please see 'Approving timesheets' 123 for instructions on how to approve the submitted timesheets.

3.4.1.5 Approving timesheets

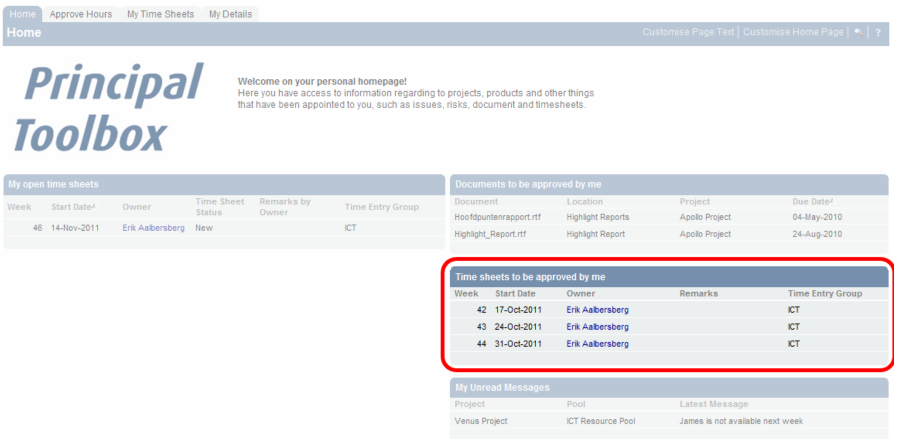
Approval by project manager

When a timesheet has been submitted and it contains hours against the project manager's project, and the hours require approval, they'll appear on the project manager's personal dashboard. The tab **'Approve Hours'** will show a list of all hours that require approval.

Approving hours

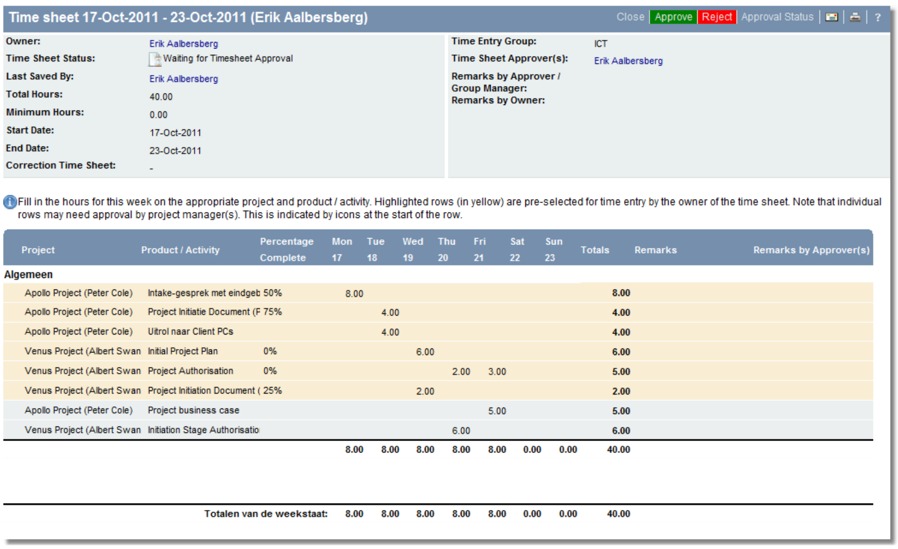
Approval by line manager

When a line manager has been registered as an approver on one or more time entry groups, a list of the submitted timesheets will appear on the line manager's personal dashboard.



To be approved timesheets on the homepage

By clicking on the start date of one of the timesheets it opens and the line manager, after reviewing the contents, can choose to **Approve** or **Reject** the request for approval.



Approving a timesheet

3.4.2 Time and cost allocations

Against products, part of a project, cost and hour entries can automatically be generated from the timesheets that have been submitted. The tab 'Costs & Hours' on each product will then list all the costs and hours in line with the timesheets from project team members that registered hours against the project.

The costs associated with the hours that the team member registered are based on an hourly rate. Each resource has its own hourly rate, as defined in the Setup. Besides this personal hourly rate, the project manager can be allowed to override that rate for a project specific rate.
To enable the automatic generation of cost and hour entries based on time entry, take the following steps.

1. Define and allocate hourly rates 124

2. Let project managers set hourly rates 125

3. Get cost and hour entries against individual products 126

3.4.2.1 Defining and allocating hourly rates

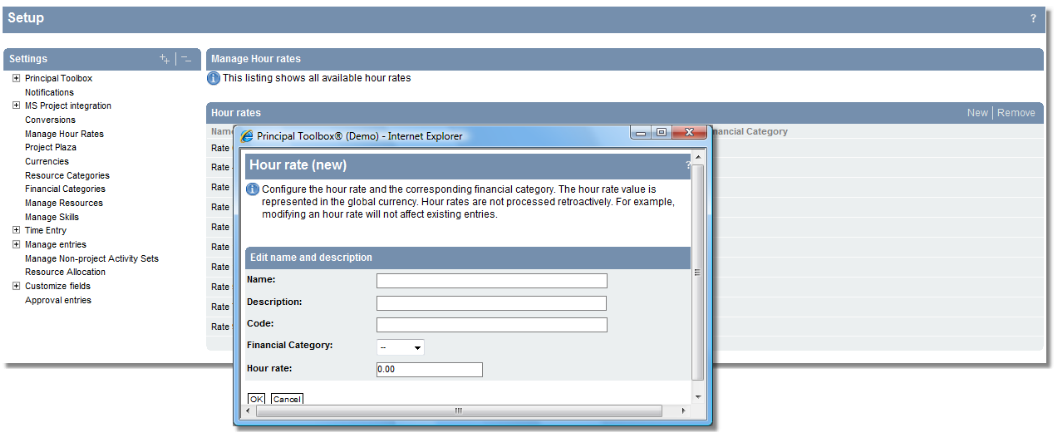
Defining hourly rates

Before assigning hourly rates to individual resources, define the rates as follows:

1. Navigate to **Setup** and click on **'Manage Hour Rates'**

2. Press 'New' to add a new hourly rate

3. In the window that appears, choose a name, a description, a code (free text), and the hourly rate in dollars (or applicable currency).



New hour rate

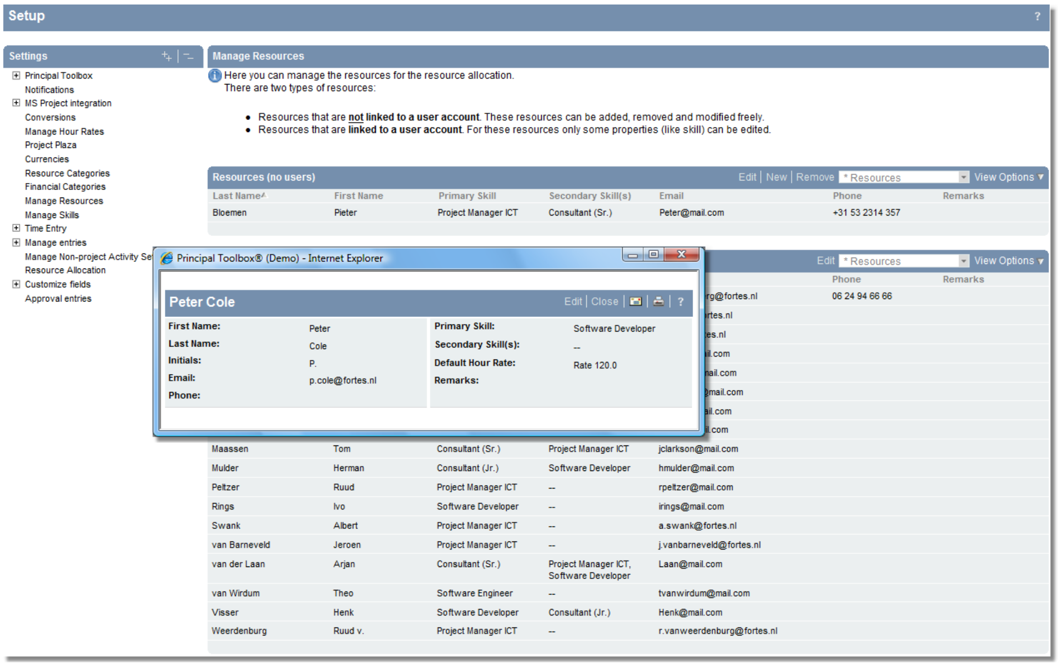
4. Once saved, the hourly rate will be available to be assigned to resources.

Allocating hourly rates

1. From within **Setup** navigate to **'Manage Resources'**

2. Edit one of the resources by clicking on its first name

3. The window that appears allows to set one specific hourly rate for this resource.



Managing resources

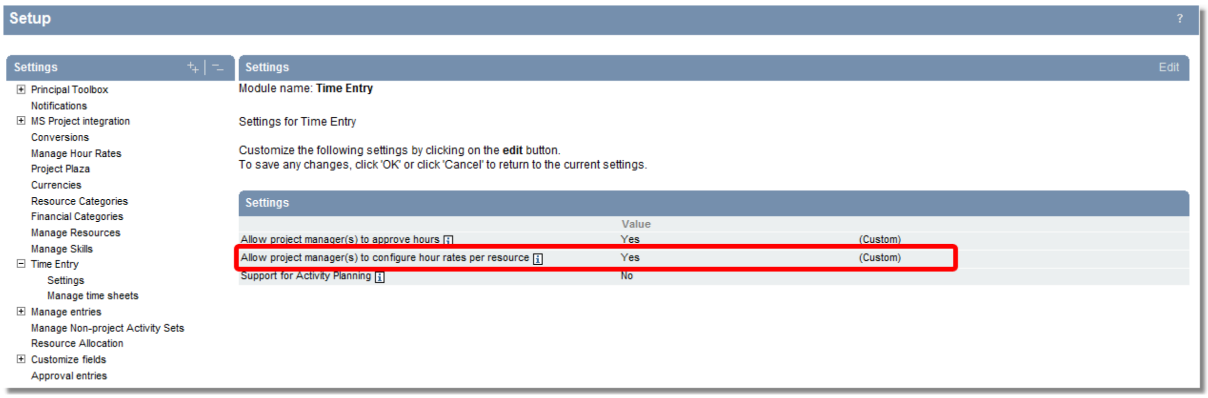
3.4.2.2 Letting project managers choose hourly rates

It's possible to let the project manager choose hourly rates for the resources on a project. This feature has to be enabled in the Setup and on the project model.

Setup

1. From within **Setup** click on **Time Entry**.

2. Open the **Settings**, and enable the setting '**Allow project manager(s) to configure hour rates per resource**'.



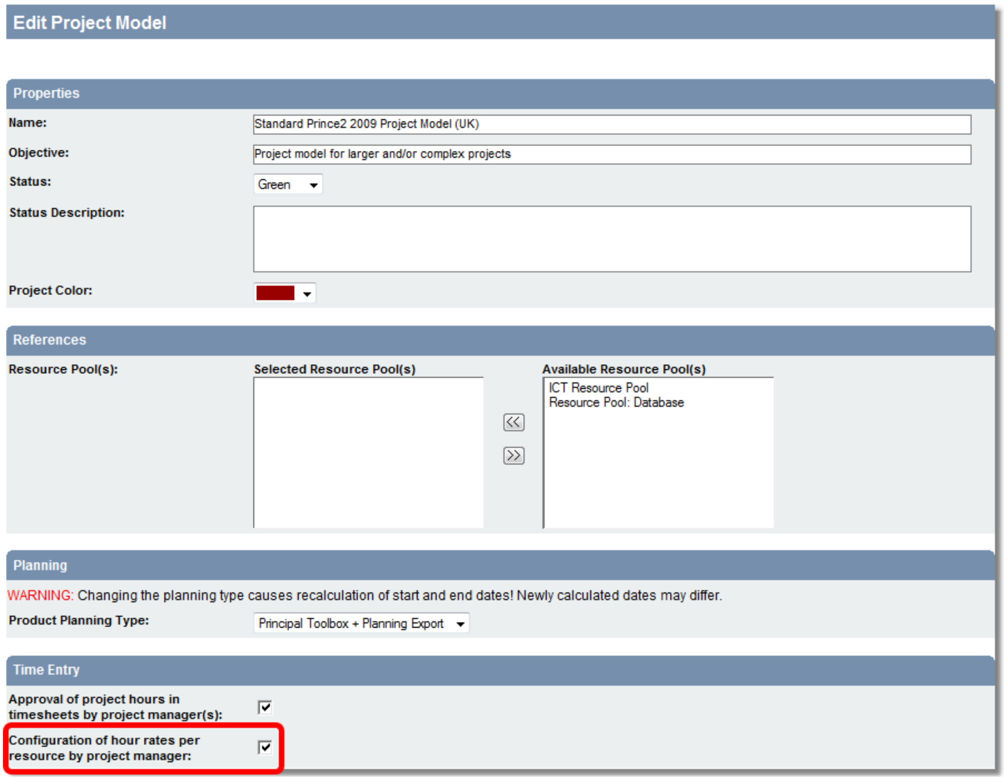
Allow project manager(s) to configure hour rates per resource

Project Model

1. Open one of the project models

2. At the project model's dashboard press **'Edit Properties'**

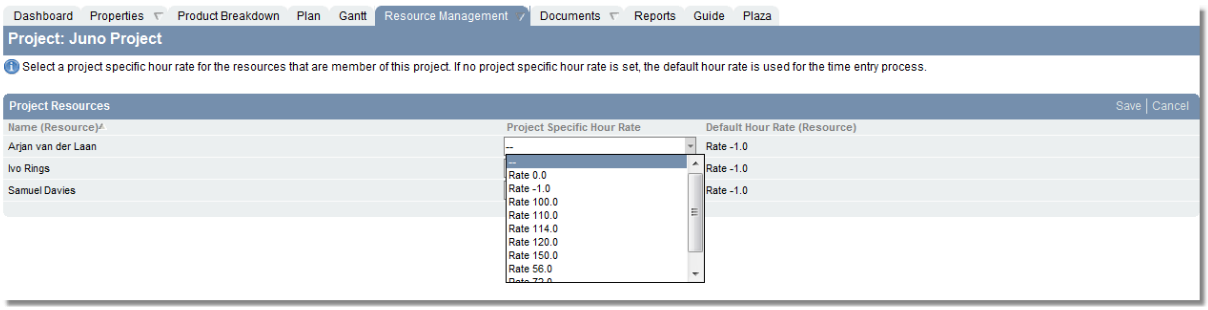
3. Enable the setting **'Configuration of hour rates per resource by project manager'.**



Edit properties on projects

After this setting has been enabled, the project manager can alter the hourly rate for the resources on the project. This is achieved as follows:

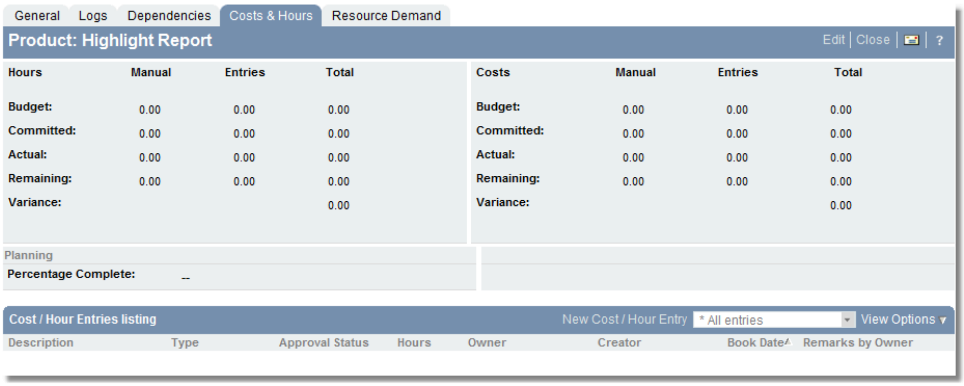
1. From the project dashboard, click on the tab **'Resource Management'** and choose for **'Resource Rates'**
2. Press the **'Edit'** button and set the required hourly rate for each resource on the project.



Assigning project specific resource rates

3.4.2.3 Time and cost allocations against products

After setting the appropriate hourly rate, each time a timesheet has been approved hour entries will be allocated against the appropriate products. Costs will be associated with the hours based on the applicable hourly rate: either the resource's rate, or if set, the rate as defined by the project manager. The generated hour and cost entries are listed on the **'Costs & Hours'** tab on each product.



Cost & hours tab on products

4 Automated Reports

Reports can be used in projects to generate reports about your projects. Reports can be created in the Principal Toolbox and both in Word and in Excel. The Word reports offer more possibilities for editing *after* generating the report, while the Excel reports offer more flexibility in working with tables. It is also possible to use so-called ' Timeline reports' to show information over time.

The automated report functionality of Principal Toolbox has especially been designed to allow you to create and edit your own automated reports.

4.1 Automated reports

> ***Note**: automated reports within projects are available to project managers and project support. On programme level they are available to the programme manager.*

> ***Note**: Normally, automated reports will be provided with the project model(s) of your organisation. It is possible, however, to create your own reports for your programme or project.*

Automated reports can be used in projects to automatically generate reports about your projects. Automated reports can be created both in Word and in Excel. The Word reports offer more possibilities for editing *after* generating the report, while the Excel reports offer more flexibility in working with tables.

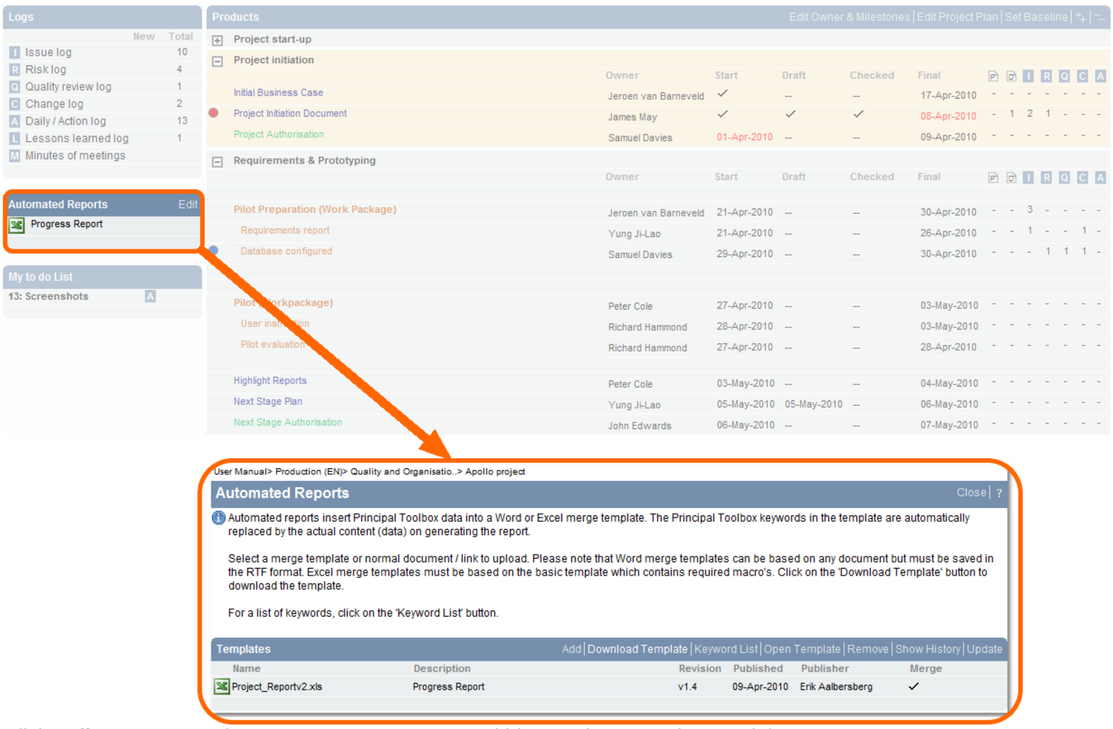
The automated report functionality of Principal Toolbox has especially been designed to allow you to create and edit your own automated reports.

Principle of automated reports
Automated reports use keywords that are replaced with data from the Principal Toolbox database. This can be either simple content of fields, like a project name and a start date, or complete tables. These tables are the views (either pre- or self-defined) at various locations in Principal Toolbox. The keywords, which include references to the views, can be found in the 'Keyword reference'. When clicking a keyword, it is copied to the Windows clipboard. You can now paste the keyword in your report template. After saving the template on your system, upload it to Principal Toolbox and the report is available for use.

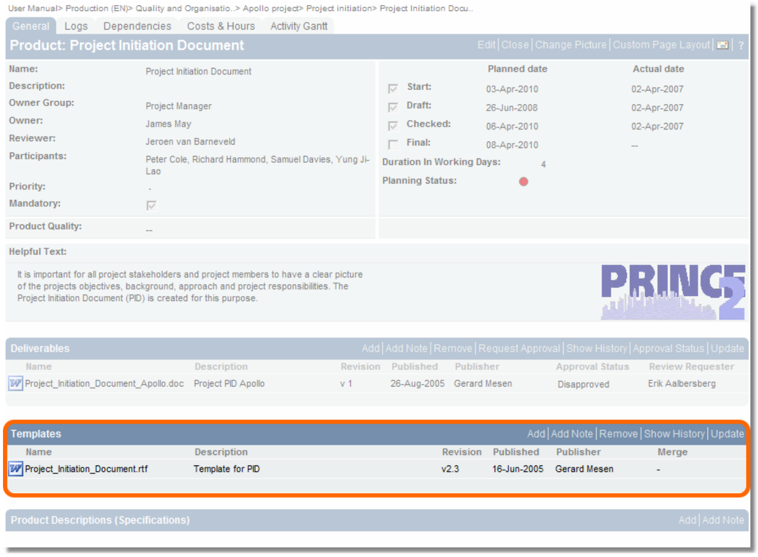
> ***Note**: some applications empty the clipboard when they are started up. In this case, first open the application and then click the keyword.*

Where to find and manage automated reports

Within projects:
On the project dashboard in the section 'Automated reports' or at a specific product page.

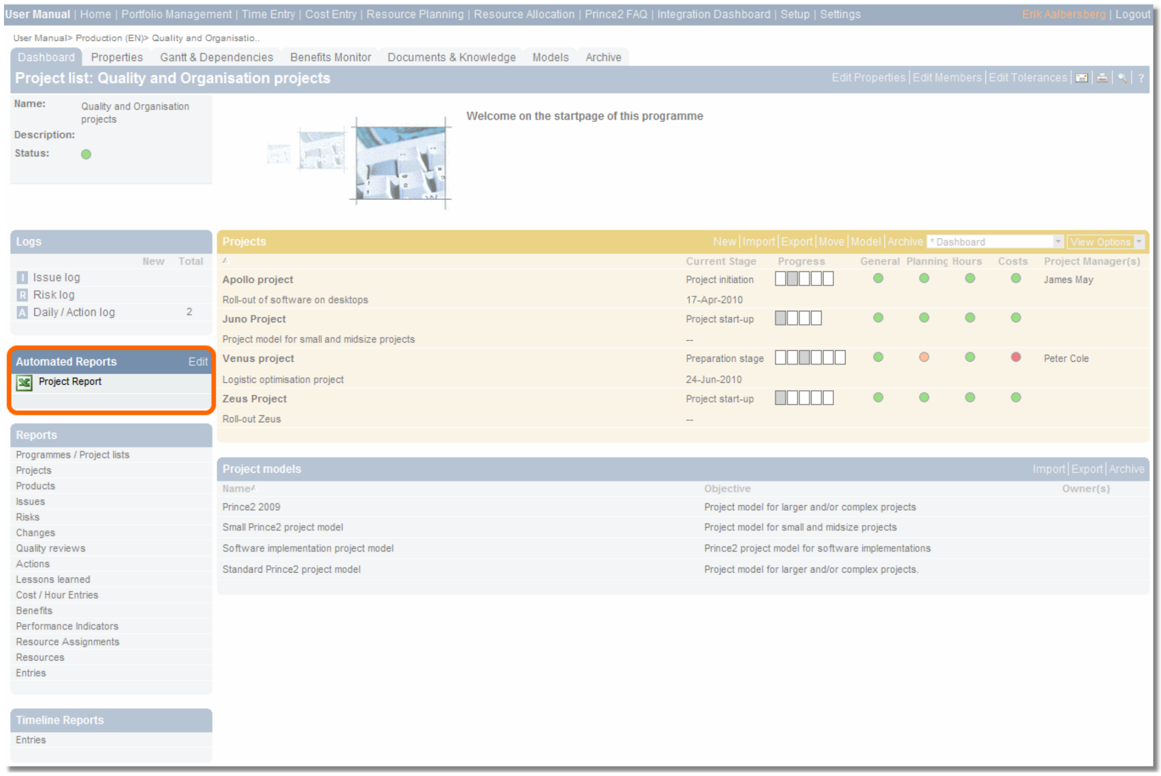


*Click **'Edit'** at automated reports to manage reports within a project or project model*



On product pages templates for automated reports can be added as well

Within programmes / project lists:
On the dashboard, at the section 'Automated reports'.



Automated Reports on a programme

In the next sections, you will find more detailed information about creating and managing automated reports.

4.1.1 Automated Word reports

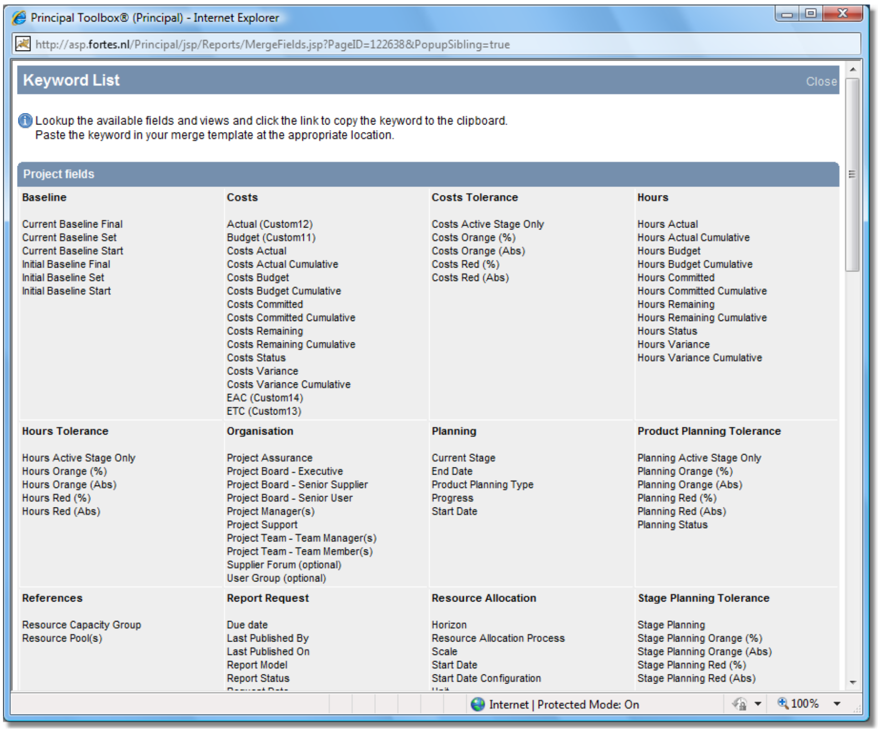
> ***Note**: Word reports are based on templates that have to be saved as Rich Text Format (*.rtf) files.*

1. Go to the dashboard and click the button '**Edit**' in the Automated report header, or go to the

specific ‘Product’ page where you want to insert the new automated merge report.

2. You can do any of the following:
   a. Open one of the templates already present, by clicking Open Template. The template will be opened, and at the same time Principal Toolbox will open a window with the 'Keyword Reference'.
   b. Start with a 'normal' or new Word document. Click **Keyword Reference** to open the window containing the keywords.

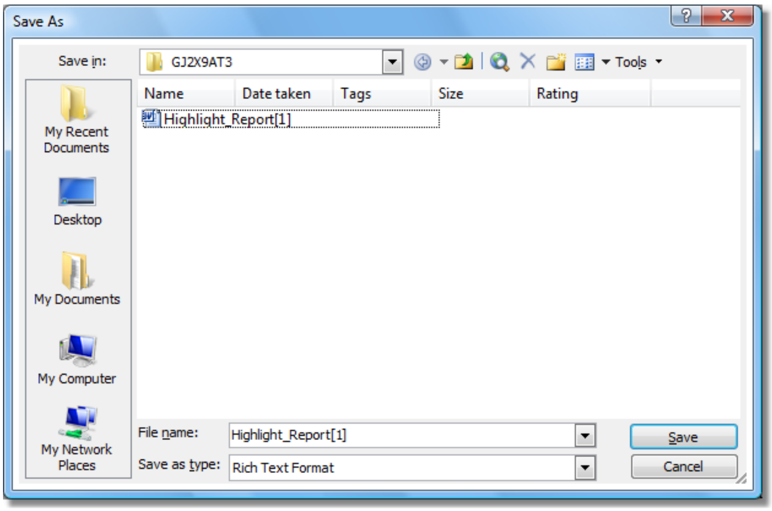
3. The Keyword Reference window will open where you can select the keywords. To select a keyword, just click it.



Keyword list

5. Go back to your template in Word. Look up the position where you want to paste the keyword. Pasting can be done in two ways:
   a. By selecting **Paste** in the **Edit** menu
   b. With the shortcut key **CTRL+V**.

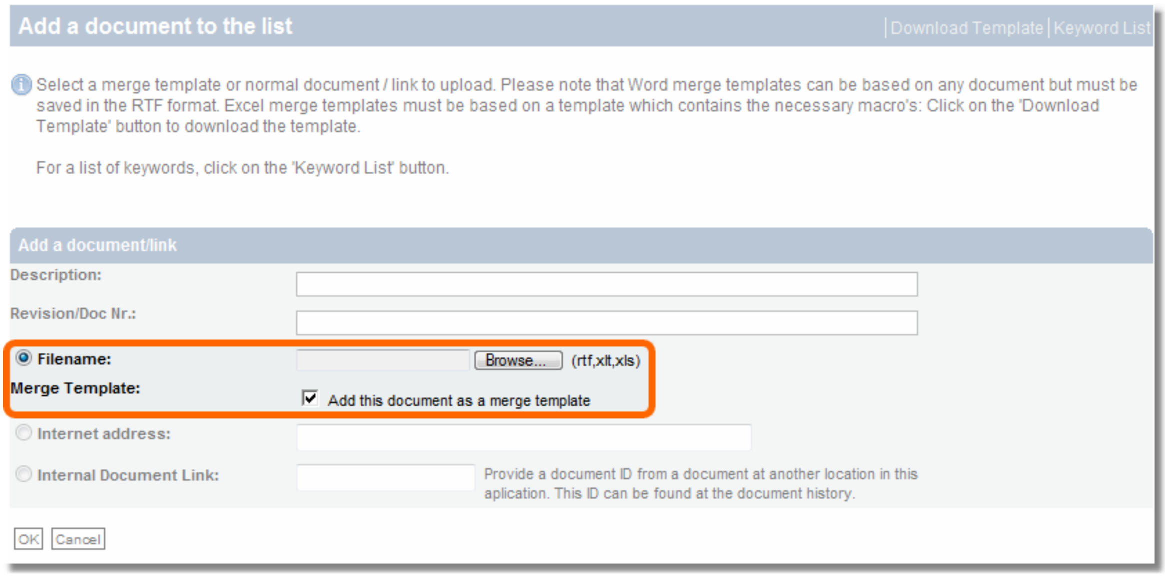
6. Finish the automated merge report and save it as an RTF-file.
   a. Choose **Save As** in the **File** menu
   b. In the dialogue, choose an appropriate folder for your template.
   c. At **Save as type** choose **Rich Text Format (*.rtf)**
   d. Click **Save** to save the template



7. Go back to Principal Toolbox. To upload the merge template in the Principal Toolbox, click Add in the Templates section (in the Edit Automated Reports window or on a product page). Fill in the following information:

Description	:	This will be the title of the report shown on the dashboard
Revision/Doc nr.	:	Use this to give a version number to your template
Filename	:	Locate the RTF-file with the browse button
Internal document link	:	Provide a document ID from a document at another location in the Principal Toolbox application. The ID can be found in the document history. This allows for a centrally placed document to be linked to from projects. Update by updating only the original centrally placed document.

8. **IMPORTANT**: Make sure the checkbox 'Document is a merge template' is ticked!



Adding a Word file

9. Click '**OK**' to add the merge template to the Principal Toolbox.

10.The document is now available as an Automated Report. If you added it to the section Automated

Reports on a programme / project list or project dashboard, you will find it in the list Automated Reports. If you added it to a product page, it will appear in the list 'Templates' on the General tab.

11. To generate the Automated Report click the template name and it will open in a new window.

12. After the report is opened in a new window it can be altered and then saved. In order to make the report available to the project team it is necessary to upload it in the Principal Toolbox.

> ***Note:*** *To edit the automated report or merge template later on, go back to step 2a and continue.*

> ***Note****: In RTF templates the system setting (default or custom) is used for language, not the personal locale.*

4.1.2 Automated Excel reports

The Microsoft Excel reporting allows you to create well formatted reports based on Principal Toolbox data. The reports can be extended with charts.

An automated report for Excel must to contain macros to be able to retrieve data from Principal Toolbox. Therefore, you need to be able to run macros to generate these reports. The Excel reports are based on a special Principal Toolbox template. This template contains keyword that point to fields and views in Principal Toolbox. When generating a report, these keywords are replaced by data from the Principal Toolbox.

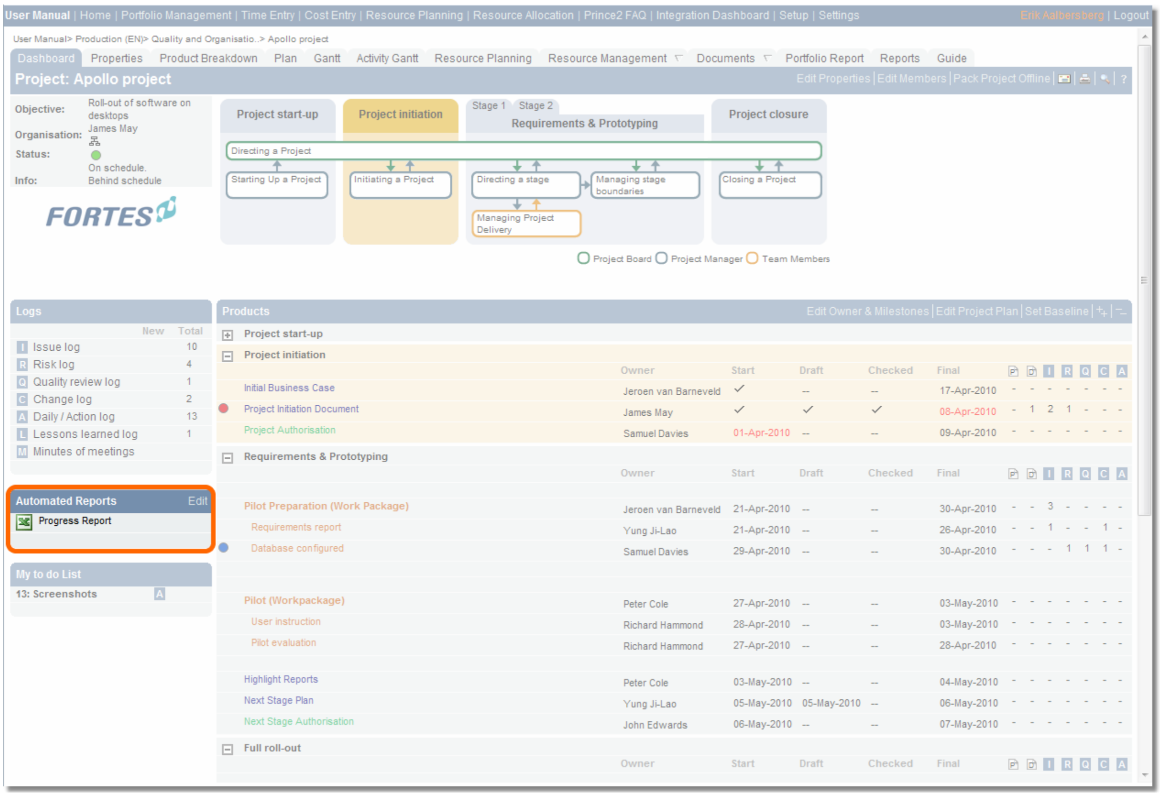
In this section, we will explain how to generate Excel reports. Creating and editing templates yourself is possible, even with basic Excel knowledge Some of the more advanced features would require some more knowledge of Excel. The topics can be found below:

- Using an Excel report 132
- Creating an Excel report template 134
- Advanced topics 143.

> ***Note****: automated reports within projects are available to project managers and project support. On programme level they are available to the programme manager.*
> *You will need sufficient rights on your computer to run Excel macros.*

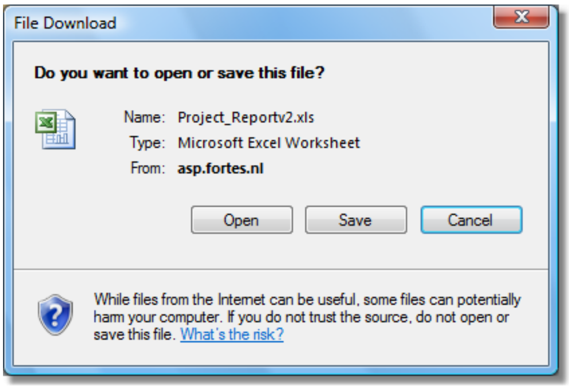
4.1.2.1 Using an Excel Report

To generate an Excel report, you can click the report name, on a programme / project list dashboard, or on the project dashboard. In the example below, the available Excel report is shown and can be clicked by the user.



Automated reports on the project dashboard

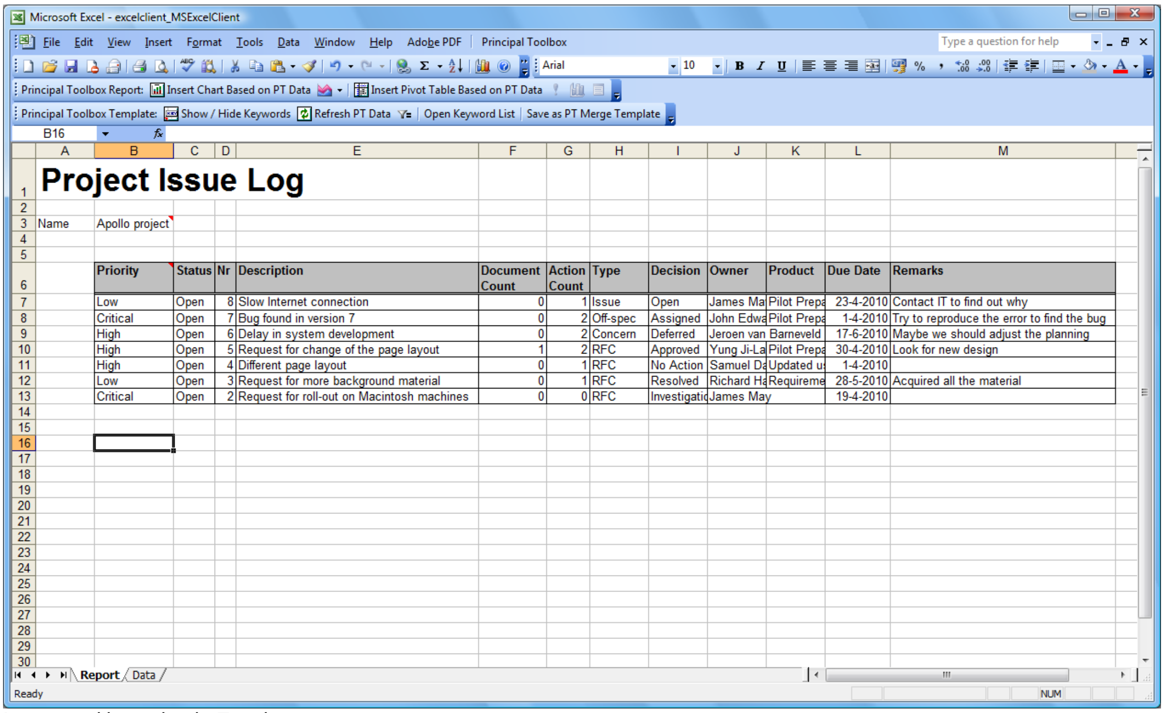
When the Excel report is downloaded, the following message is shown to you by your browser.



In this dialog, click **'Save'** and select an appropriate location for the template. Then click **'Open'** to open the report in Excel. Saving the report first ensures that the Excel file will be opened correctly. If opened directly, the required support macro's included in the Excel file will not be started.

Note: *always* ***Save*** *an Excel report before opening it!*

When opening the file in Excel, the data is automatically 'refreshed' with the currently available data.



Automated issue log in Excel

If you want to add the report as a deliverable in a project, add it as a deliverable. See section [adding documents to products](64).

4.1.2.2 Creating an Excel Report Template

Creating an Excel report template is done by following these steps:

1. Download a basic Excel report template 134
2. Open the template and insert keywords 136
3. Create charts 139 and Pivot tables 141 based on the Principal Toolbox data
4. Finish the template and make the report template available within the 142 Principal Toolbox

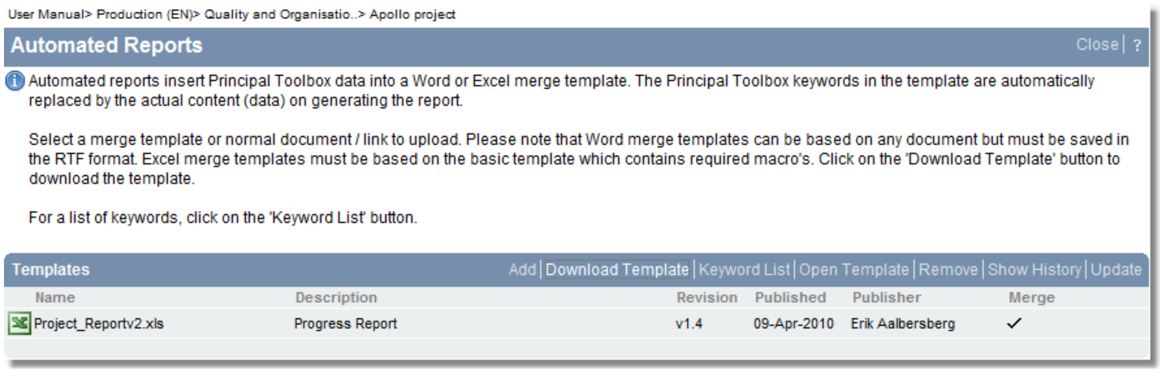
For more advanced topics, see the 'Advanced Topics' 143 chapter.

4.1.2.2.1 Open the basic Excel Report Template

***Note**: you need to be manager of the programme or project to create and edit report templates. Within a project, also project support can do this.*

To create an Excel report template, log in to the Principal Toolbox application and navigate to the 'level' on which you want to place an Excel report. For example, when you want to create a project report, navigate to the project. When a programme report needs to be created, navigate to a programme where you have access to the automated reports.

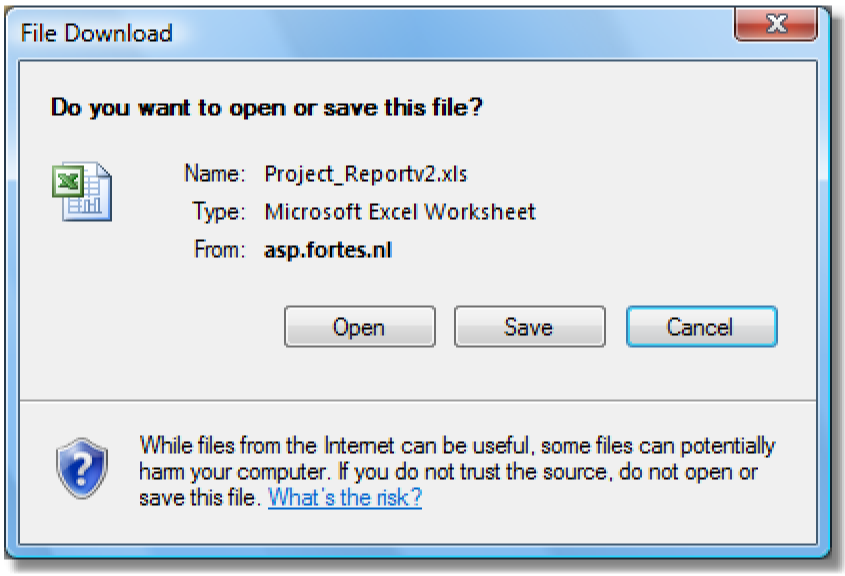
On the chosen level, click the **Edit** button to access the available automated reports. A page as shown below should appear.



Automated reports page.

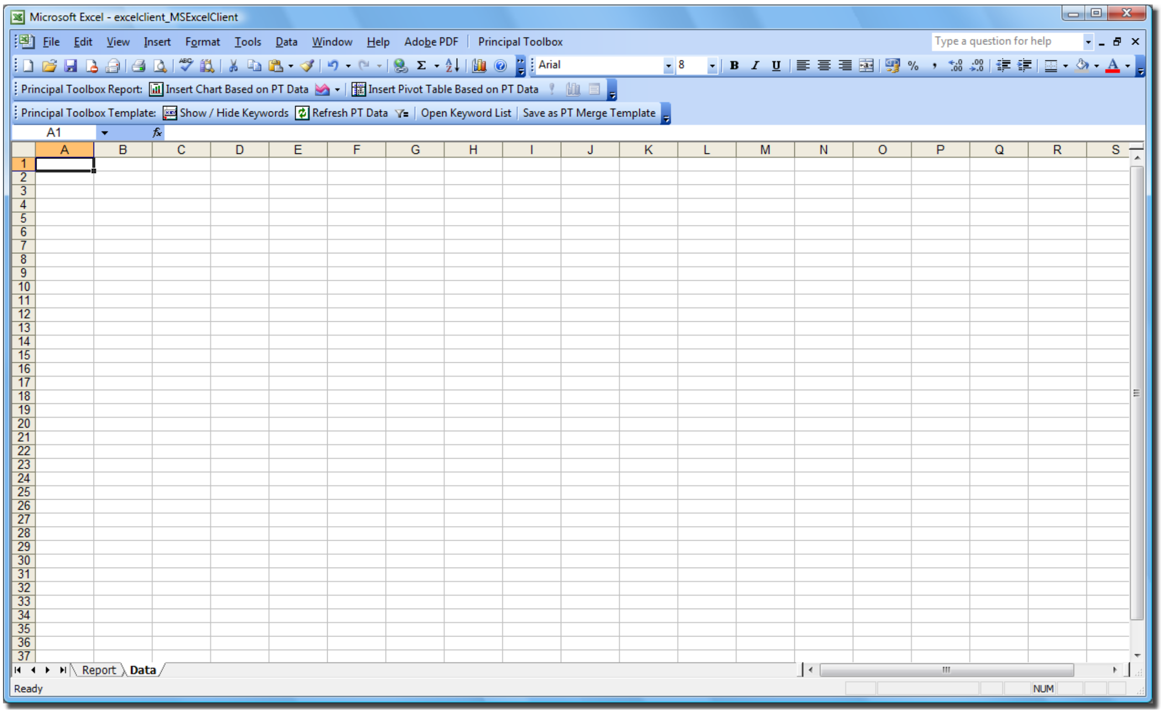
On this page, click the **'Download Basic Excel Template'** button to download an empty template that can be used as a start for creating the report template. Instead of starting a new template, an existing template can be used to modify, if one is available. In this case, click the 'Open template' button on the Excel template in the list.

When the Excel template is downloaded, following message is prompted by the browser.



In this dialog, click **'Save'** and select an appropriate location for the template. Then click **'Open'** to start configuring the template in Excel. Saving the template first ensures that the Excel file is opened correctly. If opened directly, the required support macro's included in the Excel file will not be started.

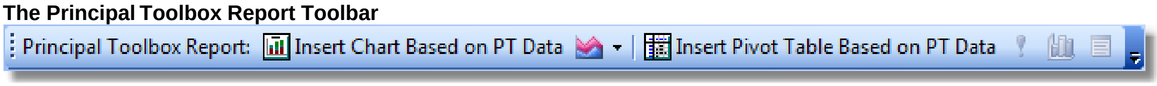
On completion, you should have the Excel file opened on the work station as shown below. When prompted whether to enable or disable macro's, click to enable macro's (as they are required to use the template correctly).



Empty Excel file

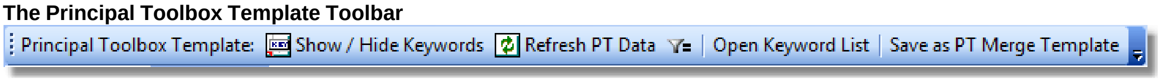
Note that you should have a menu entry called 'Principal Toolbox' and two Principal Toolbox toolbars:

The Principal Toolbox Report Toolbar



This toolbar provides functions related to reporting. It offers to insert either a Pivot table or a chart based on the Principal Toolbox data. For more information, see creating a chart 139 and creating a Pivot table 141 based on Principal Toolbox data.

The Principal Toolbox Template Toolbar



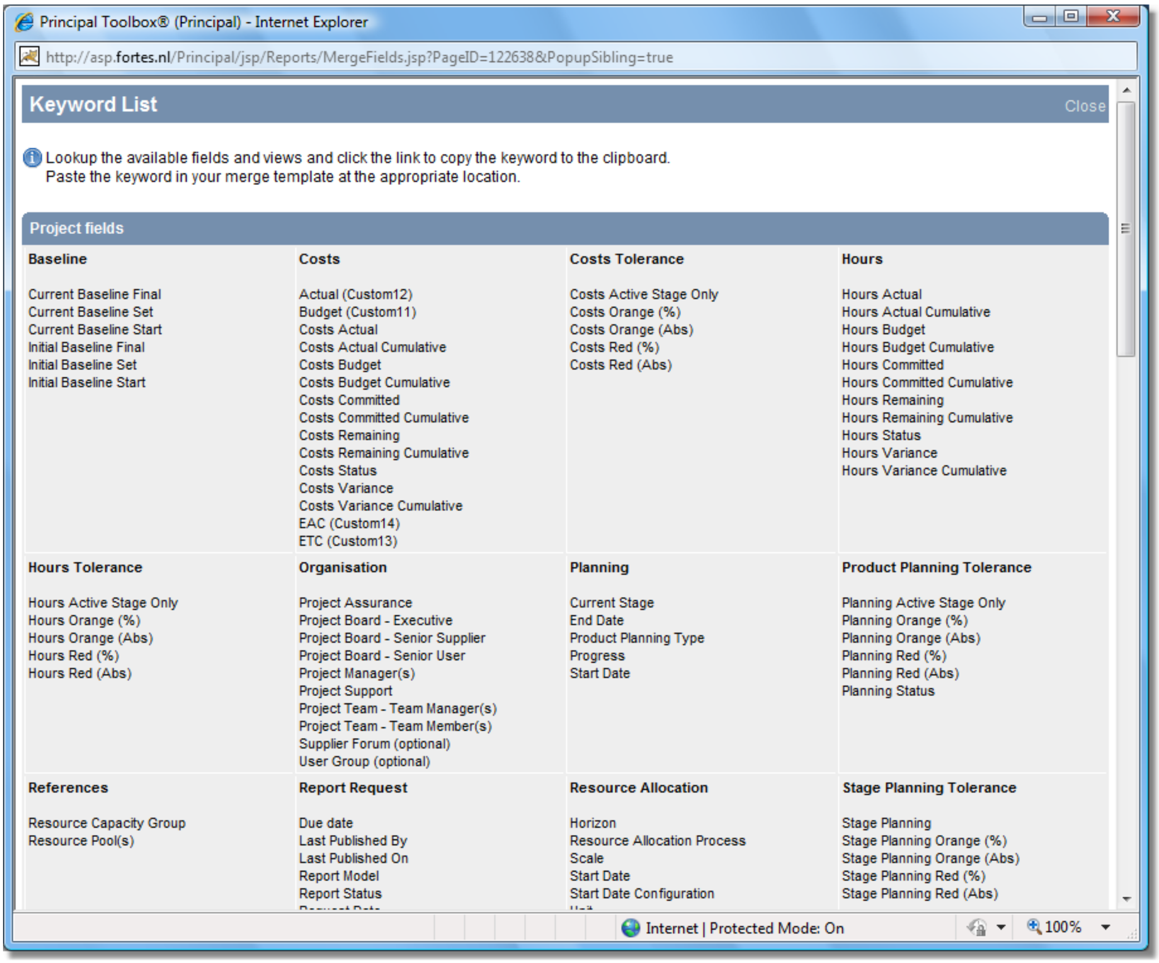
This toolbar provides functions related to setting up a template. The keywords that relate to the Principal Toolbox data can be referenced, inserted and the data refreshed.

4.1.2.2.2 Inserting Principal Toolbox Keywords

Keywords are used to define which data will be imported from Principal Toolbox into your report. These keywords are provided in a context-sensitive list, the keyword reference. This list can be opened from within your Excel template. Click the 'Merge Keywords' button on the template toolbar to open a browser window with the available keywords for this template.

A page like the one below should appear. Note that the content of the page may differ per project / programme.

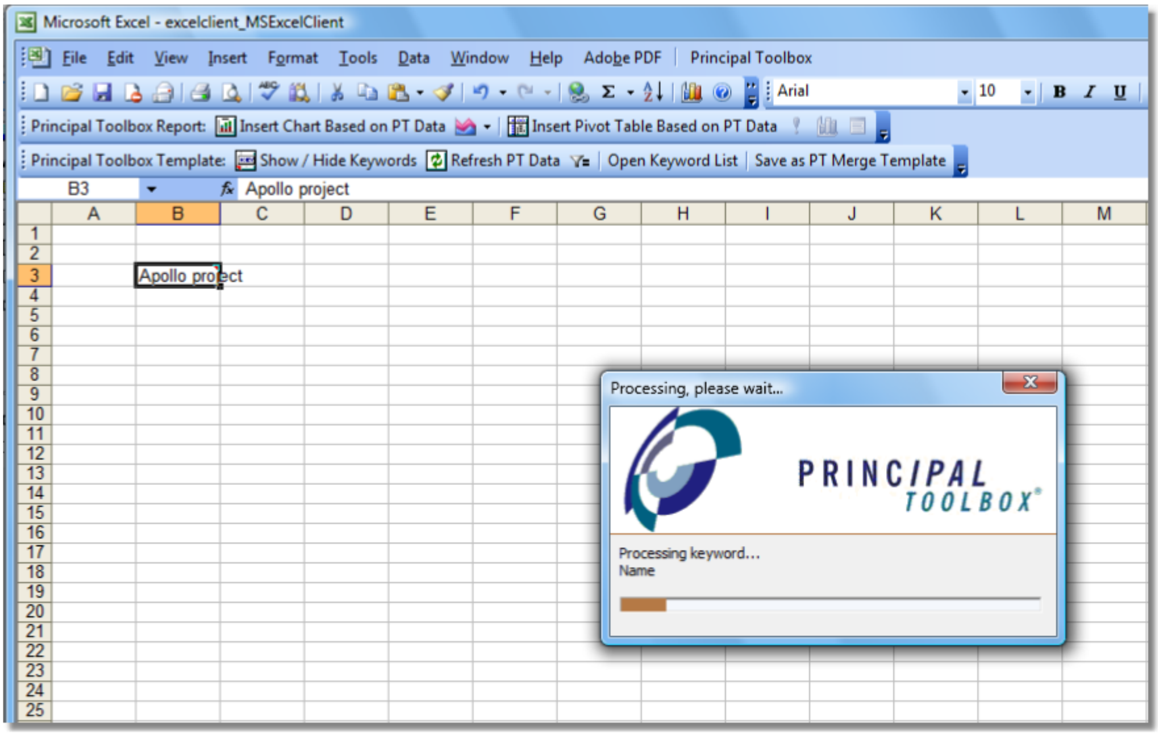
> ***Note**: if the report is to be used on different locations within the application, make sure to only use generally available keywords. This is mainly the case with the availability of views.*



Keyword list

Click a keyword to copy the information to your clipboard. Then select the appropriate location in the Excel template where you want to place the related data. To get the keyword in the template, choose **Paste** in the **Edit** menu. Alternatively use the shortcut key **CTRL+V**.

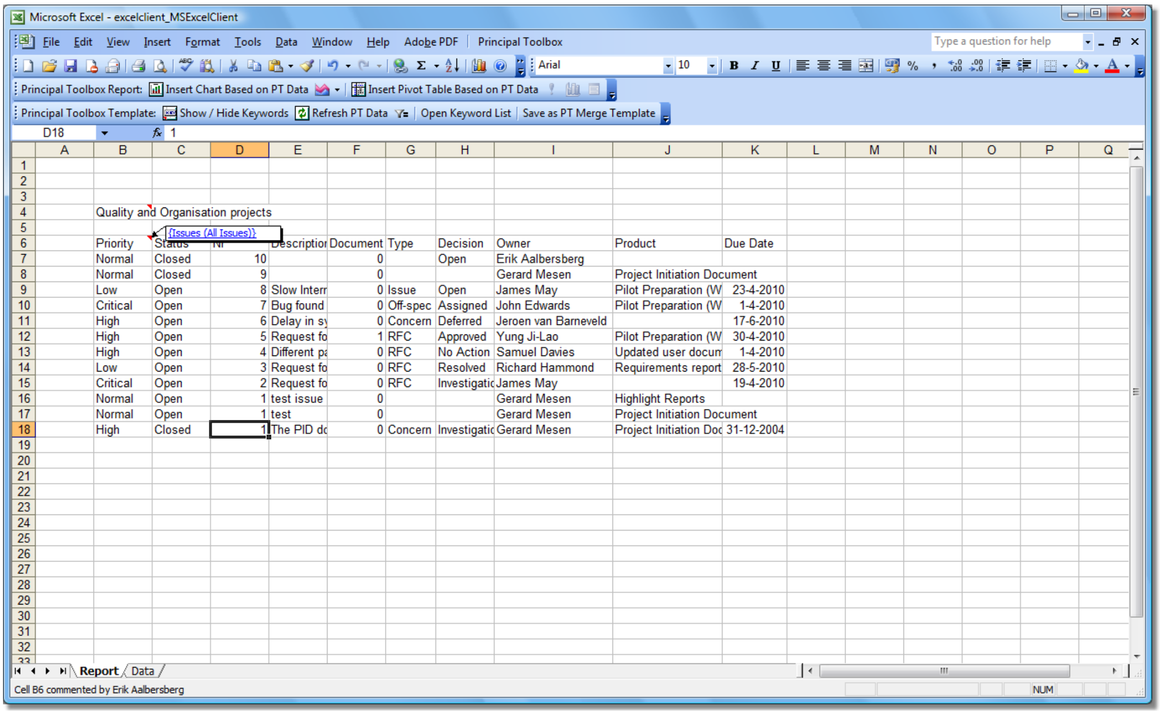
For example, when clicking the **'name'** keyword, the keyword can be inserted in the Excel file on location B2:



Adding a keyword

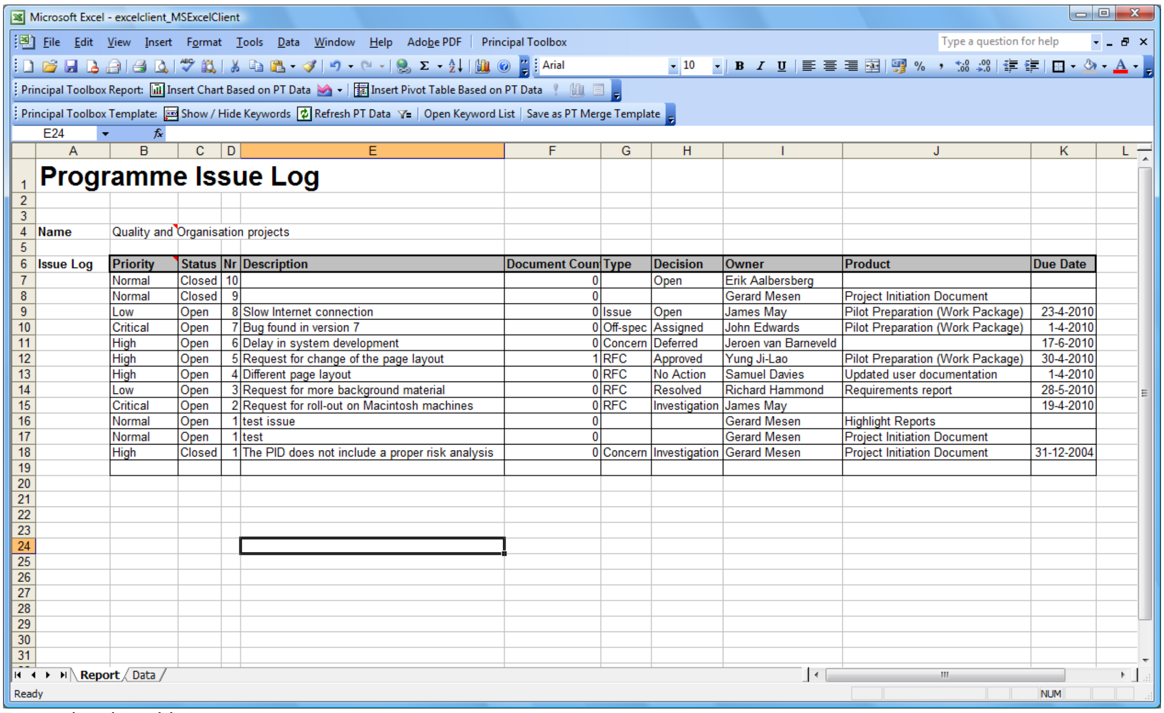
Note that when inserting the keyword, the keyword is replaced with the actual data immediately. During this process, a dialog appears showing the progress of the operation.

Now, insert a view (table of date) in the template by selecting a keyword related to views. In the example below, the view on open issues is inserted.



Inserting a keyword

Again, the keyword is immediately replaced with the data. You are now able to change the format of the table appropriately. E.g., make the column heading bold and have adapted width of the columns.


Programme Issue Log

Name: Quality and Organisation projects

Issue Log

Priority	Status	Nr	Description	Document Coun	Type	Decision	Owner	Product	Due Date
Normal	Closed	10		0		Open	Erik Aalbersberg		
Normal	Closed	9		0			Gerard Mesen	Project Initiation Document	
Low	Open	8	Slow Internet connection	0	Issue	Open	James May	Pilot Preparation (Work Package)	23-4-2010
Critical	Open	7	Bug found in version 7	0	Off-spec	Assigned	John Edwards	Pilot Preparation (Work Package)	1-4-2010
High	Open	6	Delay in system development	0	Concern	Deferred	Jeroen van Barneveld		17-6-2010
High	Open	5	Request for change of the page layout	1	RFC	Approved	Yung Ji-Lao	Pilot Preparation (Work Package)	30-4-2010
High	Open	4	Different page layout	0	RFC	No Action	Samuel Davies	Updated user documentation	1-4-2010
Low	Open	3	Request for more background material	0	RFC	Resolved	Richard Hammond	Requirements report	28-5-2010
Critical	Open	2	Request for roll-out on Macintosh machines	0	RFC	Investigation	James May		19-4-2010
Normal	Open	1	test issue	0			Gerard Mesen	Highlight Reports	
Normal	Open	1	test	0			Gerard Mesen	Project Initiation Document	
High	Closed	1	The PID does not include a proper risk analysis	0	Concern	Investigation	Gerard Mesen	Project Initiation Document	31-12-2004

Formatting the table

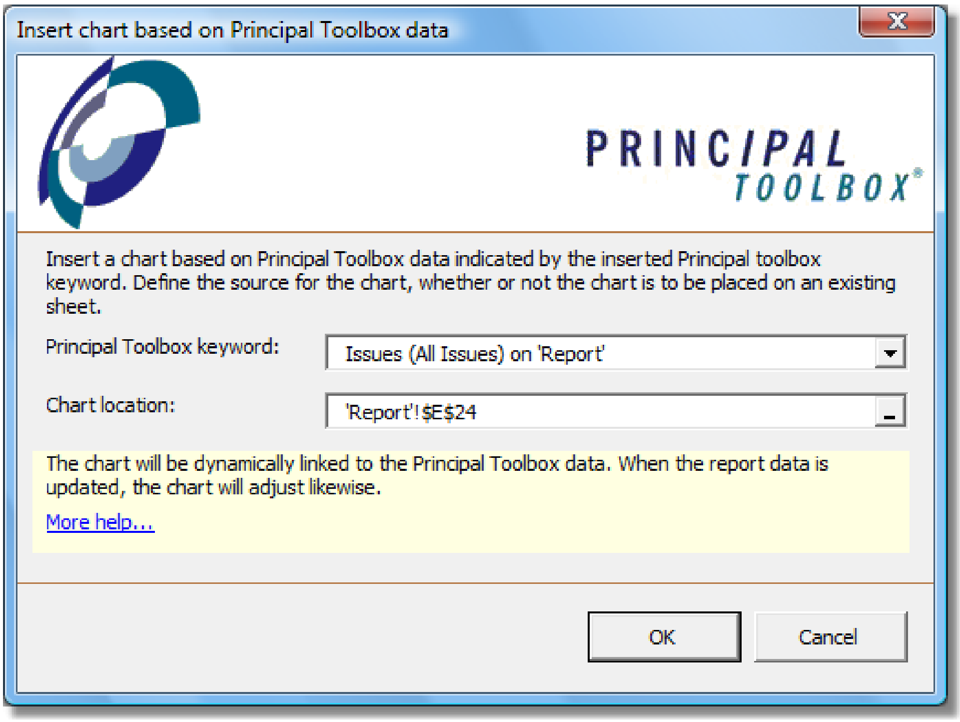
In the example above, the table has been adjusted and additional information inserted (labels, report title etc.). If necessary, the data can be refreshed by clicking the [Refresh PT Data] button on the template toolbar.

4.1.2.2.3 Creating a Chart Based on Principal Toolbox Data

To create (or insert) a chart based on Principal Toolbox data, it is required that the data has already been inserted through a keyword, see 'Inserting Principal Toolbox Keywords 136'.

Next, click the **'Insert Chart Based on PT Data'** button on the report toolbar.

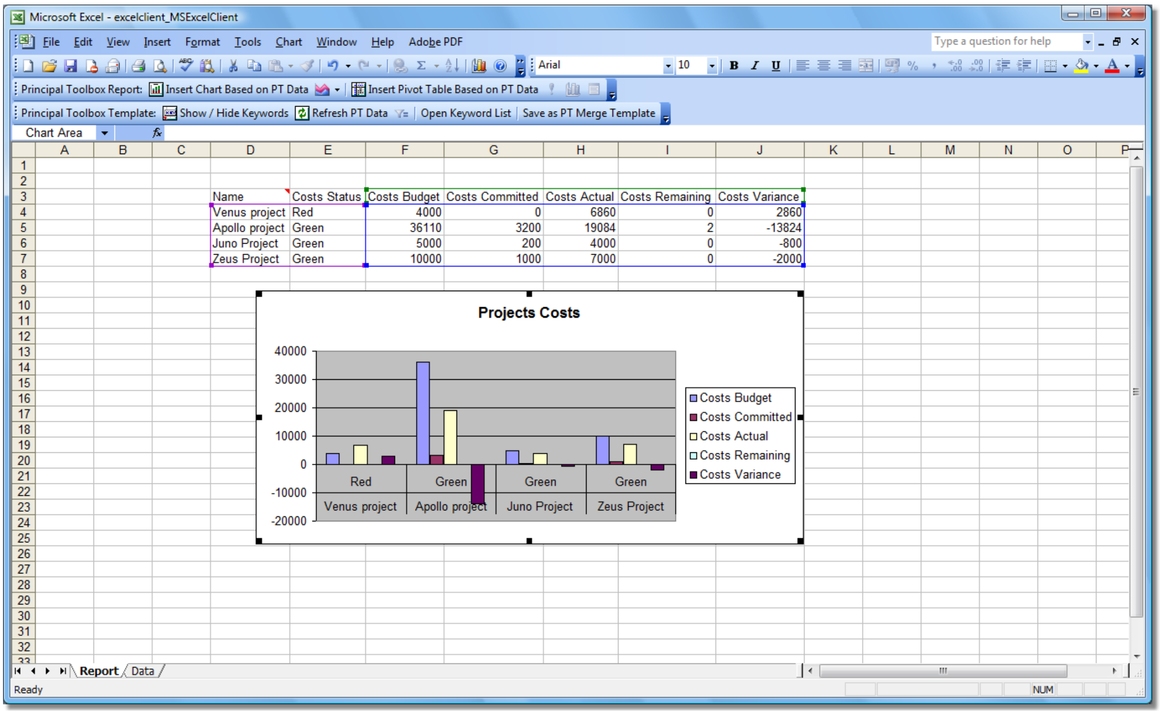
A dialog as shown below should appear. In this dialog, select the data that should be used as the source for the chart and the location where the chart will be related to (if not placed on a new sheet if chosen).



To alter the chart location, click the [_] button (behind chart location) and select the location. This is mainly useful for showing the chart on a sheet different from the source data.

The selection for Principal Toolbox data will show all available data inserted by keywords in the template. Please note that the selected data is automatically interpreted by Excel to be applied in the chart. This works best for data that is organised as a 'label column', followed by chart data columns, see the example below.

To insert the chart, click **OK**. When inserting normally (on an existing sheet), the following should appear (as an example).



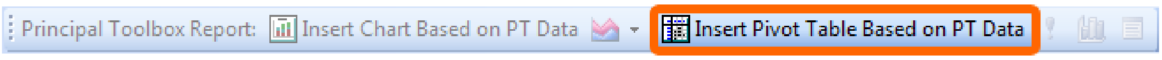
Inserting a Chart

The same chart would appear on a new sheet when this was selected. Please note that the chart type is by default set to 'stacked columns'. The user has to tune the chart by normal Excel functionality.

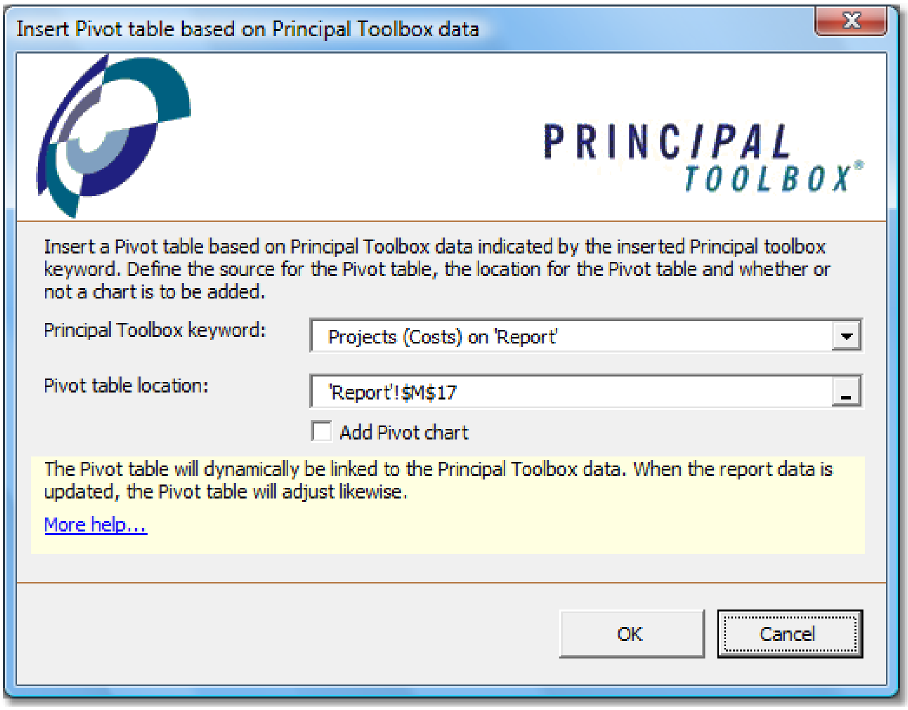
4.1.2.2.4 Creating a Pivot Table Based on Principal Toolbox Data

To create (or insert) a Pivot table based on Principal Toolbox data, it is required that the data has already been inserted through a keyword, see 'Inserting Principal Toolbox Keywords 136'.

Next, click the **'Insert Pivot Table Based on PT Data'** button on the report toolbar.

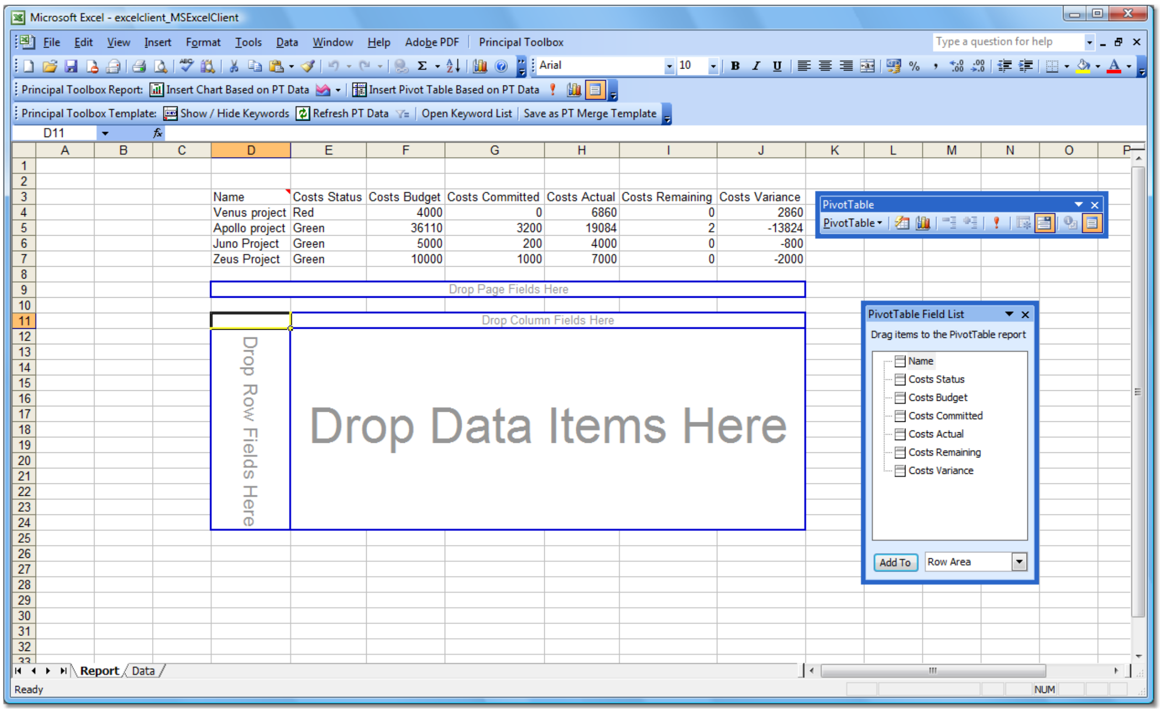


A dialog as shown below should appear. In this dialog, select the data that should be used as the source for the chart and the location where the chart will be related to (if not placed on a new sheet if chosen).



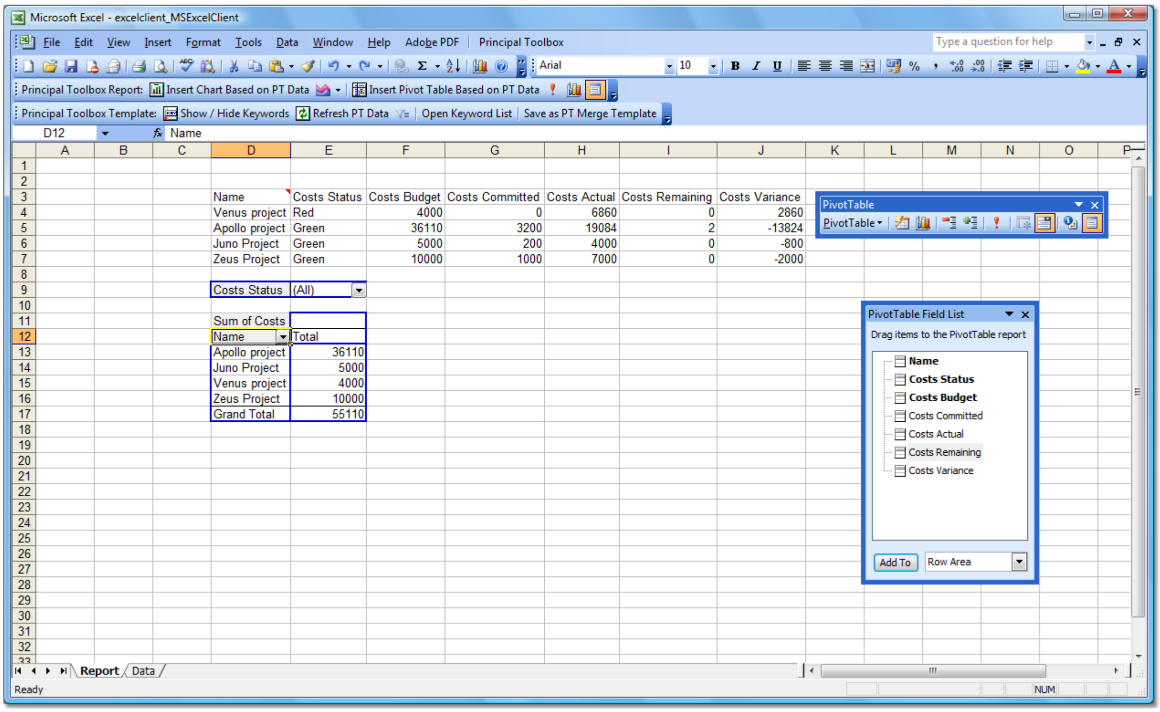
To alter the Pivot table location, click the [_] button and select the location. The selection for Principal Toolbox data will show all available data inserted by keywords in the template. Additionally, the user can click to add a Pivot chart (connected to the Pivot table. This chart will be placed on a new sheet automatically.

To insert the Pivot table, click **OK**. The following should appear (as an example).



Inserting a Pivot Table

In this setup, the user is able to drag the required fields to the appropriate location in the Pivot table. In the example shown below, the Pivot table is configured such that it shows the number of issues per project and per issue type.



Pivot Table inserted

4.1.2.2.5 Finishing the Excel Report Template

When all the keywords have been inserted into the template and required charts and Pivot tables have been added, the template can be made available within the Principal Toolbox.

To publish the template for use of reporting, navigate to the appropriate location in Principal Toolbox. For example, if you would like to use the report on a programme, navigate to that specific programme dashboard to add the template.

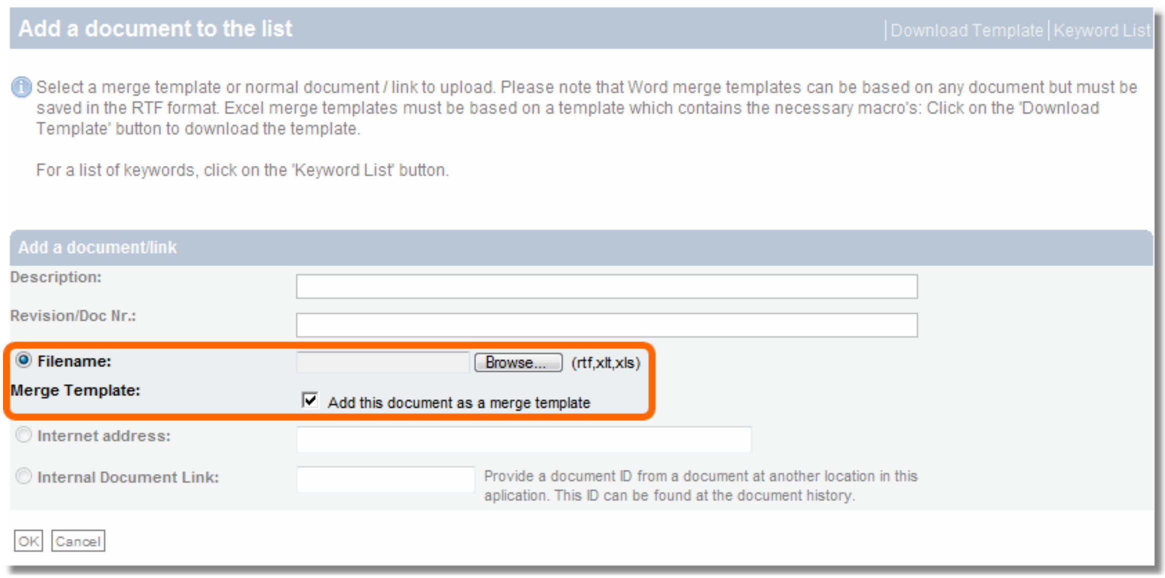
> ***Tip****: If you add the template in a model (either a project model or an MSP programme model), the report becomes available automatically on the projects / MSP programmes that are created based on the model.*

At the appropriate location, access the automated report list ([Edit] button on the list of available automated reports). See also creating an Excel report template 134.

To upload the merge template in the Principal Toolbox, click Add in the Templates header (in the Edit Automated Reports window). Fill in the following information:

Description	:	This will be the title of the report shown on the dashboard
Revision/Doc nr.	:	Use this to give a version number to your template
Filename	:	Locate the XLS-file with the browse button
Internal document link	:	Provide a document ID from a document at another location in the Principal Toolbox application. The ID can be found in the document history. This allows for a centrally placed document to be linked to from projects. Update by updating only the original centrally placed document.

IMPORTANT: Make sure the checkbox **'Document is a merge template'** is ticked!



Adding a Excel Report Template

Click '**OK**' to add the merge template to the Principal Toolbox. The document has now been made available as an Automated Report and it can be found on the dashboard in the list Automated Reports.

To generate the Automated Report click the template name and it will open in a new window. After completion, the template can be used as a report within the project / programme etc. See using the Excel report 132.

4.1.2.3 Advanced Topics

Configuring the template may require advanced options like formatting the table conditionally, add calculated data to the original Principal Toolbox data or add custom calculations / processing.

The Excel client reporting allows you to add this kind of configuration to the automated report templates. For these topics it is assumed that the user is familiar with the options and functionality provided by Excel.

4.1.2.3.1 Extending the Report Data

Extending report data allows you to add information to the report data retrieved from the Principal Toolbox. For instance, adding a calculated column to a table. This can be useful when data has to be presented different than the default formatting or if the data needs to be post-processed.

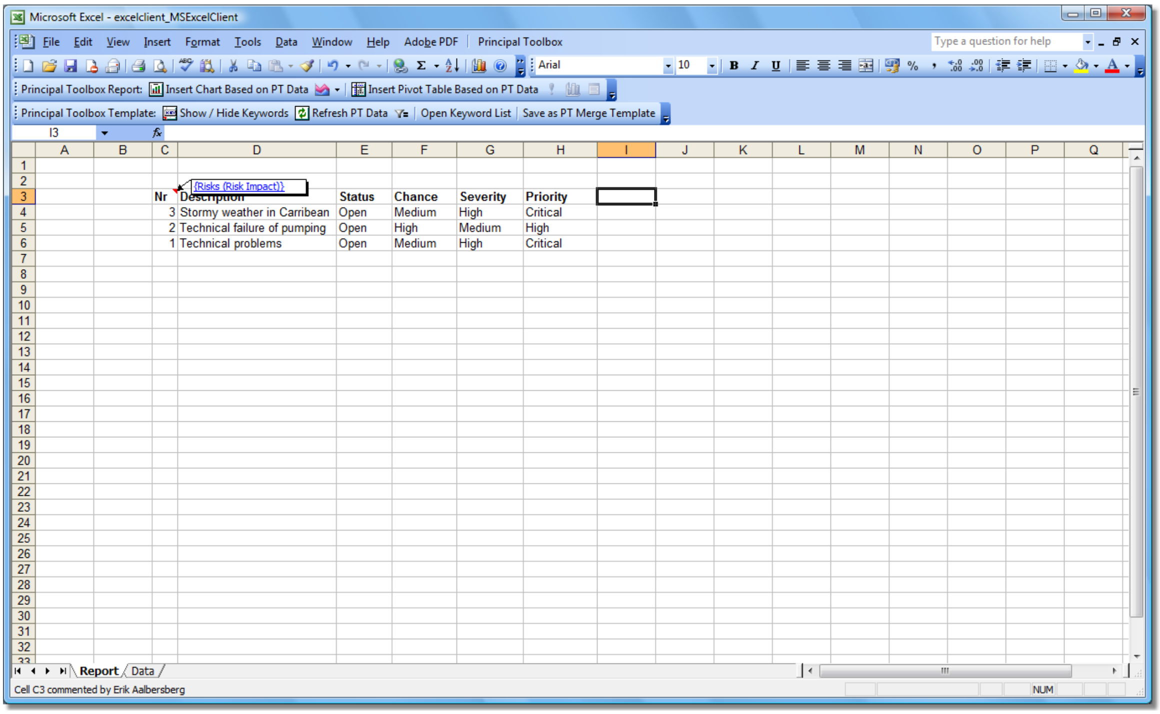
The report extension is standard Excel functionality and can be applied as is on single cell data (like the budget field of a project). However, for tables of data based on views in the Principal Toolbox, it is more complex. The data coming from Principal Toolbox have a dynamic behaviour. The number of rows may change in time and / or the location at which the report is used. This behaviour makes extending the report data (and other advanced options) a bit complex as it has to be configured in such a manner that it works independently from the number of rows in the table.

To explain the proper way of configuring extended report data, consider the following example. Here, the impact of a risk is to be determined based on the Principal Toolbox fields 'Chance' and 'Severity'. The impact is to be determined by the impact matrix stated below.

Chance **Severity**	*Small*	*Medium*	*High*
Small	1	2	5
Medium	2	4	10
High	5	10	25

In the table, the impact is stated as a value between 1 and 25. The objective is now to add this impact as a column to the report data.

To start, it assumes that an appropriate view is created in the Principal Toolbox and is available as a keyword for use in the Excel template. As a result, a template as shown below could be created.



Extending the report data

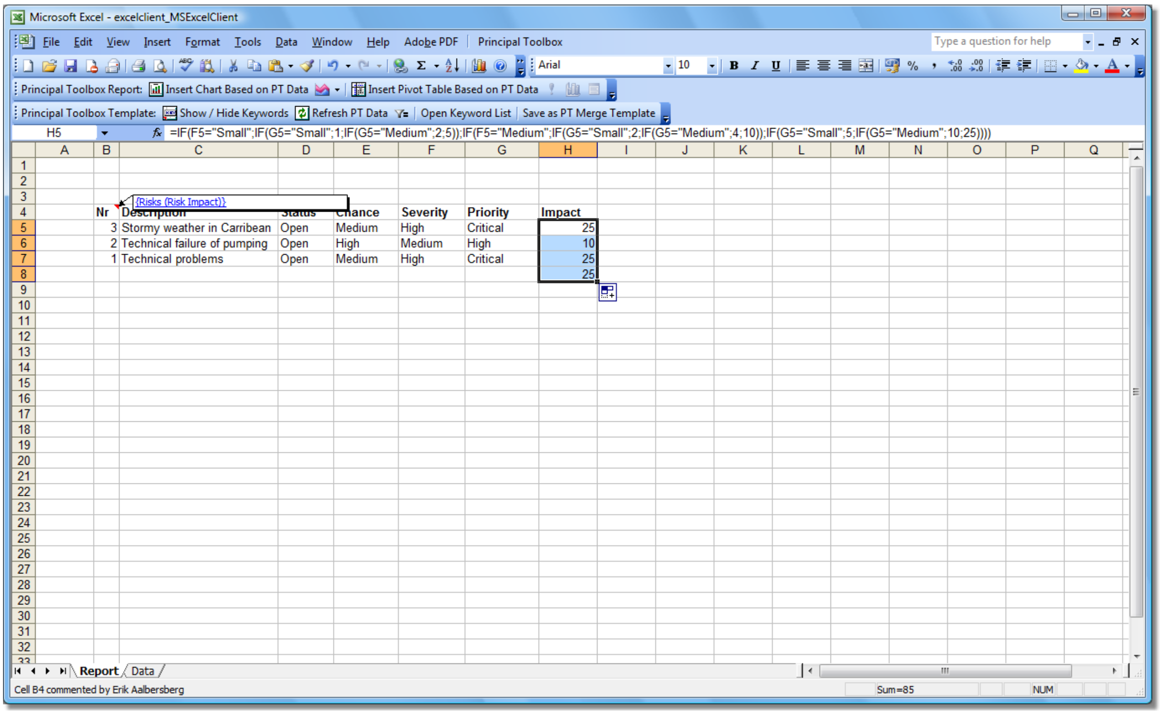
To add the calculated impact data, a column heading is added next to the 'Priority' column. Also, in the cell below this heading, the following formula is entered:

```
=IF(F5="Small";IF(G5="Small";1;IF(G5="Medium";2;5));IF(F5="Medium";IF
(G5="Small";2;IF(G5="Medium";4;10));IF(G5="Small";5;IF
```

```
(G5="Medium";10;25))))
```

(adapt the formula as necessary to refer to the correct cells!)

This formula calculates the impact based on the values detected for 'Chance' and 'Severity'. Next, extend the formula to be applied to all rows and **the first empty row below the table of data.** See the picture below.



Report data extended

The row below the data is considered to be a 'store' of the formulas and formatting to be applied to the table. When refreshing the data, the formula(s) in the first empty row below the table of data will be used for all rows (independent of whether there are more or less rows of data).

When the extended data is placed adjacent to the table of data from the keyword itself, the extended data can also be used for Pivot tables and charts, see the appropriate help pages for more information.

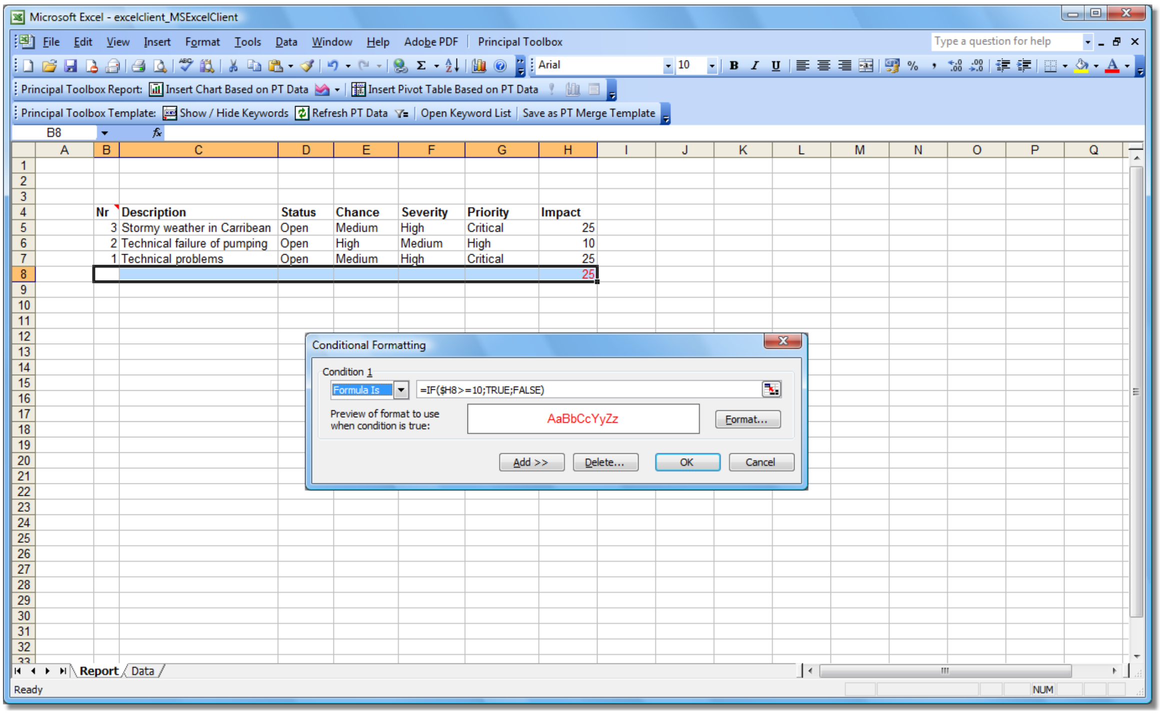
4.1.2.3.2 Apply Conditional Formatting

Conditional formatting allows to alter the visualisation of data depending on value conditions of the data. For example, when the data represents a number and the number is above a certain level, the colouring of the data may turn red.

The conditional formatting is standard Excel functionality and can be applied as is on single cell data (like the status field of a project). However, for tables of data based on views in the Principal Toolbox, it is more complex. The data in the Excel client reports, as provided by the Principal Toolbox, has a dynamic behaviour. The number of rows of data may change in time and / or the location at which the report is used. This behaviour makes the conditional formatting (and other advanced options) a bit complex as it has to be configured such that it works independently from the number of rows in the table.

To explain the proper way of configuring conditional formatting using the Excel reporting functionality, consider the example as given in the topic regarding extending the report data 144.

Now, we will add formatting to the rows that have an impact that is greater than equal to 10. If so, the text in the row will turn red.



Apply conditional Formatting

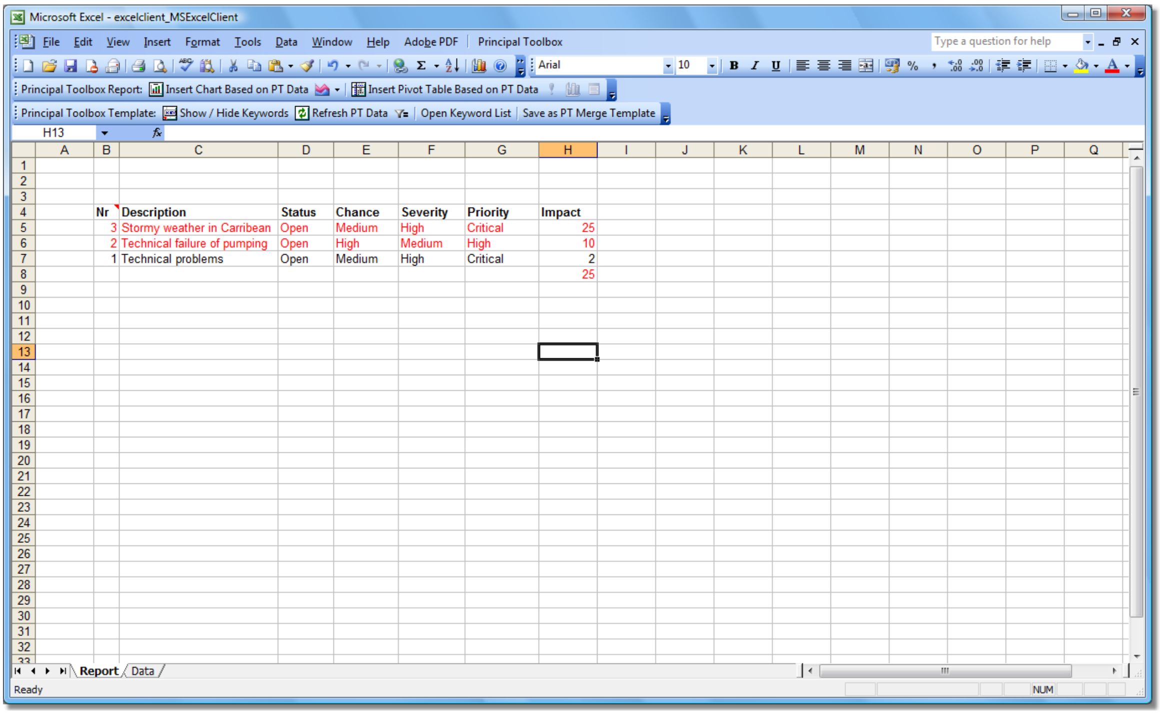
In the picture above, the row below the data is selected to apply the conditional formatting to. Note that this row is considered the 'store' for formatting and calculations to be applied to the table data.

For this row, the conditional formatting is set. The formatting is set as a formula to apply the formatting to the entire row depending on a single cell value (instead of applying the formatting to a single cell depending on that same cell). The formula entered is:

```
=IF($K8>=10;TRUE;FALSE)
```

(adapt the formula as necessary to refer to the correct cell!)

The cell K8 refers to the impact value for the selected row. The formatting is set to red text. When the data is now refreshed (click [Refresh PT Data] on template toolbar), the formatting is applied to all the table data as well, see below.



Conditional formatting applied

4.2 Timeline reporting

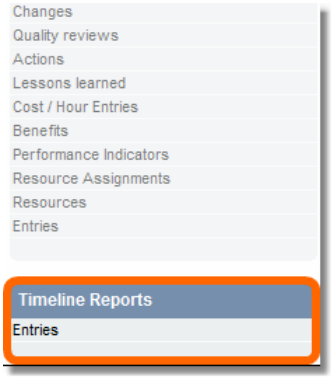
A timeline is a graphical representation of information in relation to time. Timeline reports enable you to instantly report on different types of cost or hour entries over time. Timeline reports can be used to compare your available resource capacity with you requested and allocated resource availability. It can also be used to compare the budget and actual costs within a project.

Timeline reports work like pivot-table known from MS Excel. It creates reports on entries coming from time registration, cost entries and resource management.

Example: Timeline Report

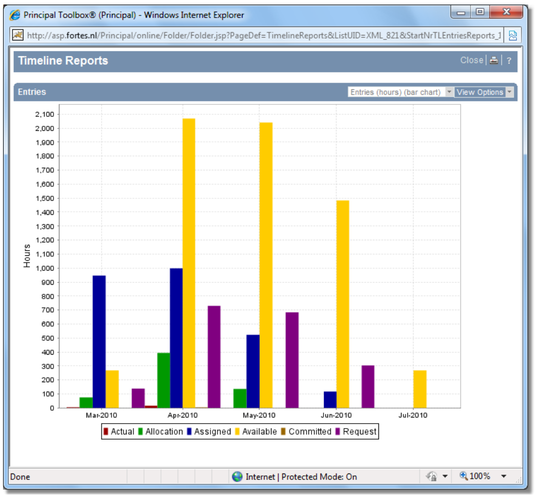
Based on the start and end date of an entry a timeline report creates an overview in time, for instance the total costs per month per project or the number of hours resources are allocated to projects.

The timeline reports can be found on the same location as the normal reports. So they are available enterprise-, programme-, portfolio- and project level. They are also available in the different modules like time registration and resource management.

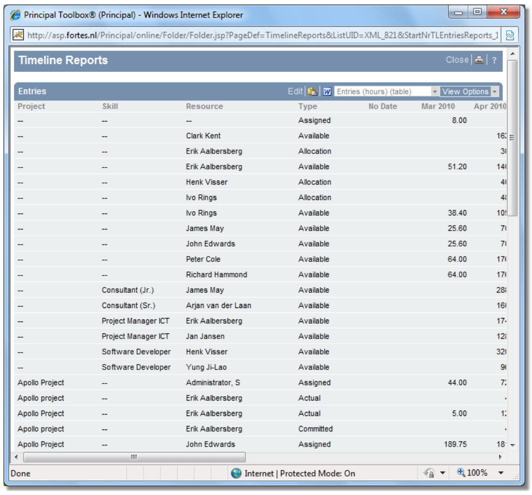


Two representation types are available:
- table
- chart

Timeline report views can be used in automated Excel and Word reports.

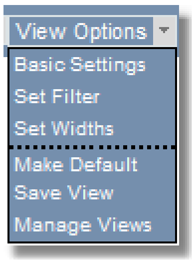


Example: Timeline Report Chart



Example: Timeline Report Table

The different options in the **View options** menu are:



Basic Setting	:	To configure the timeline report view
Set filters	:	Define a filter to make a selection of the shown items
Set widths	:	Set the column width, so the view fits better on screen or in a MS Word report. Drag the line between columns to increase or decrease the column size.
Make default	:	This sets a view to the personal default
Save view	:	Save the view for later use.
Manage views	:	Set properties for the view. You find more information at 'Manage views 24'.

Create a Timeline report view

This example describes how to create a table with costs per product per month for this year within a project represented as a timeline report.

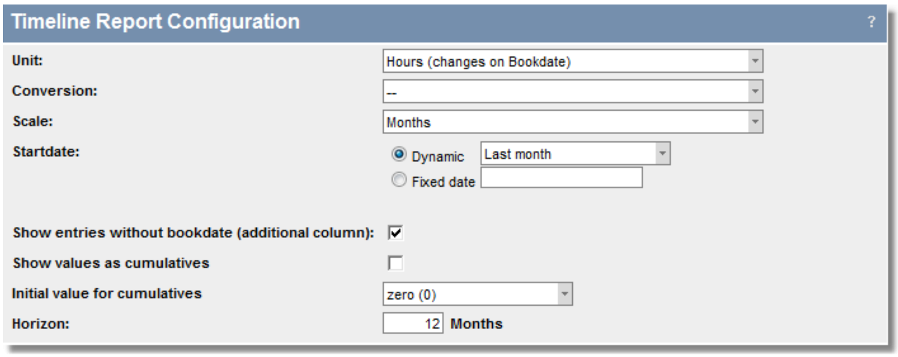
Basic Settings

1. Navigate to your project in Principal Toolbox and go to the 'Report' tab
2. Click on '**entries**' in the Timeline report - section
3. Open '**view options**' and choose '**Basic Settings**'
4. Set the values for the settings
   a. unit : select '**Money** (changes on book date)'. This setting is used to select which kind of entries (costs or hours) you want to see and in which unit it is represented on screen. The system automatically calculates the data between different unit settings.

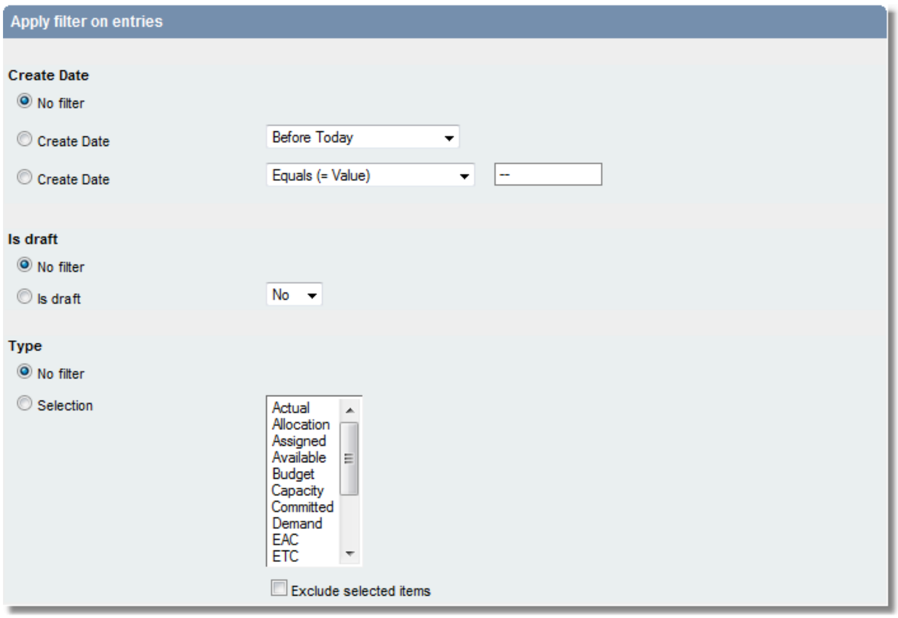
   b. Scale: set scale to weeks to show the costs per week.

   c. Start date: set a dynamic or fixed start date where the windows of the timeline must start. Select '**This year**' as a dynamic start date.

   d. Horizon: set the number of weeks, months or quarters to show starting at the start date.

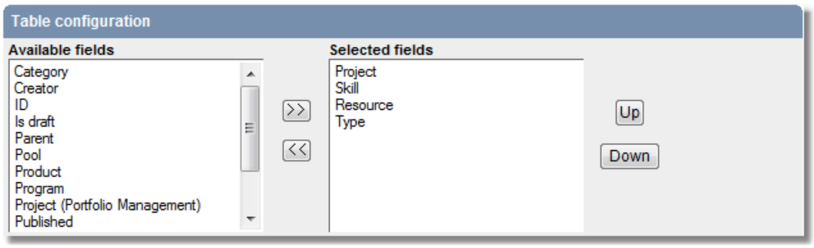


5. Apply a filter on entries: select '**Budget**' and '**Actual**' in the filter type. This will give you only the cost-entries of the type budget and actual.



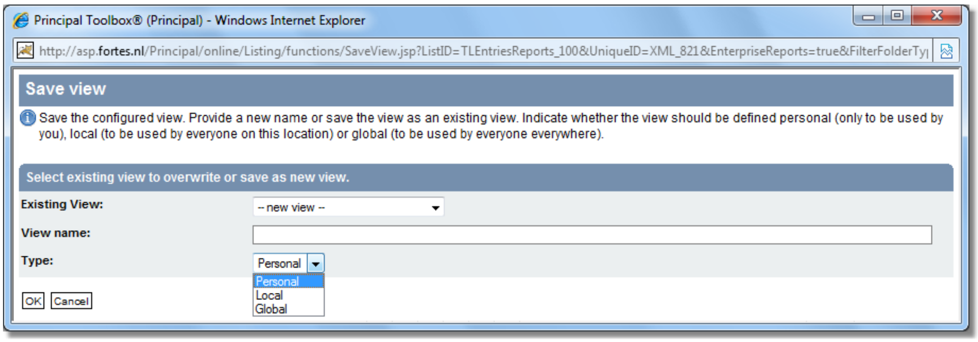
6. Select '**Table**' as the representation type to get a table with the budget and actual costs

7. Table configuration – select the field to show per row. Select product and type to display the product name in the type of entry (budget or actual).



8. Click '**OK**' and see the result on screen

Save view
If you want to save the newly defined view you need to save it with **Save view**. To overwrite an existing view you saved before, select the name of this view at the Existing view pull down list. To create a new view, enter the new name at 'New view'. Click **Save** to save the view.



Save view

Select personal, local or global. See manage views 24 for more information.

- With the '**Make default**' option a specific view can be set to the personal default view on that page.

- With the button '**Manage views**' the views available can be managed. See Managing views 24.

5 Advanced options

5.1 Currencies (add-on)

With the add-on 'Advanced Cost Registration' it is possible to define multiple currencies to be used in Principal Toolbox. One global currency is defined, which is used as the reference currency. For every different currency, a local currency can be defined.

The global currency makes it possible to report on project costs for all projects at enterprise level in the same currency. Furthermore it makes comparing these projects within an international organisation easier.

The add-on 'Advance Cost Registration' supports the use of more than one currency in a project. Currency rates can be imported via the 'Integration Dashboard' add-on.

5.1.1 Defining currencies

To define different currencies go to the **'Setup'** page. Firstly define the global currency.

1. Go to the **'Setup'** page.

2. Click on **Currencies**. To change the Global currency click **Edit**.

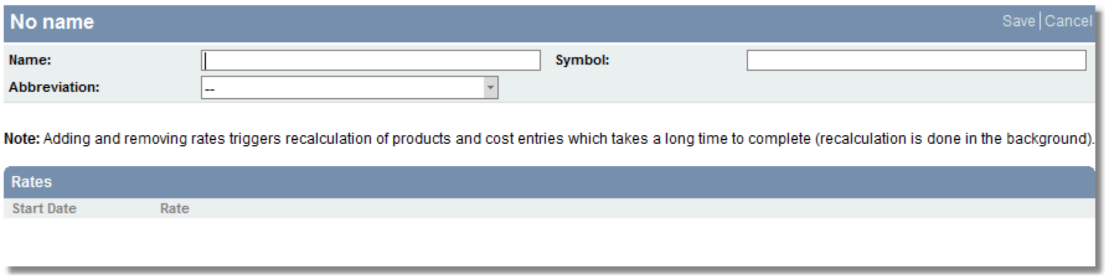
3. Fill in the following information:

Global currency abbreviation	:	Select the correct currency abbreviation.
Global currency name	:	Insert the name of the currency.
Global currency symbol	:	Insert the currency symbol.

After the global currency has been set the local currency needs to be defined.

1. Go to the '**Settings**' page.
2. Click **Currencies** and then on **Local Currencies**. To add a local currency click **New.**
3. Fill in the following information:

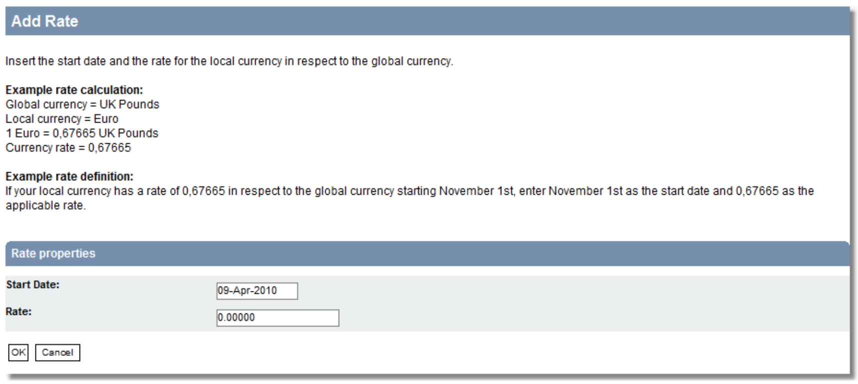
Name	:	Insert the name of the currency.
Abbreviation	:	Select the correct currency abbreviation.
Symbol	:	Insert the currency symbol.



Adding a new currency

4. Next, the rate of the local currency needs to be defined. Click '**New**' to insert the rate.

5. A new window will appear where you can set the rate and start date for that rate. The start date is used for the calculation of the global costs.



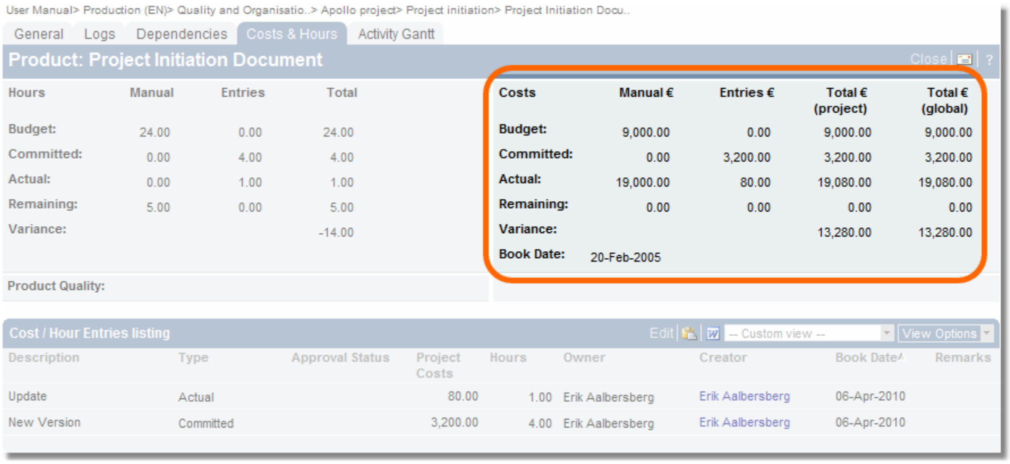
The rates can be changed whenever there is a need to do so. Go to the specific currency and click '**New**' to set a new rate with a specific start date.

5.1.2 Working with global and local currencies

When a new project is created in the Principal Toolbox the programme manager needs to decide if the project costs need to be managed in the global currency or with a local currency. (see creating a project 33). The currency setting in a project can not be changed after the project is created.

When you insert cost entries to the system it will calculate costs both for the local project currency as well as the global currency.

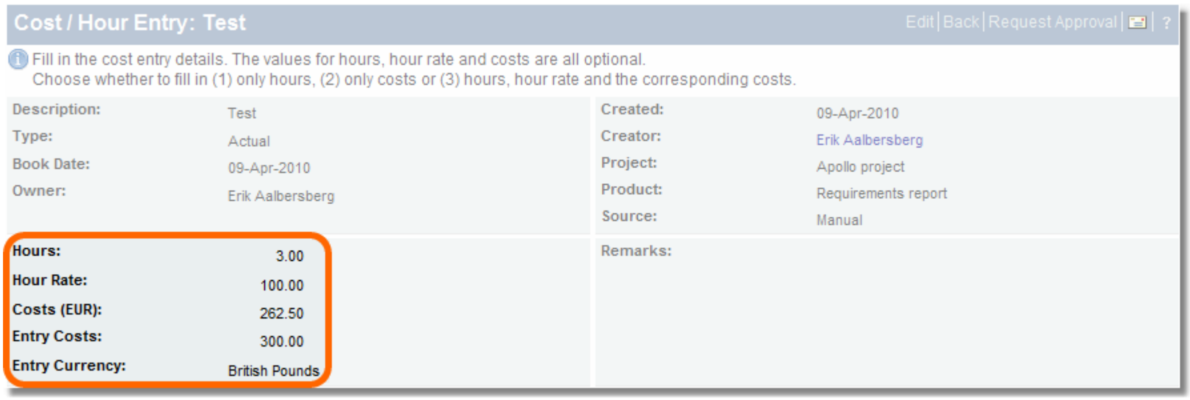
1. Click a specific product and go to the **'Plan'** tab. The following window will appear. In the section on the right you will see columns for the project (local) and the global currency for totals.



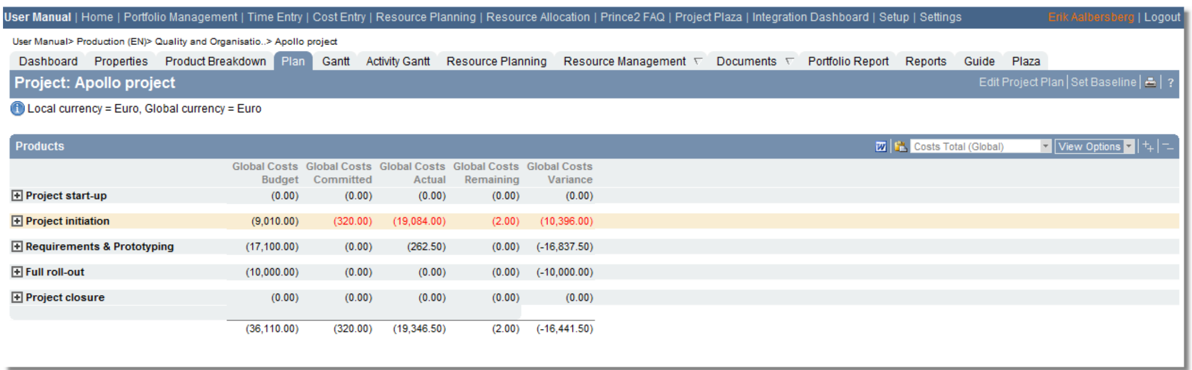
Costs on a product

2. On the bottom of the right hand side page section, a book date can be defined for the costs that have been entered manually.

3. On the cost entry page the project (local) currency and the global currency are visible.



These global costs are calculated based on the book dates of the cost entries. Both the global and the local currency can be used for reporting.



Plan tab

5.2 Project plaza (add-on)

***Note**: Project plaza is an add-on, and only available when Principal Toolbox has been installed within a network.*

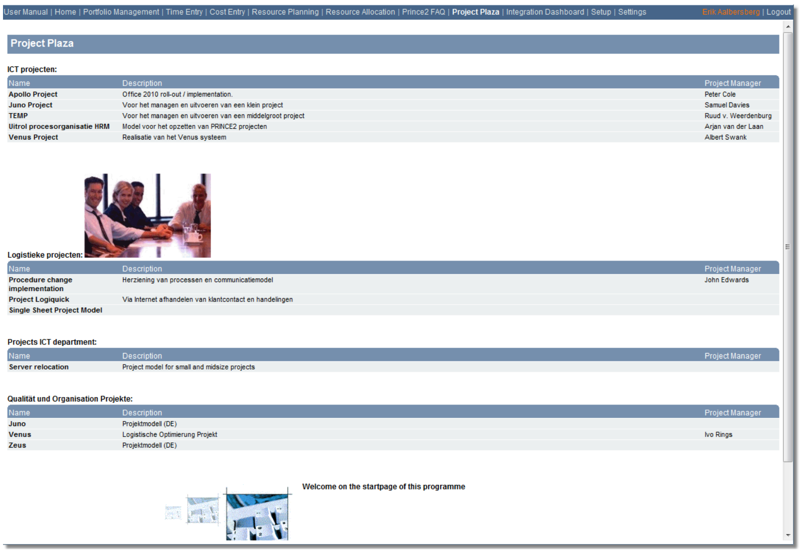
As well as providing information to the project organisation it is possible to inform the whole organisation about projects that are running through the add-on 'Project Plaza'. Some project information like background and contact information is made available through the 'Project Plaza'. It is the project manager decides who decides which information will be be made available.

1. Go to the **Project Plaza** tab.

2. Fill in the following information :

Background	:	Background of the project
Scope	:	Scope of the project.
Projectnumber	:	Specific project number.
Deliverables	:	Which major products will be realised in the project.
Contact	:	Contact information.
Remarks	:	Eventual remarks.
Hide for project plaza	:	Highlight if the project is not to be shown on Project Plaza.

3. The project information is accessible to everyone within the organisation.



Project Plaza

5.3 Advanced Customisation & Workflow (add-on)

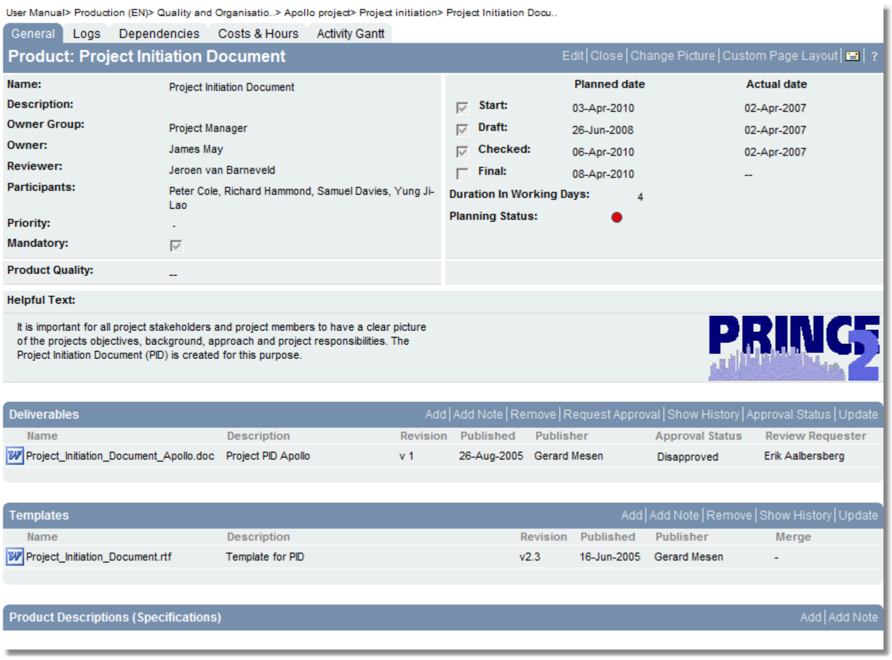
With the add-on ‘Advanced Customization & Workflow’ an organisation can define electronic forms in the different project models. These pages can be tailored to the specific needs of the organisation or programme.

1. Go to a project model and create a new product to customize or select an existing product.

2. Click the product to open the product details page.

3. Click the button Custom Page Layout to define the layout of the page.

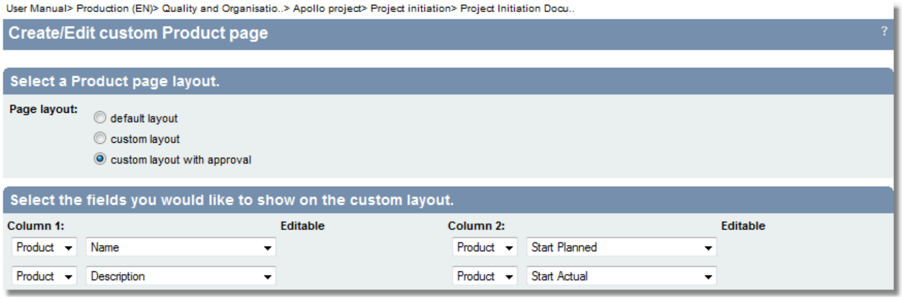
Default layout	:	Standard Principal Toolbox view;
Custom layout	:	To choose which fields are visible on the product page.
Custom layout with approval	:	To customise and define an approval for the page.



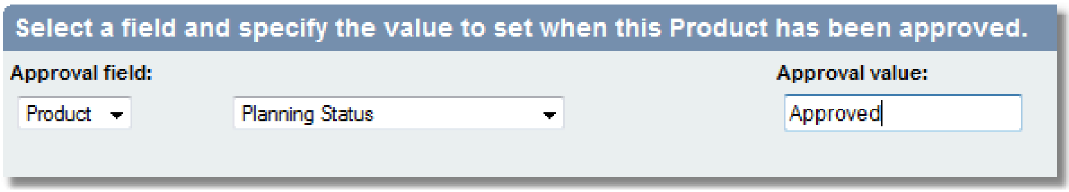
Product page

4. In this example a new page with an approval cycle is defined. Place a tick in front of ‘**Custom layout with approval**’.

5. Next step is to define which fields need to be available on the page. In the first pull-down menu select if the field is a project field (e.g. project name) or a product field. Then select the field to show on this custom product page.

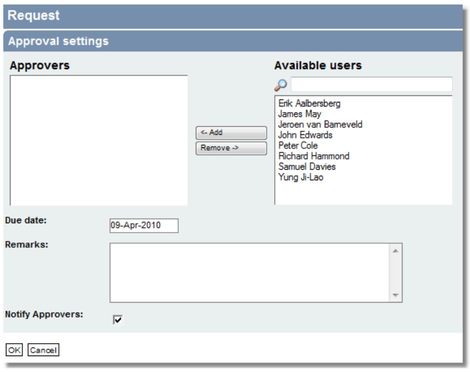


6. The last action on the page is to select what field will be set when all the reviewers approve the data on the product. In the example given, a custom product field (product approval) is used to set on approval.



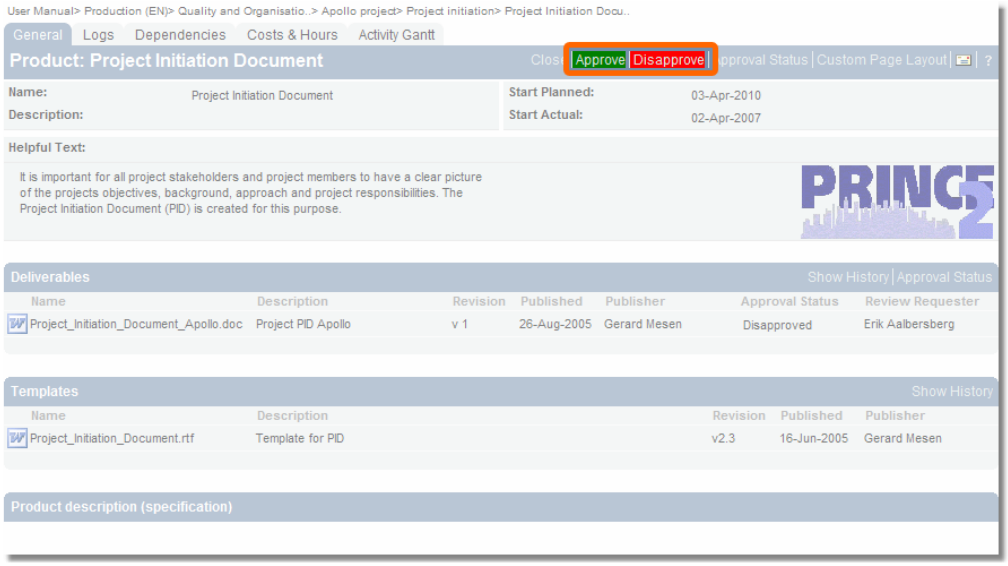
7. When this project model is used for a project, the project manager (or the owner) inserts data on the product and then requests approval for the product by clicking the Request Approval button.

8. A new window will open where the approvers need to be selected, a due date can be set and remarks can be inserted. To send an email to the approver(s) about this product approval, tick **'Notify approvers**'.



9. The approver(s) will be informed through an email and will have a note on their ‘Home’ page.

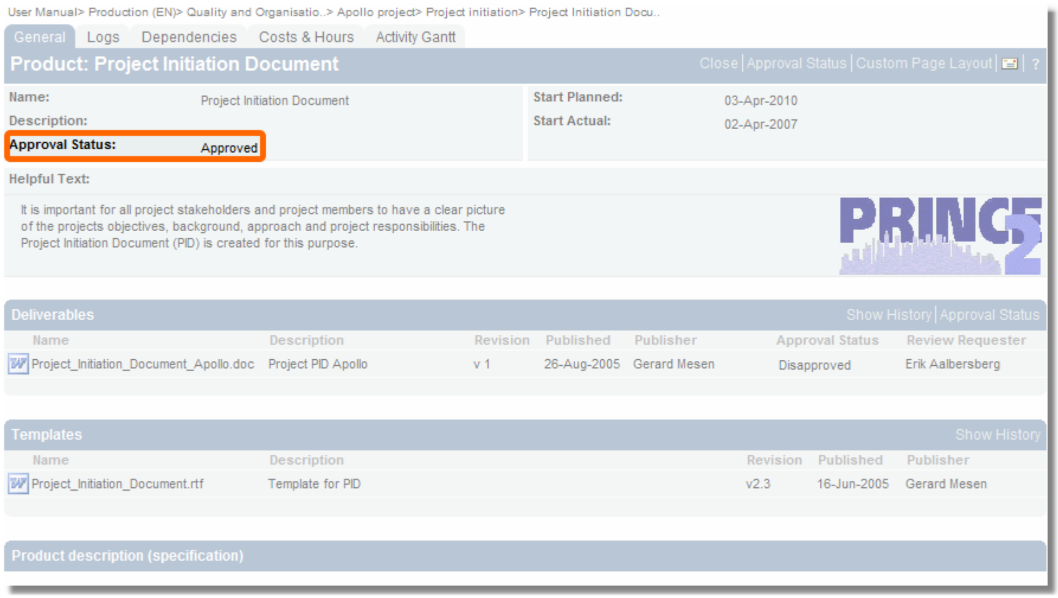
10. To review the product page click the product name and the specific ‘Product’ page opens.



Approve or disapprove the product

11.After review click ‘**Approve**’ or ‘**Disapprove**’ and insert any remarks.

12.In this example we have approved the product and the status of the ‘Product approved’ field is automatically set to ‘**Approved**’.

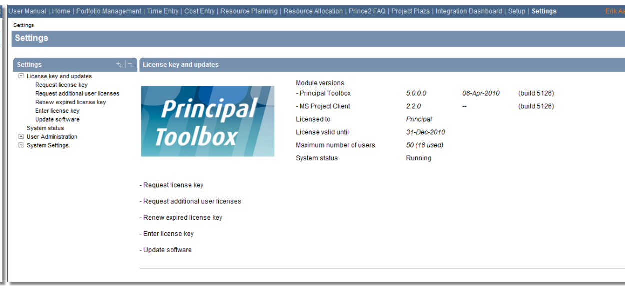


Approved product

6 System Administrator: Setup & Settings

The administrator can simply control the Principal Toolbox via the 'Setup page' and the 'Settings page'. In order to access the 'Setup page' you need to click Setup in the dark blue header of the Principal Toolbox application. To access the 'Settings page' you need to click Settings in the dark blue header of the Principal Toolbox. These functions are initially only available to users with administrator rights.

Setup page



Settings page

On the Setup page you can find several configuration options, such as non-project activities, local currencies and custom fields. In the middle of the 'Settings page' you can see the information of your current license. Underneath are options to alter the license key and the version type.

6.1 Setup

On the Setup page you can find several configuration options, such as non-project activities, local currencies and custom fields. On the left hand side of the page you see a list with subjects that point to the different setup pages.

We will review the most important subjects in this section:
- Principal Toolbox settings 158
- Email notification 158
- Creating non-product activity sets 159
- Defining custom fields 161

6.1.1 Principal Toolbox

***Note**: this section is only relevant to system administrators.*

This is an overview of the advanced system settings. Normally spoken these do not need to be changed. Some of these settings will only be shown when add-on's are activated.

Page	Link	Setting	Standard value	Remarks
Principal Toolbox				
		Only expand active and next stage	No	
		Activate product selector in logs	Yes	
		Use of PRINCE2™ roles	No	If the full PRINCE2 organisation is used within the organisation, select 'Yes'.
	MS Project file export	As soon as possible constraint	As soon as possible	If progress of project is to be monitored in MS Project change this to 'Yes'
		Must finish on constraint	Must finish on	To change to a NL version of MS Project: “ Moet eindigen op ”
		Must start on constraint	Must start on	To change to a NL version of MS Project “ Moet starten op ”
MS Project integration (add-on)				
		Edit project progress in	Principal Toolbox	If progress of project is to be monitored in MS Project change this to 'Microsoft Project'
	Add-in installer	Show installer step	Yes	Should the installer step be shown? If not, change to 'No'
		Show download option	Yes	Should the add-in installer download step be shown? If not, change to 'No'
		Customer installer instruction text		Needs to be changed when a specific customer instruction is needed here.
Time entry (add-on)				
	Manage time sheets			Click 'New' to create new time sheets or select a specific timesheet and click 'remove' to delete.
Cost entry (add-on)				
	Manage cost entries			Select a Cost entry and click 'Remove' to delete cost entries which are not approved.
Resource planning (add-on)				
		Selectable values for the field 'Skills'	management, engineering, administration	Click ‘Edit’ and define the skills for your organisation at custom value.

6.1.2 Email notification

Email notification on log items, time sheets, approvals etc. sends an email automatically when something becomes overdue.
Most of the notification are turned off by default.

Modify settings
1. Go to **Settings** > **Notifications**
1. Click on **Edit** to modify the settings

Email notification settings

6.1.3 Creating non-project activities

Specify non-project activity sets for activities that are done outside projects. This can be productive hours, like service management, meetings, general, etc. You can also add a category for non-productive hours, like sickness, holidays, special leave etc.

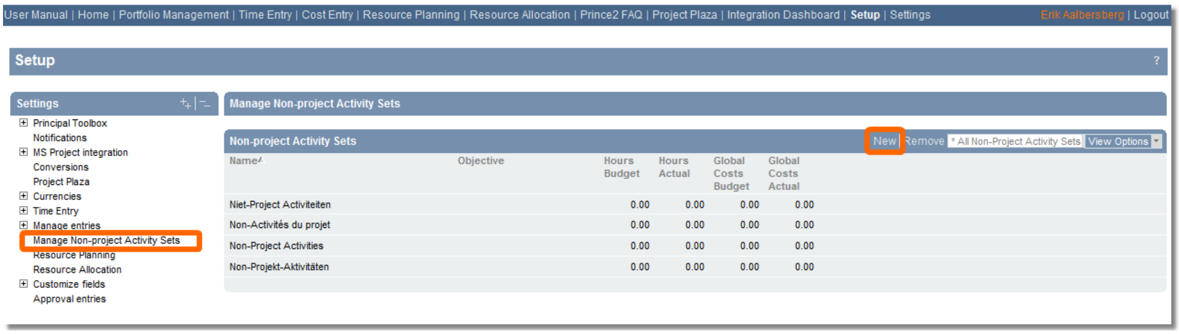
Different sets can be defined if different departments use different categories or have different non-project activities. It is also possible to have multiple non-project activity sets active for one group. So you could define one set for the entire organisation (e.g. with the categories sickness, leave), and a separate set for each department with department specific activities.

Creating non-project activity sets

1. In the dark blue bar in the top, click **'Setup'** .

2. On the left side of the screen you will find 'Settings', click **'Manage Non-project Activity Sets'**.

3. Click on **New** in the section 'Non-project activity sets' to create a Non-project Activity Set.

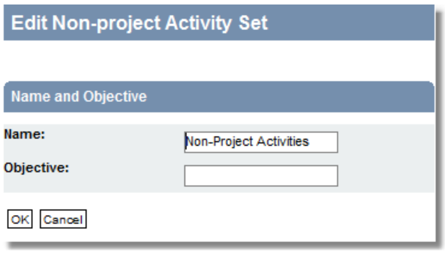


Non-project activity sets on the 'Setup' page

3. Then fill in the following information:

Name	:	Name of the non-project activity set.
Objective	:	Objective of the non-project activity set.

4. Click **OK** to create the non-project activity set.

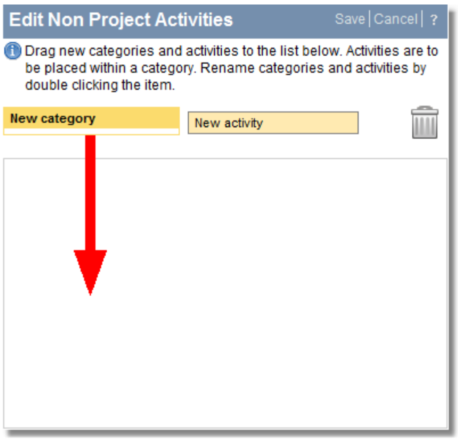


5. When the non-project activity set is stored, it will appear in the listing of 'Non-project activity sets'. Now click the created set to add the non-project activities to the set.

6. Click Edit Categories and Activities to add categories and activities, or to change the current set-up.

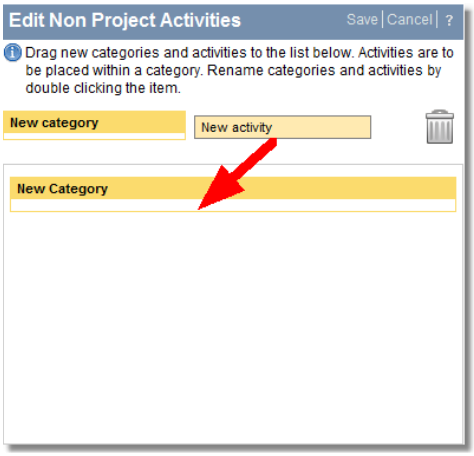
7. In the window that has been opened, you can create new items with drag and drop.

   a. First add a new category. Drag **New category** into the lower part of the window as shown below.



b. In the pop-up, add a name for the category.

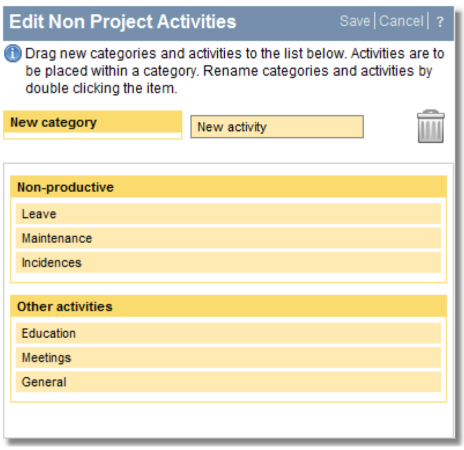
c. Then, drag **new activity** into the category, as shown below.



d. Give a name to the new activity.

> ***Note****: Activities can only be placed inside categories, so you'll need to define at least one category.*

e. Add new categories and activities to get your set complete. Below you find an example of categories with activities.



Click **Save** to save the set. Close the window to go back to the time entry pages.

6.1.4 Defining custom fields

Within organisations there often is a need to define custom fields such as, for example; project costs, SAP numbers and project codes or there is the need to have extra fields on, for example the logs, the product page or a programme level. With the Principal Toolbox you are able to define these fields.

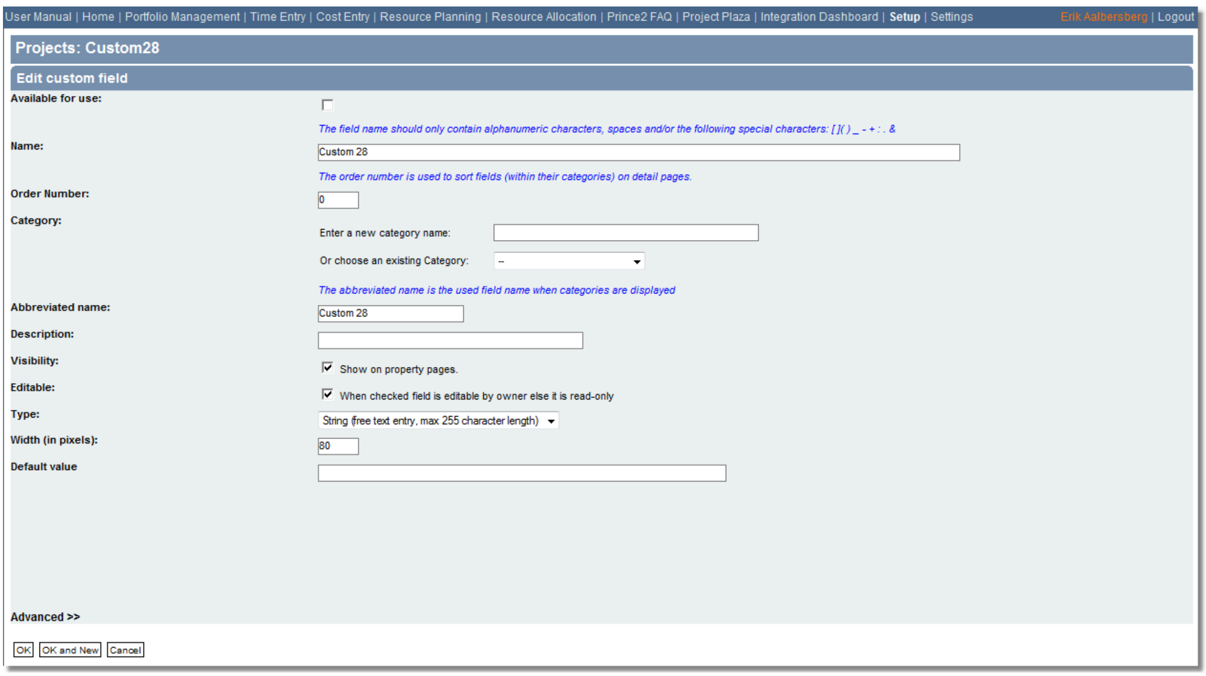
These fields can be used for defining custom views and reports.

1. Go to the **Settings** page.

2. Click the link **Customize fields**. Then you select the item where you want to add a custom field. You can define custom fields on:

Action	Allocations	Benefit	Change	Cost/Hour Entry
Issue	Lessons learned	Resource	Programme/Project list/Enterprise	Projects
Resource Pool	Quality Overview	Risk	Product/ Workpackage/ Stage	Portfolios
Entry				

3. Click the specific item to define a custom field. Click **Edit** to define a custom field.



Defining a custom field

4. An new window will open where you need to fill in the following data:

Available for use	:	Highlight to make the field available on the pages.
Field name	:	Name of the custom field.
Field description	:	Description of the field.
Editable	:	Highlight to make the field editable.
Field type	:	Select the type of the custom field.
Field width	:	Width of the field on the screen.
Field default value	:	Default value of the field.

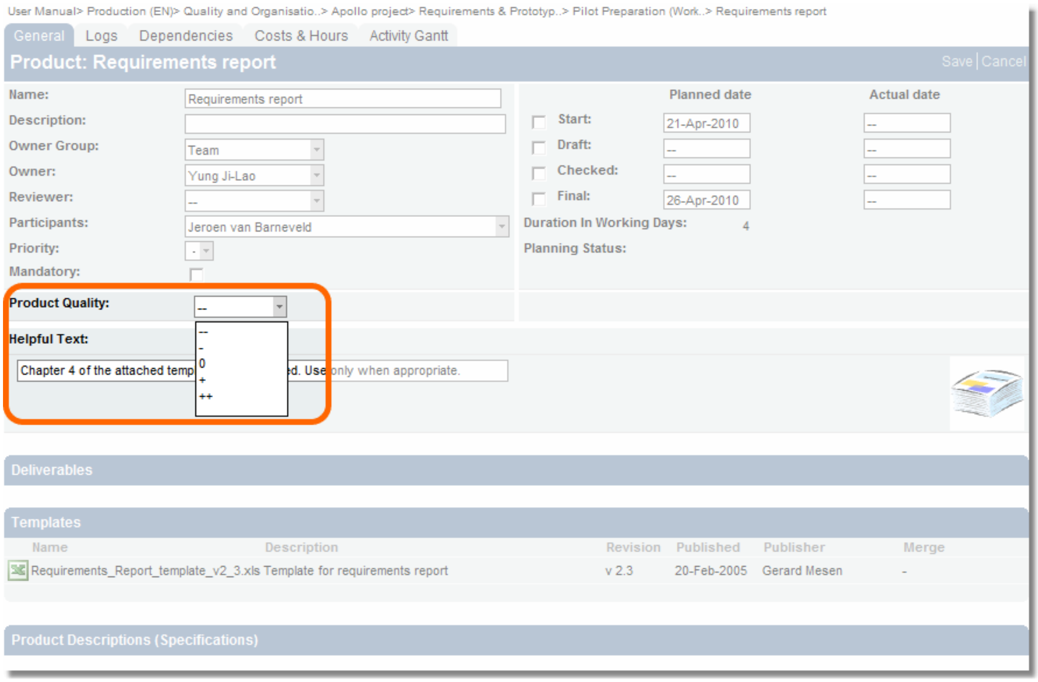
5. There are some different field types available for the custom field. We will explain them shortly:

String	:	Text field with max. 255 characters.
Memo	:	Text field with unlimited characters.
Number	:	Number field with no decimal accuracy (for example 2342).
Double	:	Number with single decimal accuracy (for example 3,5).
Currency	:	Number with two decimal accuracy (for example 3,45).
Date	:	Date field
Checkbox	:	A basic checkbox.
Picklist (single)	:	From the picklist only one can be selected.
Picklist(muliti)	:	From the picklist multiple values can be selected.
Person (single)	:	From the picklist only one person can be selected
Person (multi)	:	From the picklist multiple persons can be selected

When selecting a picklist, a new data field will appear named ‘Picklists values’ where you can specify the different values.

6. Then click **OK** and the field will be available at the specific page.

The screenshot below shows you a custom field to set the product quality after the quality review. It is a multi picklist with the values; --,-,0,+,++.



A custom field (Product Quality) has been added to a product

Default the Principal Toolbox is configured with ten custom fields for each item. If you need extra custom fields these can be created with the **Add custom fields** button

Remember: *To reset an existing custom field go to the edit page of the custom field -> Click **Edit**'-> Click **Advanced** and then hit the **Reset** button. When you are sure you want to reset the field click **OK**.*

All values inserted by users will be deleted from the system and can not be retrieved !

6.2 Settings

In the middle of the 'Settings page' you can see the information of your current license. Underneath are options to alter the license key and the version type. On the left hand side of the page you see a list with subjects that point to the different settings pages.

We will review the most important subjects in this section:
– obtaining the license key and carrying out updates 163
– management of users 165

6.2.1 License key and carrying out updates

Under the heading License key on the Settings page you come across a number of options:

- Request license key 163;
- Request additional user licenses 163;
- Renew expired license key 164;
- Enter license key 164;
- Update software 164.

6.2.1.1 Applying for a license key

If you have carried out the installation yourself and then arrived at the 'Settings page' it is necessary to request for a license key at Fortes Solutions.

1. Go to the 'Settings page'.

2. Click the link **Request license key**.

3. Fill in the following information:

Customer Name	:	Company name
Purchase order	:	Code received in letter sent.
Machine ID	:	Filled in automatically.

4. By clicking the key **Create e-mail** a message or mail is made which you will need to send. Within one work day you will receive a license key from Fortes Solutions.

6.2.1.2 Request for additional user licenses

The license you received is based on the number of users named in the Principal Toolbox. If you have reached the maximum number of user licenses you cannot make any new users. With the option ‘Request additional user licenses’ you are able to increase the number of existing licenses.

1. Go to the 'Settings page'.

2. Click the link **Request additional user licenses**.

3. Fill in the following information :

Purchase order	:	Code received in the post or if your first request for more licenses you can fill in unknown or ‘-’.
New User Limit	:	Here you can fill in the number of users that you really need.

4. By clicking the key **Create e-mail** a mail is then made which you are required to send. As soon as the extra licenses are approved you will receive a new license key from Fortes Solutions.

6.2.1.3 Renewal of an outdated license key

If your license has expired you can request a new license using this option.

1. Go to the 'Settings page'.

2. Click the link **Renew expired license key**.

3. Fill in the following information:

Purchase order	:	Code received in the post or if your first request for more licenses you can fill in unknown or ‘-’.

4. By clicking the **Create e-mail** key a mail will be made that you will need to send. Within one working day you will receive a new license key from Fortes Solutions.

6.2.1.4 Setting up the license key

After making a request for a license key in one of the ways shown above you will receive the necessary information by e-mail. This license key then needs to be activated in the Principal Toolbox.

1. Go to the 'Settings page'.

2. Click the link **Enter License key**.

3. Fill in the following information:

Name	:	Name of the organisation; *Fill in the exact name as written in the e-mail.*
Key	:	The license key from the e-mail.

4. Then click **OK** whereupon the license key will be activated. You will be required to restart system in which the Principal Toolbox runs, once again.

In some cases the Principal Toolbox will give an alert on the license page (main page of the Settings), ignore this alert and start up the system once more. If the alert continues then check again whether all information is filled in correctly.

6.2.1.5 Updating the software

Implementing updates and the installing of new releases of the Principal Toolbox is done via the ‘**Settings**’ screen. You will receive a file in the form of a .jar or .sql file from Fortes Solutions in order to implement an update or to be able to install a new release.

Remember: *Before starting the update we recommend to backup the database and application. Users should be informed of the update and should not be working on the system during the update.*

1. Go to the **'Settings page'**.

2. Click the link **Update software**.

3. Now click **Start update procedure**.

4. Log out all active users and click **Proceed with step 2**.

5. Wait while storing the unsaved data and select the checkbox in front of **Check when backup of**

database has been performed.

6. Click the button **Proceed with step 3**.

7. Locate the appropriate file (.jar file or .sql file) using the **Browse** key.

8. Click the **Proceed with step 4** key in order to carry out the update.

9. After completion of the update, the update procedure restarts the Principal Toolbox application.

10. After the restart, log in as administrator and wait for update processes and the sanity check to finish. This can take time depending on the update and the size of the database.

11. The system is ready for use after completion of the update processes and the sanity check.

When problems or fault announcements arise please contact Fortes Solutions: support@fortes.nl.

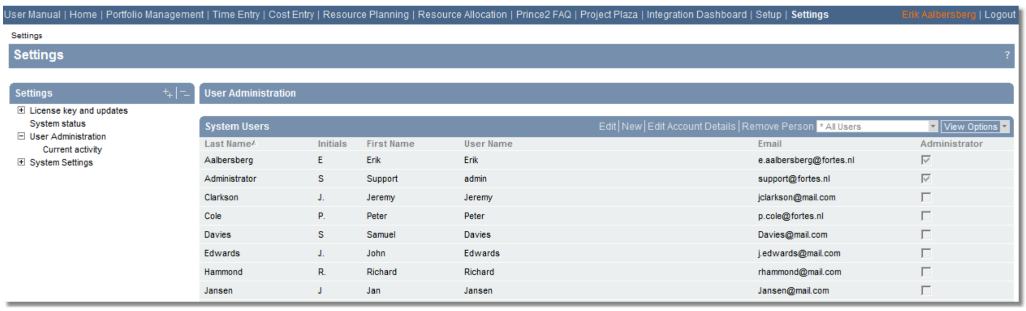
6.2.2 User administration

Control of users of the Principal Toolbox runs via de **Settings** page. Using the link **User Administration** you are able to control the existing users and to add new users.

1. Go to the **Settings** page.

2. Click the link **User Administration**. A list of all users of the Principal Toolbox will appear.

3. Further click **Add** in order to add a new user.

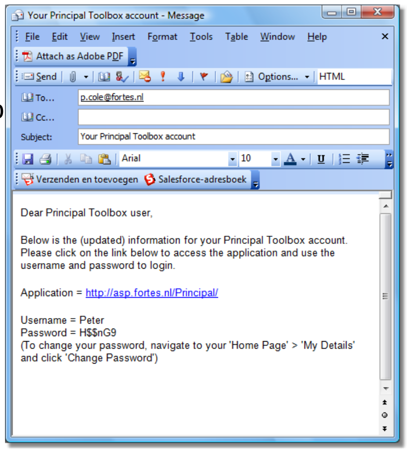


4. The screen *Add person* appears, fill in the following data:

Firstname	:	First name of the user.
Initials	:	Initials of the user.
Lastname	:	Surname of the user.
Email	:	Users email.
Hour rate	:	Hour rate (optional). This hour rate is used in the add-on hours registration.
Username	:	User name
External (add-on)	:	Highlight if the user is an external supplier in the project. By doing this only the allocated products, issues, etc. are visible.
System Role	:	Normal User or Administrator. The administrator role has logically all rights. A normal user, has only the rights that are allowed depending on his/her permissions within the programmes and projects.
Remarks	:	User specific remarks to send within the e-mail.

5. Click **OK** in order to make a user in the system.

An email will be generated based on this information. When there is no mail server configured in the Principal Toolbox or there is no email address filled in during the creation of the new account, you are able to fill the email with the relevant information and then send this further to the user by yourself. Otherwise the Principal Toolbox will generate the email automatically and send this to the users email address.



In order to delete users or to change the current information you go to the **User Administration** page and by using the **Edit** and **Remove** buttons you are able to alter or remove information about a user.

6.2.2.1 Person details

Besides the basic information for the user login there is an option to add detailed information per user/resource. If the add-on ‘Resource Capacity Planning’ is available you can also set skills for the resources.

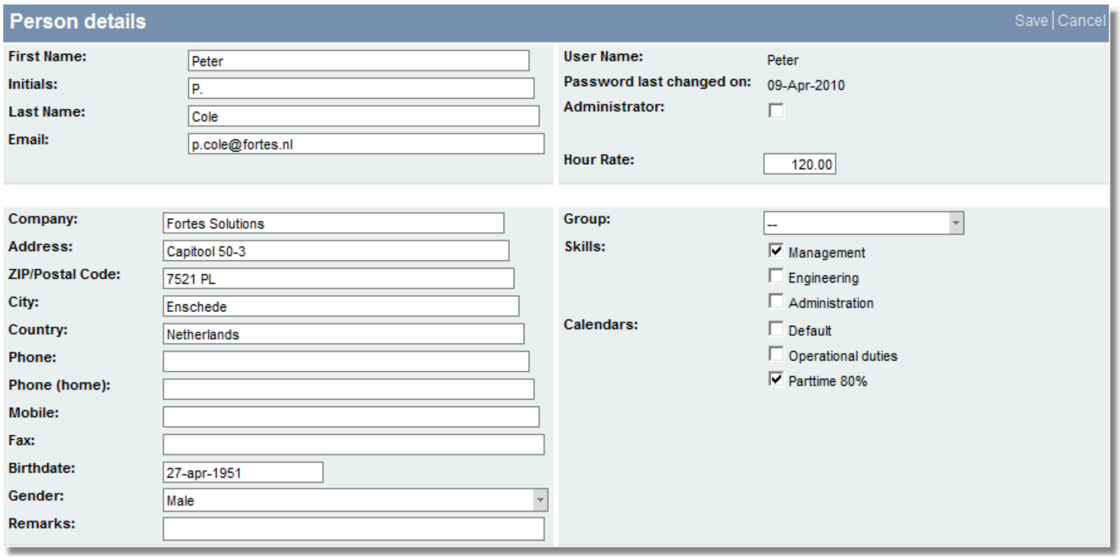
1. Go to the **Settings** page.

2. Click the link **User Administration.** A list of all users of the Principal Toolbox will appear.

3. Click a specific user/resource to add the detailed information.

4. Now click **Edit** to insert the following information:

Company	:	Name of the company.
Address	:	Address of the company.
ZiP/Postal Code	:	ZIP/Postal Code.
City	:	City where the office is located.
Country	:	Country where the office is located.
Phone	:	Office phone number.
Phone (home)	:	Private home phone number.
Fax	:	Fax number.
Mobile	:	Mobile phone number.
Birthdate	:	Date of birth.
Gender	:	Male or female.
Remarks	:	Any remarks.
Skills (add-on)	:	Multi select of persons skills.
Calendar	:	Calendars applicable to the user



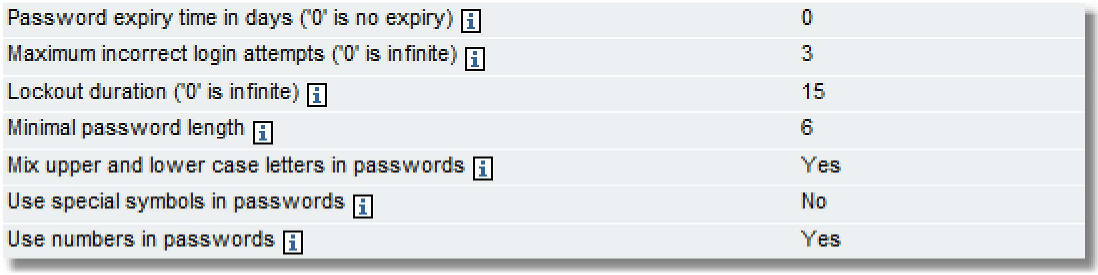
Person details			Save | Cancel
First Name:	Peter	User Name:	Peter
Initials:	P.	Password last changed on:	09-Apr-2010
Last Name:	Cole	Administrator:	☐
Email:	p.cole@fortes.nl	Hour Rate:	120.00
Company:	Fortes Solutions	Group:	--
Address:	Capitool 50-3	Skills:	☑ Management
ZIP/Postal Code:	7521 PL		☐ Engineering
City:	Enschede		☐ Administration
Country:	Netherlands	Calendars:	☐ Default
Phone:			☐ Operational duties
Phone (home):			☑ Parttime 80%
Mobile:			
Fax:			
Birthdate:	27-apr-1951		
Gender:	Male		
Remarks:			

Person details

6.2.2.2 Advanced options

The administrator has rights to modify advanced options for the login policy. There are several security settings possible for the password.

Go to the **Settings** page and navigate to **System settings** > **User login settings**



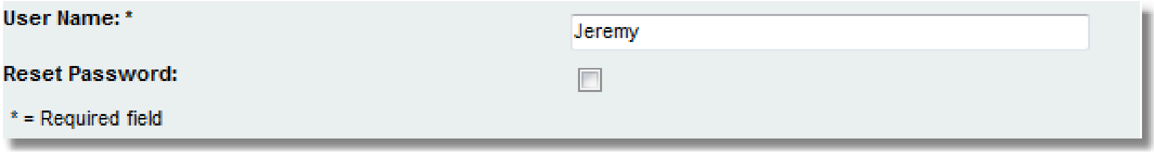
Password expiry time in days ('0' is no expiry)	0
Maximum incorrect login attempts ('0' is infinite)	3
Lockout duration ('0' is infinite)	15
Minimal password length	6
Mix upper and lower case letters in passwords	Yes
Use special symbols in passwords	No
Use numbers in passwords	Yes

User login settings

These settings can be changed:

Password expiry time in days	:	This is the time (in days) a password is valid. After this date the user has to enter a new pasword. ('0' is no expiry)
Maximum incorrect attempts	:	Number of login attempts before a user account is locked. ('0' is infinite)
Lockout duration	:	Number of minutes a user account stays locked. ('0' is infinite, the administrator can reset a locked account.)
Minimal password length	:	The number of characters a password should consist of.
Mix upper en lower case letters	:	Enforce the user of both upper and lower case letters.
Use special symbols in passwords	:	Enforce the use of symbols (non alphanumeric) in each password, like @, &
User numbers in passwords	:	Enforce the use of numbers in a password.

The administrator is able to reset an account. When an account is reset a new password is created by the system.
Go the **User Administration** and open the account to reset.



Password reset

6.2.3 System Settings

***Note**: this section is only relevant to system administrators.*

This is an overview of the advanced system settings. Normally spoken these do not need to be changed. Some of these settings will only be shown when add-on's are activated.

Page	Link	Setting	Standard value	Remarks
System settings				
		Document storage location	Location chosen during installation	All documents within the Principal Toolbox are saved and coded here
		Default system locale	English	Default language settings for the all users. Users can a personal language if setting 'Personal locale' is set to **yes**.
		First week of the year	Week that contains a minimum of 4 days in January (ISO)	Configure week numbering.
		Personal locale	No	Users can a personal language if setting 'Personal locale' is set to **yes**.
		Link to Document Management System	-empty-	Specify a URL to a external location which is used to add a external document link.
		Application location	-default value-	Only change when problems.
		Garbage collector	Yes	By normal use, keep the standard values.
		Debug	No	By normal use, keep the standard values.
		Max file size	90 Mb	By normal use, keep the standard values.
		Person display name	Lastname, initials	Modify if necessary
		URL prefix static files	-default value-	
		Number of currency decimals	2	Number of displayed decimals for all currency values.
	User Login settings	Login type	Basic	Change if one works with IIS.
		Multiple domains	No	
		More settings: See User adminisration > Advanced options 167		
	Mail	SMTP Server		Specify the SMTP server for sending email
		System address		from-address used for emails automatically sent by Principal Toolbox, for example notifications.
		Fixed from-address		Fill in a fixed from address which is used instead of the users email address when sending email from Principal Toolbox
		Fixed reply-to address		only specify when all mails sent should be replied to one email address
	LDAP settings			all settings and field mappings for LDAP synchronisation. Contact support@fortes.nl for more information about LDAP synchronizationand Single-sign-on options

7 Troubleshooting and Solutions

7.1 Troubleshooting

Sort	Issue	Solution
Login		
	Internet Explorer window stays blanc or Principal Toolbox logo hangs after login.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Miscellaneous** section, set **Allow META REFRESH** to enabled.
	Single Sign On is enabled, but Internet Explorer ask user credentials when opening the Principal Toolbox.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **User Authentication** section, check the setting **Logon** and adjust to the significant value.
	Can't login into the application because the login button doesn't work at all.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Scripting** section, set **Active scripting** to enabled.
Automated reports and document downloading and uploading		
	Automated reports and documents can't be downloaded.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Downloads** section, set **File download** to enabled.
	Keywords for automatic reports won't be copied to the clipboard.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Scripting** section, set **Allow Programmatic clipboard access** to enabled.
	There are noPrincipal Toolbox reporting toolbars in the Excel template available.	Make sure you have saved the file before opening. On the **Tools** menu, click **Macro** > **Security**. When the Security dialog is opened, click the tab **Security Level** and set the security level to **Medium**. Re-open the Excel template. Excel should ask to accept to run macros.
	Nothing happens when the Save list as RTF button is clicked	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Downloads** section, set **File download** to enabled.
Edit Project Plan		
	Drag and drop in Edit Project Plan window won't work.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Scripting** section, set **Active scripting** to enabled.
	Internet Explorer blocks a pop-up after adding the first product on the Edit project plan page.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Miscellaneous** section, set **Use Pop-up Blocker** to disabled (make sure there are no other Pop-up blockers active).
	The Edit Project Plan window hangs while message "Processing please wait" is displayed. *	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **ActiveX controls and plug-ins** section, set **Script ActiveX controls marked safe for scripting** to enabled (make sure there is no other script blocking software active).
Gantt chart editing		
	Can't drag bars in edit Gantt dialog.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Scripting** section, set **Active scripting** to enabled.
Resource Capacity Planning		
	Can't assign resources by dragging in edit plan board mode	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Scripting** section, set **Active scripting** to enabled.
	While double clicking personal Calendars in edit resource planning mode, nothing happens.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Miscellaneous** section, set **Use Pop-up Blocker** to disabled (make sure there are no other Pop-up blockers active).
Miscellaneous		
	Internet Explorer reports Script errors on different pages.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **ActiveX controls and plug-ins** section, set **Initialize and script ActiveX controls not marked as safe for scripting** enabled
	Links to projects and programmes on the homepage doesn't	On the **Tools** menu, click **Internet Options**. Open the **Security**

Sort	Issue	Solution
	work.	tab and click the **Custom level** button. In the **Scripting** section, set **Active scripting** to enabled.
	Pack Project Offline window hangs while message "Processing please wait" is displayed.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Downloads** section, set **Automatic prompting for file downloads** to enabled.
	No pop-up windows are opening while clicking links.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Miscellaneous** section, set **Use Pop-up Blocker** to disabled (make sure there are no other Pop-up blockers active).
	Can't download the MS Project Client add-in.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Miscellaneous** section, set **Launching applications and unsafe files** to enabled.
	Functions in drop down menus won't work.	On the **Tools** menu, click **Internet Options**. Open the **Security** tab and click the **Custom level** button. In the **Scripting** section, set **Active scripting** to enabled.

** Only noticed in Microsoft Internet Explorer version 6.*

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SIMPLY FORTES.

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