Merlin

Documentation of Version 2.7

Generated automatically from the Apple Help for Merlin.

Contents

Welcome to Merlin

Welcome to Merlin! We are delighted to welcome you to the project managers' roundtable. This reference should assist our users in finding their way around Merlin. This document was not intended to be read from beginning to end (although, this is also possible). Moreover, you will find specific information within each chapter focusing on the relevant topic.

You will find several cross-references in this document that we hope will support you in gathering information throughout your project planning.

We would also like to recommend our website for more information focusing on Merlin. You will find this at http://www.projectwizards.net/en.

Basic Concepts

Drag & Drop

One of the most important Mac OS X concepts is Drag & Drop. Merlin uses the Drag & Drop concept for many of its operations. To open or import files you can drag them from the Finder onto the Merlin application icon.

Here is an overview of just a few ways you can use the Drag & Drop functionality in Merlin:

- Importing files
- Expanding on existing projects
- Working with the Library
- Exporting entire or parts of specific projects
- Grouping activities
- Sorting activities
- Attaching Elements
- and much more…

Top-Down and Bottom-Up

Another very special feature of Merlin is its versatility. With Merlin you can choose different directions in planning your projects. You can plan your projects from top to bottom (starting from the project down to the individual activities) or you can plan them from the bottom up (from the activities to the project). This process applies to the following sections

- Activities
- Assignments
- Budgets

Elements

From the first "project vision" through the last "post-mortem meeting," Merlin offers you practical methods of attaching several types of information to a specific activity, a phase or to the entire project. It is analogous to using e-mail. Following the same principal, Merlin attaches Elements to an activity or to other information in your project. The attached Elements are always available to you whenever required. The following Elements have been integrated:

- Checklists
- Events
- FIles
- Information
- Issues
- Risks

Expandability

Merlin can be extended in several ways. Any project can be saved as a template, and the Library can be built into a valuable component for your documents. It is also possible to create you own reports.

Overview

The Main Window

Merlin's interface provides you with a main window, which displays all the tools and information you usually use. The main window is divided into four areas offering a large variety of information regarding the project outline, elements, resources and inspector.
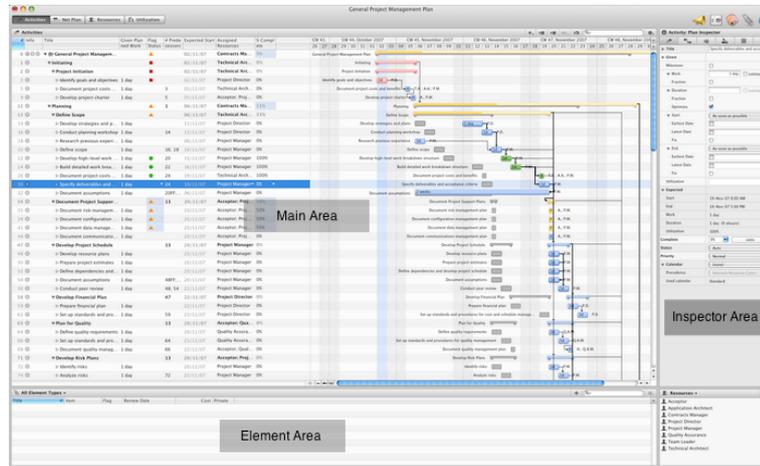
Menus
In the menus you will find all the commands that can be used in Merlin. A keyboard shortcut exists for almost all the menu functions.

The View Selector
Four different views have been integrated into Merlin. Clicking on the desired view will bring that view into focus.

The Main Area
Depending on the view you have selected, the main area offers you different details and information about your project. You can view and in certain cases modify the main outline of your project, adding activities, groups and milestones. Furthermore, this area also allows you to work interactively with the Gantt chart, Netplan and resource utilization.

The Element Area
The Elements Area provides a collection point for all the information that is gathered prior to, during and after a project completion. With Merlin's Element concept we have implemented a new type of functionality for project management software. Elements will provide you with a powerful and organized structure to store and document events, risks, checklists throughout your project. The Elements area is always situated below the main area and can be accessed using the F2 key.

The Inspector
The Inspector displays detailed information of the selected object. You can enter required information in the Inspector and obtain valuable data for your project. Right clicking on an empty gray area in the Inspector will display a context menu, in which you can switch between small and large inspector controls. You will also find the setting for this option in the Preferences.

The Additional Area
This area provides you with two different types of contents. A list of resources or grops that can be assigned to activiies. In addition, you can add your Address Book resources to Merlin by dragging and dropping the resources into this dialog.

The second type of content displayed in this area is project conflicts. When a conflict is selected from this list, Merlin highlights the corresponding activity in the main view.

Adjust the column separator for additional space for the activities or the described conflicts/warnings

The Toolbar

Merlin's toolbar is global to the entire application. You can edit the tool bar icons by right-clicking anywhere on the tool bar itself and choosing "Customize Toolbar...". In addition to the view selector buttons, Merlin's tool bar has additional buttons described below:

This is the Project Settings icon. It can also be accessed using the Main Menu at "File - Project Settings".

This is the Library icon. Pressing it will show the Library. It can also be accessed using the Main Menu at "Window - Library."

This tool bar button will show/hide the Element section. Alternatively, the Element section can be accessed over the menu "Window - Show Elements."

This tool bar button is used to show/hide the inspector. The corresponding menu command for this is "Window - Show/Hide Info Area".

This tool bar button is used to toggle Merlin's publishing mode on or off. The corresponding menu command for this is "File - Publish".

The Feature Bars for the Views

Each view has an additional toolbar - the so-called feature bar. On this bar you will find the functions that are important for that specific view. Each feature bar is developed according to the same design. On the left side you will find the title of the view with its icon; On the right side, the functions used for this view. Unlike the main toolbar, it is not possible to modify these feature bars

The Activity Feature Bar

Plus: A single click on the plus button creates a new activity directly below the selected activity on the same level. Pressing and holding will display a menu of other types of activities that can be inserts.

Outdent: The selected activity will be pushed one level further to the left.

Indent: The selected activity will be pushed one level further to the right.

Limiting the Date Range: displays the Visible Date Range Dialogue helping the user to limit the view of the project to a specific start and end date.

Search Field: The search field allows you to search through the selected view. You will find more information in search.

Gear Menu: Clicking this button will display the context menu for the selected activity.

The Net Plan Feature Bar
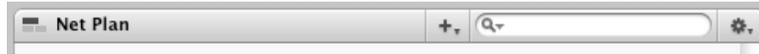
Plus: A single click on the plus button creates a new activity directly below the selected activity on the same level. If you keep the mouse button pressed on this symbol, the context menu "insert" will be displayed.

Search Field: The search field allows you to search through the selected view. You will find more information in search.

Gear Menu: Clicking and holding the mouse button on this symbol will display the context menu for the selected activity.

The Resource Feature Bar

Plus: A single click on the button creates a new resource.

Resource Group: Press this button to show or hide the resource group list.

Search Field: The search field allows you to search through the selected view. You will find more information in search.

Gear Menu: Clicking and holding the mouse button on this symbol will display the context menu for the selected activity.

The Resource Group Feature Bar

Plus: A single click creates a new Resource Group

The Utilization Feature Bar

Increasing/Decreasing: Increases or decreases the selected rows. By doing this, the utilization is displayed accordingly as either small boxes or as a histogram.

Limiting the Date Range: Limiting the date range displayed in the view helps keep an overview of larger projects.

Search Field: The search field allows you to search through the selected view. You will find more information in search.

Gear Menu: Clicking and holding the mouse button on this symbol will display the context menu for the selected activity.

The Element Feature Bar

Toolbar title: A single click displays the types of elements the list can be filtered on.

Plus: A single click on the button displays the Element dialogue box. If you keep the mouse button pressed on this symbol, the context menu listing all the Elements will be displayed. If the toolbar had a filter in effect, pressing the plus button creates the filtered type jmmediately.

Search Field: The search field allows you to search through the selected view. You will find more information in search.

Gear Menu: Clicking and holding the mouse button on this symbol will display the context menu for the selected activity.

Adjusting Sections

The dimensions of each section in Merlin can be modified using the gray separators between each section. For example, if you would like to increase the height of the additional area section, simply grab the separator with your mouse and slide it upwards.

Furthermore the vertical separator in the Inspector can be used to modify the section between the field description and the data fields.
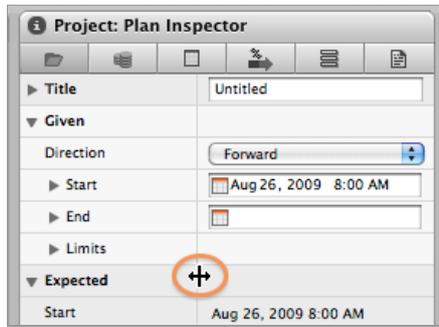
In addition, you can show/hide the Gantt chart in the Activities, and Utilization views by sliding the Gantt resizer button found on the bottom edge.

Project Templates

Merlin is a document based application where data is saved in individual files. Like
most other document-based applications, Merlin files can be based on pre-defined
templates or saved as templates.

How to create a new project based on a template

1. Select "File - New Project".
2. Select the template you wish to use.
3. Press the "Next" button to further customize the template or "Create" to create the file and start populating it.
4. If you chose "Next", you can choose the type of project, currency symbol, project start date, etc. Several customization options are grouped under tabs.
5. Select "Create" to start using your newly customized project file.

It is also possible to save any project file as a template. User created templates are
listed among the bundled templates

How to create your own template

1. Select "File - Save as Template…"
2. Merlin defaults to "~/Library/Application Support/Merlin/Project Templates". You are free to save them anywhere else, in case you want to provide this file to someone else, but if you do, Merlin will not offer this template when creating a new project.
3. Your template is now listed when you create a new project.

If you want to edit your template, open it using "File - Open" menu entry and navigate to the location of the
template. Default location is "~/Library/Application Support/Merlin/Project Templates"

Project Calendar

Merlin provides a user friendly interface to modifying the project calendar. Initially, the project calendar was found in the project settings but that has been changed since.

Project calendar is now accessed as a tab in the inspector when the **project row is selected** in the outline portion of the Activities View.
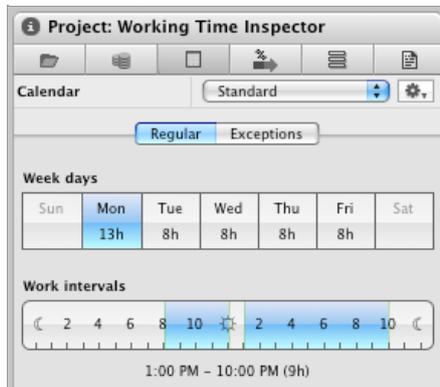
How to modify the project calendar

You can change the project calendar to accommodate for project wide events such as national holidays.

1. Select the project row in the outline portion of the Activity View.
2. Click on the calendar tab in the inspector
3. Under the "Regular" tab, do any changes to the working hours. The changes on the working hours of a specific day will affect the working hours for this day throught the weeks, so they are recurring in nature.
4. If you wish to mark off type events such as national holidays or fixed company closing dates, use the "Exceptions" tab to enter these dates.

5. Click the "+" to add an entry to the exceptions list.

If you wish to re-use your project calendar in other projects, you can export/import calendars by clicking on the gear icon ⚙▾

Note: If you already have the exceptions on an iCal calendar, there is no need for you to enter them manually in Merlin. You can simply use the gear icon and import the iCal file into the selected Merlin calendar.

Combining Projects

If you wish to observer multiple project files in one Gantt chart, you need to combine your projects into one, Master, file. You can combine your project files using drag & drop or Merlin menus.

Why should I combine projects?

Here are some scenarios that might benefit from combining projects:

- **Master and Sub-Projects:** Often extremely long or large projects are divided into different sub-projects, which are, supervised by several project managers. These sub-projects can be consolidated in one master project.
- **Multiple Projects Overview:** In many firms or project organizations a certain number of projects is always in progress. To keep an overview of the "big picture," individual projects (even if only temporarily) can be combined together.

How to combine projects:

1. Locate the projects you would like to combine.
2. Drag all of the desired projects onto the Merlin application icon
3. Determine if you wish to open the files individually or combine them

You can also accomplish the same using the "File - Combine Projects…" menu.

Things to know about combined files

Combined files considerations

Although projects are combined into one master file, the following issues need to be kept in mind.

- Changes to each file will be saved back to the individual file
- Each project has it own calendar, settings, resources and resources calendars
- You can't created dependencies that cross projects
- If resources are used across multiple combined projects, you will see multiple instances of the same resource in the Resources View. This is expected behaviour

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How to save a "Master" file

If you wish to combine the projects into one master file that you can reuse, you need to save the master file. Here is how to do it.

1. Combine your projects as described above
2. Choose "File - Save As…"
3. Select the location and name of the master file

Remember that the master file is a conduit to the other project files. Even after saving the master file, changes to the combined files will be saved back to there respective files.

Note: We recommend you focus on using the "Utilization" view as it lists all the resources and their assignments. The following columns might be useful to show.

- Planned work
- Planned work costs
- Expected work
- Expected work costs
- Actual work
- Actual work costs

Limiting Date Range

To limit the time span of a Gantt chart display, use the limiting date range feature.

How to limit the date range

1. Choose "View - Limit Date Range" or click on the button.
2. The Limit Date Range dialogue will appear.
3. Select the "A range of the project" radio button.
4. Define the "From" and "To" dates
5. You can also enable any one of the following options
   - **Hide rows not in range:** This options hides all the expected bars in the Gantt that are out of the selected range. Be aware of leaving this mode active when sharing the file with other users as it might mislead them.
   - **Hide planned values:** To complement the above option, you can also hide the planned values (grey bars).
   - **Consider Gantt labels when hiding:** Enabling this will increase the Gantt display range to the left side of the Gantt to accommodate for displaying text information to the left side of the bars.

Note: The "Limit Date Range" button indicates whether a date range limit is in effect or not. Here is how:

- Indicates that there is not data range limit
- Indicates that there is a date range limit in effect.

How to remove the date range limit

1. Choose "View - Limit Date Range" or click on the button to show the dialogue box
2. Select "The complete project"
3. Click on OK

Workspaces

Like most users, you might want to customize the look and feel of Merlin. You might want specific colors for your Gantt chart, specific columns in your outline, etc. It would be very inefficient if you have to change all these parameters every time you open a new Merlin file. To help you preserve these settings, you can use Merlin Workspaces as a way of preserving and activating a specific set of changes.

You can adjust your Merlin environment as you wish and save these settings in a workspace so they are always available to you when you need them. You can save multiple workspaces and invoke the one you want. This is very useful when wanting to present your project file but don't want to show more information than needed. You can create a simple workspace that has only the necessary columns for your stakeholders.

Merlin offers you three different types of workspaces with which to work.

Built-in: Workspaces that comes with Merlin build in. They can't be modified

For all projects: Workspaces created by the end user. They can be used across multiple projects

For current project: Workspaces created by the end user but can only be used within the project file they were saved in

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How to activate a specific Workspace

1. Select "Window - Workspaces"
2. Select the workspace you wish to activate

You can also activate a workspace from the workspace editing dialogue.
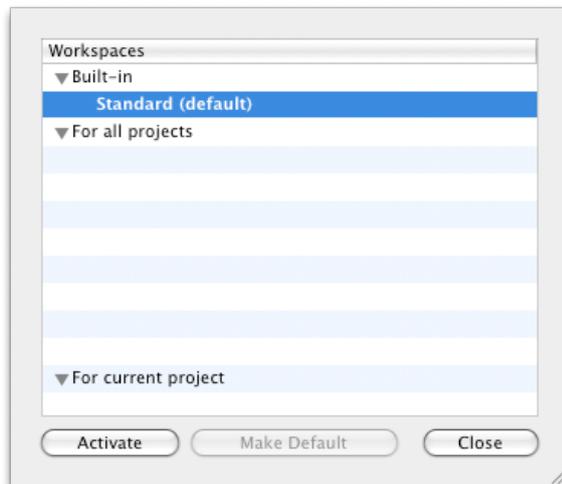
Select the workspace and press the "Activate" button

How to save a Workspace

1. Save your workspace using "Window - Save Workspaces …"
2. Enter the name of the workspace and choose its type
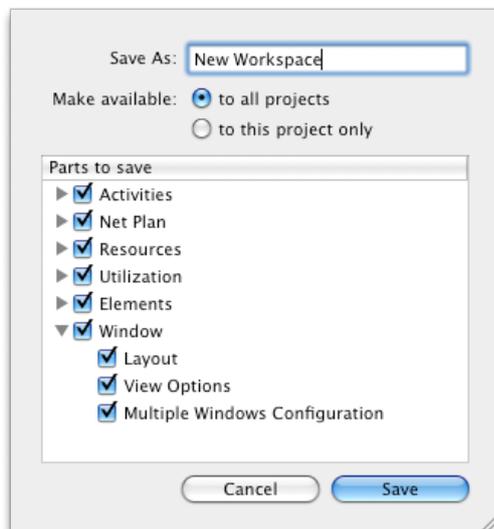
Within a view it is possible to save different parts in the Workspaces. You can expand any section and control every aspect of the workspace you wish to retain.

How to designate a specific Workspace as default

You can select a single Workspace as the default one so when you open a new or pre-existing Merlin project file, it defaults to that workspace.

1. Select "Window - Edit Workspaces …"
2. Select the desired workspace
3. Press the "Make Default" button to designate the selected workspace as a default workspace
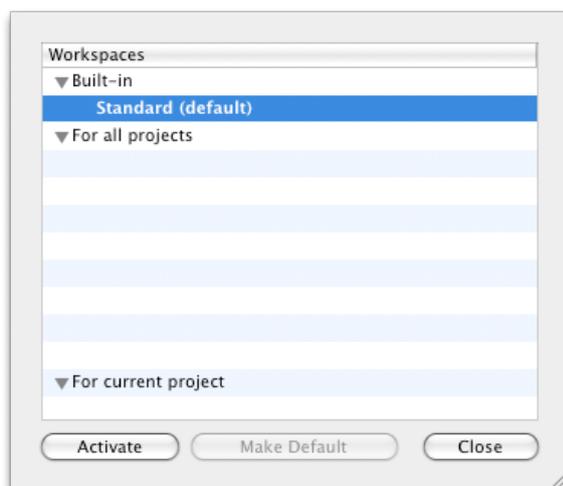
How to delete a specific Workspace

1. Select "Window - Edit Workspaces …"
2. Select the desired workspace then pressing the "Delete" button.

Workspaces
▼ Built-in
    Standard (default)
▼ For all projects

▼ For current project

(Activate)   (Make Default)   (Close)
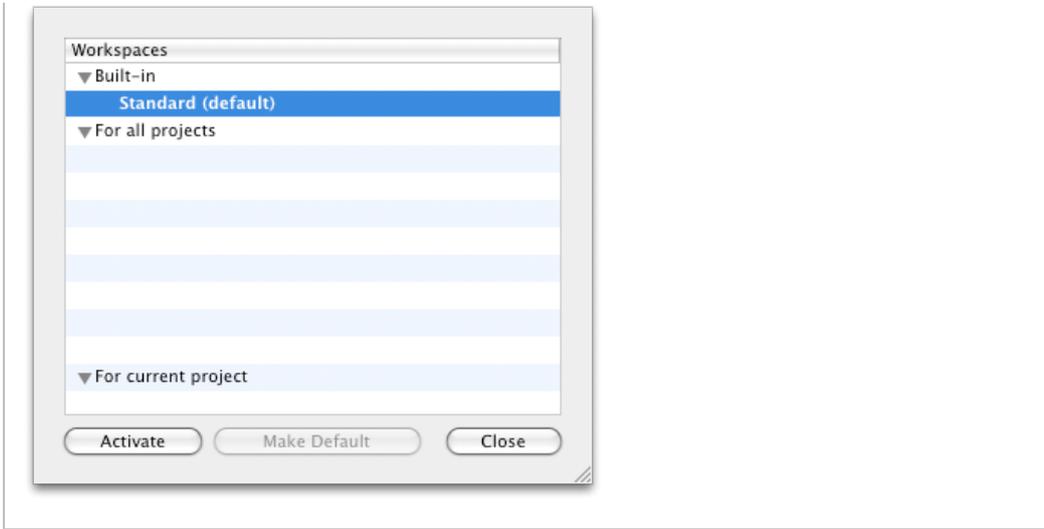
Project Settings

Here you can make changes that are specific to the project you are working on. These settings take effect when the project file is opened by Merlin.

You will find the basic settings for your project under the "General" tab

Financial
All basic financial data is entered here:

- The currency symbol represents the project currency. **A currency conversion does not take place**.
- **Default Work and Overtime Rate:** The default rates for regular and overtime rate are always used whenever resources with no specific rate is assigned.

Work Units
Define the length of the work day, week and month, taking the possible number of work hours into account.

Default Work: You can define the default work for newly created tasks here.

Cal. Durations Unit: You can allow Merlin to choose the right **Calendar Duration** time unit or force it to use a specific time unit through out the entire project. Manually entered values will retain the units they were entered in.

Date Presets
The status date can be used to view the status of the project on this specified date.

Dynamic Shifting Enable this option if you wish Merlin to start newly created tasks on the project status date, which defaults to the system's current date. This option also moves all the tasks that haven't started to the project status date depending whether you want to shift **expected values** or **expected and planned values**. This feature is ideal for Agile Project Management.

Status Date: Choose the date you want Merlin to use as the status date. **By default, Merlin uses the current date as the status date.**

First day of the week: Choose which day marks the start of a working week.

Value Lists

All the contents of the Elements' pop-up lists are available in the value lists.
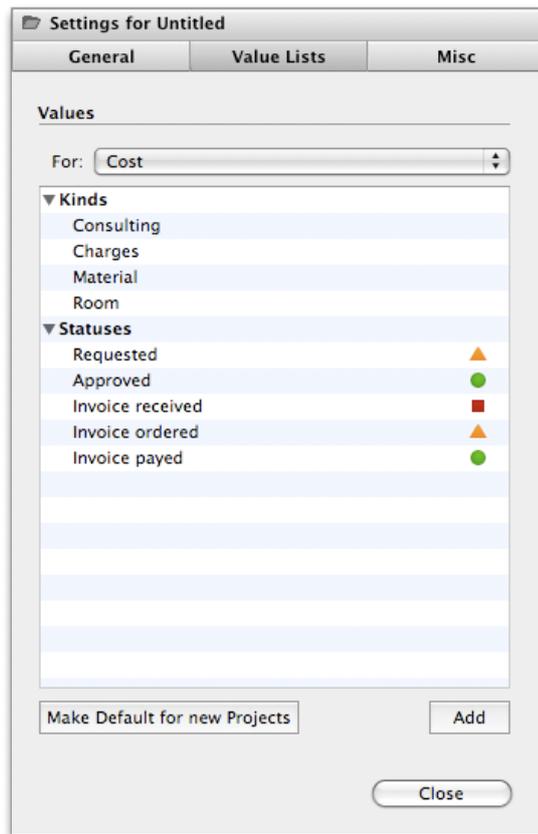
The following lists are available:

1. Cost
2. File
3. Information
4. Issue
5. Resource
6. Risk

How do you insert new values in a list:

1. Select the relevant list from the "For:" pop-up menu.
2. Click the section of the list where you would like to insert a new entry.
3. Click on the button "Add" to insert the new entry.
4. Drag the new entry upwards or downwards to change its order.

How do you delete a value from a list:

1. Select the relevant list from the "For:" pop-up menu.
2. Select the entry you would like to delete.
3. Press the delete or the backspace key.

Misc

This is a collection of project settings that don't belong to any other category.
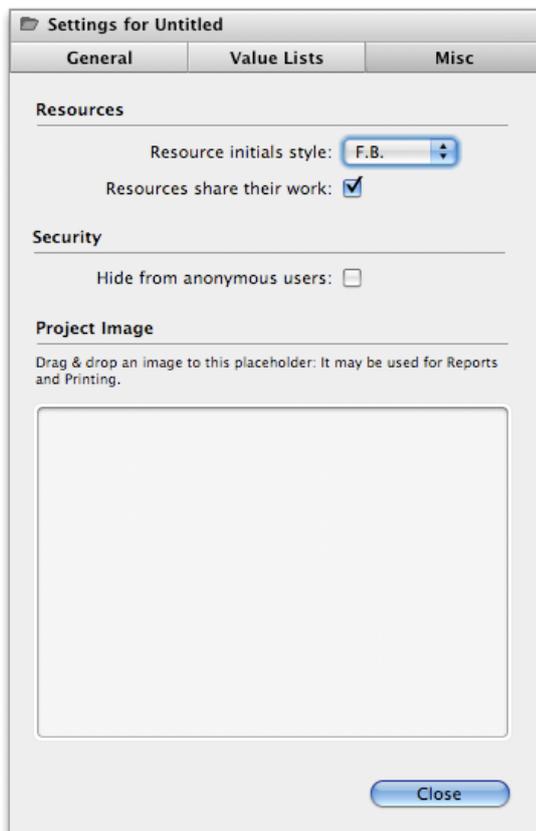
Resources:
Resources share their work: Determines Merlin's behavior when adding more than one assignment to a specific activity. When **disabled**, resources will double up. This will cause a warning by Merlin, which indicates the amount of work the resources have is more than the activity work they are assigned to. When **enabled**, the resources share the activity work split evenly between them.

Security:
Hide from anonymous users: When enabled, other clients remotely opening files on this system will not see this file on the list shared projects Merlin is serving. This is useful if you wish to share the project over the network, but want it to get displayed for authenticated users only.

Project Image:
You can drag and drop any image into this location. This image will be used in reports. **PNG format is preferred.**

How to access Project Settings for Combined Projects

When you call up the project settings for combined projects you will notice a small triangle in the title row of the Project Settings window:

When the title of such a project is clicked, all contained projects are displayed in a menu. To access the settings for a project contained in the combined project, select the desired project in the menu.
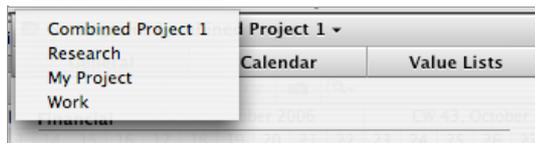
This way it is possible to manage individual project settings even for linked/combined projects.

WBS

WBS or "Work Breakdown Structure" describes the global structural layout of a project. In comparison to a graphical display of the project structure (which can be imported into Merlin, e.g. from a mind map), Merlin is responsible only for the structured display in the outline.

In the "File" menu you can access the "WBS Code Settings." Merlin will display a dialogue form in which you can define the structure of the WBS.

Prefix - Here you can enter a global prefix, which is used for the WBS code.

Level - The levels are numbered consecutively and define the outline level of the structure.

Sequence - Here you can select the form of the outline. The following forms are available:

- Numbers (this is also the default when nothing is defined)
- Lowercase letters
- Uppercase letters
- Lowercase roman numerals
- Uppercase roman numerals
- Numbers - spelled out

Example - In this section you can view an example of how the WBS code will be displayed.

In the Activity view and the Utilization view it is possible to activate the relevant column in the outline. In the Netplan view the WBS code can be activated to be displayed in a section of the Netplan boxes.

Further Information
You can find further information regarding the WBS in Wikipedia.

Activities

Activities are the main building blocks of projects. It is what most project managers think of when they visualize a project. Merlin uses the "Activities" view to list all the tasks related to a project.

Merlin has many types of activities you can enter:

- **Activity:** A new activity is inserted below the highlighted activity. This activity is inserted on the same level of hierarchy as the one above it.
- **Sub-Activity:** The selected activity becomes a Group Activity and a new sub-activity is created.

▼ Group Activity	Group Activity	
Sub Activity	Sub Activity	3 days ?

- **Successor Activity:** A new activity is created below the selected activity. The new activity has a dependency on the selected activity making it a successor.

Selected Activity	Selected Activity	2 days
New Activity	New Activity	3 days

- **Predecessor Activity:** A new activity is created above the selected activity. The new activity is linked to the selected activity making it a predecessor.

New Activity	New Activity	1d?
Selected Activity	Selected Activity	2 days
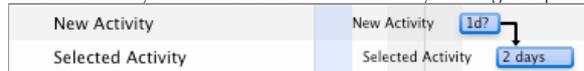
- **Aunt Activity:** A new activity in created on the same level as the selected Activity's Group Activity.

▼ Group Activity	Group Activity	
Select Activity	Select Activity	3 days
New Activity	New Activity	1d

How to insert new activities

Select the appropriate activity type you see listed under the **"Insert" menu**. Use this menu to explore the types of activities Merlin allows you to enter.

Activity	⌘N
Milestone	⌥⌘M
Sub–Activity	⌥⌘G
Successor Activity	⌥⌘S
Predecessor Activity	⌥⌘P
Aunt Activity	⌥⇧⌘A
Assignment	⌥⌘A
Resource	⌘R
Resource Group	
Element	▶
Project…	⌥⌘L

You can use **Context Menu** by right clicking the mouse (^ Left-Click) on the selected task
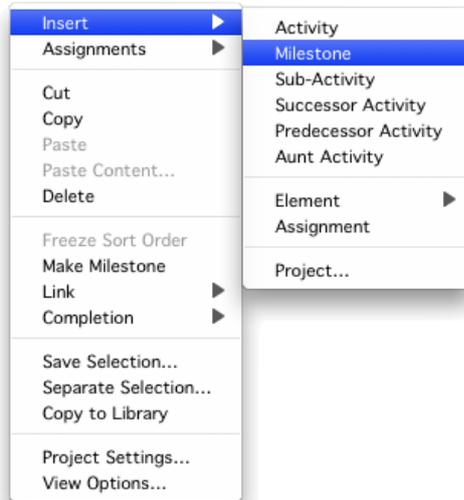
You can also use the **Library** to add individual activities as well as activity groups into the project per drag & drop. Find out more here.
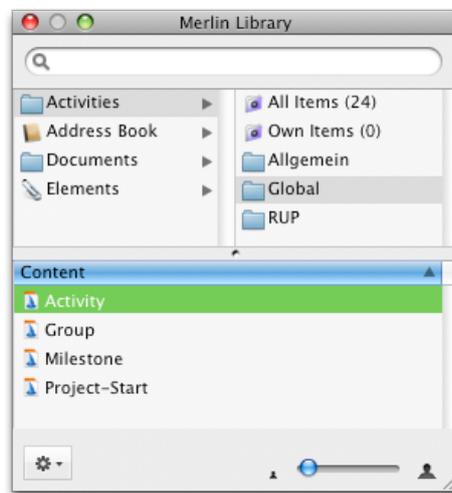
Button: When you click on the Plus button ![plus button] a new activity is created. If you click and hold, the context menu will be displayed offering you several types of activities you can add.
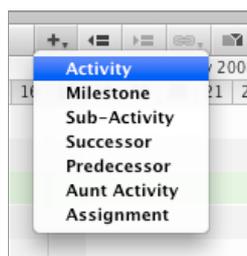
Tips and Tricks

If you prefer to keep your fingers on the keyboard than use the mouse, you can use **"Enter"** to edit the activities name and **"Tab"** to jump to the next column. This will allow you to easily edit your tasks information without needing to resort to the mouse often.

Which time units does Merlin recognize?

When entering time units, you don't need to spell out the time unit. You can use the first one or two letters of the unit and Merlin will recognize it according to the list below.

- **se** OR **sec** = Seconds
- **min** OR **mi** = Minutes
- **h** OR **ho** = Hours
- **d** OR **da** = Days

- **w** OR **we** = Weeks
- **m** OR **mo** = Months
- **y** = Years

Manipulating Activities

How to Indent or Outdent activities

Using Indent and Outdent, you can structure your outline in whatever hierarchy you wish.

1. To indent an activity in the outline, highlight the relevant activity and select "Edit - Indent", press the button, or use the "⌘→" short cut.

2. To outdent an activity in the outline, highlight the relevant activity and select "Edit - Outdent", press button, or use the "⌘←" short cut.

If one of these options is not available, it is because it is not possible due to structure restrictions.

How to move tasks around

You can move your tasks around the outline hierarchy using drag & drop. It important to note that **you have to have the "#" column (manual sorting) selected**.

1. Select the task you want to want to move
2. Click and drag the task around the outline
3. release the mouse button to move the task to the desired location indicated by the dark outline lines.
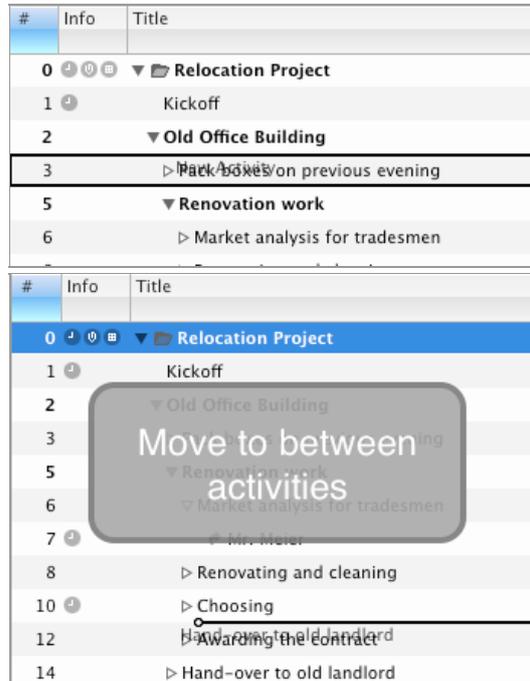
How to expand or collapse all activities

Larger files are harder to view all at once. To help, Merlin has several hot keys to easily collapse or expand outlines.

1. **Expand All:** This option expands the entire project, displaying the complete project structure. Select "Edit - Expand All" or use "⌘↓" short cut.
2. **Collapse All:** To collapse the project to the first level select "Edit - Collapse All" or use "⌘↑" short cut.

If you wish to **see all the assignments**, use "Edit - Show All Assignments" menu option or "⌘⇧↓" short cut. To **hide all the assignments** use "Edit - Hide All Assignments" or "⌘⇧↓" short cut.

How to show a specific level of the outline (hierarchy)

If you would like to view the project up to a specific outline level, select "Edit - Show Outline" and then choose the relevant level in the sub-menu.
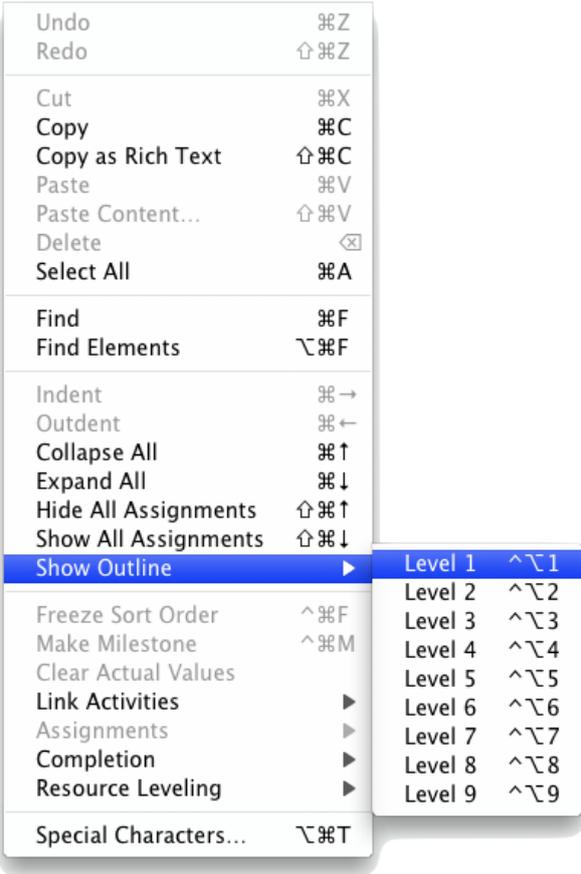
You can also use "^⌥1...9" short cut.

Linking Activities

You can link activities using dependencies to express the flow of your activities through out your project. Merlin supports the following types of dependencies:

- **Finish to Start:** The initiation of the successor activity (2) depends upon the completion of the predecessor activity (1).
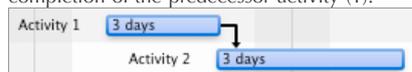
  This is the most popular type of dependency used.
- **Start to Start:** The initiation of the successor activity (2) depends upon the initiation of the predecessor activity (1).
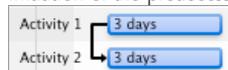
- **Finish to Finish:** The completion of the successor activity (2) depends upon the completion of the predecessor activity (1).
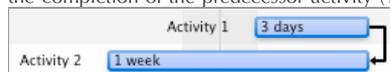
- **Start to Finish:** The completion of the successor activity (2) depends upon the initiation of the predecessor activity (1).
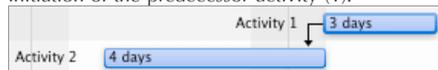
  This type of dependency is seldomly used.

You can link activities in Merlin using:

- The mouse
- Draging & Dropping in the Inspector
- Input in the outline

How to link two activities using the mouse

1. Hover over the relevant activity and press the ⌥ key.
2. Press the mouse button and drag a line to the successor activity you wish to link to.<

<div align="center">The link will be a dependency of type Finish to start.</div>

3. You can do the same if you are working in the Gantt chart. Hover over the end you wish to link from and press ⌥ then click and drag the link to the start or finish of the target (successor) activity

You can create all types of dependencies with this method.

How to link two activities using dragging & dropping

1. Select the relevant activity, with which you would like to link with.
2. Click on the links tab in the Inspector
3.
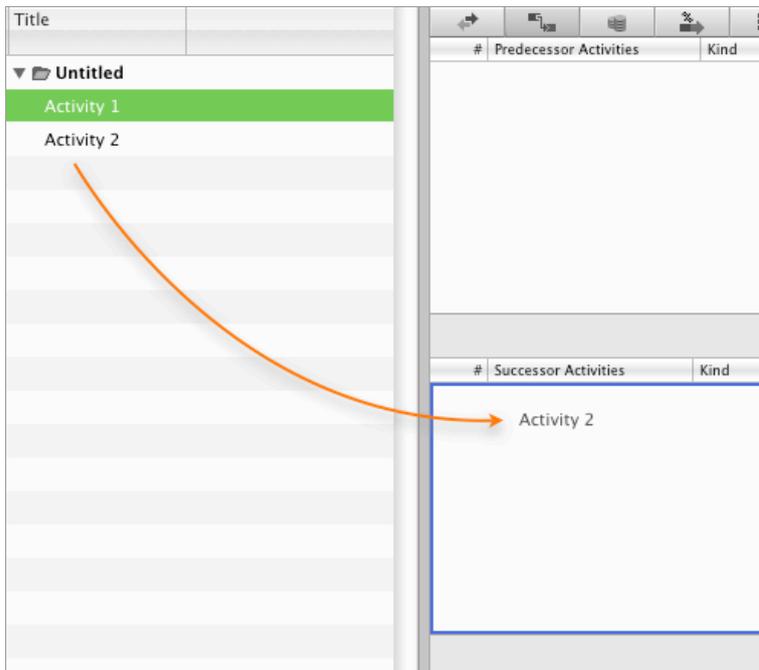
4. Drag the activity to successor or the predecessor tables in the inspector

---

How to link two activities in the outline

1. Select the successor activity.
2. Double click the column "# Predecessor" in the relevant field.
3. In this field enter the activity number as displayed in the "#" column.
4. Press the enter key and your activities should now be linked.

If you are a MS Project user, this is probably your most familiar linking method.

How to sort activities

You can sort your activities automatically or manually.

1. To sort your tasks automatically, simply select the column you wish to sort on. Clicking on the column header again will toggle the sort order (Ascending or Descending).
2. To sort your tasks manually, ensure that your "#" column is selected then click and drag on the tasks title in the outline section to move your tasks around.

Conflicts and Warnings

Warnings

Warnings indicate that a specified value has been exceeded. A warning does not necessarily mean that your project plan contains an error. it can certainly be

intended. For example, an activity starts or ends in a work-free period.

It is possible to deactivate the warnings in the Activities View Options.

Possible warnings are:

- Activity starts at a non-working time
- Activity ends at a non-working time
- Planned work exceeds the given value
- Expected work exceeds the given value
- Planned duration exceeds the given value
- Expected duration exceeds the given value
- Budget sum exceeds approved budget

Conflicts

A conflict indicates a problem in the project planning. As a rule, conflicts always occur when you have entered a start or end value that cannot be executed by Merlin in the planning.

Possible conflicts are:

- Activity starts before the given date.
- Activity starts after the given date.
- Activity ends before the given date.
- Activity starts before the given date.
- Relationship order is violated.

How Do You Resolve A Conflict?

Merlin doesn't support solving warning and conflicts automatically because no algorithm exists that can automatically solve planning conflicts. There can be several reasons for a conflict. Instead, we would like to offer a few tips for locating the source of a conflict:

- A linked activity pushes an activity beyond a given planned date.
- A time limit has not been adhered to. (the sum of the sub-tasks is greater that what the task was given)
- A fixed activity cannot be completed on the planned date. In this case the link will show the conflict.

Furthermore, it should always be the responsibility of the project manager to modify the data in a project. After all, there must have been a reason, why an activity (currently showing the conflict) was planned on a specific date.

Actual Values

Merlin provides very comprehensive support of entering actual values. Actuals for activities can be entered in the inspector under the "Actuals" tab or entered in the outline view using the relevant columns.

This is a mini project example that best describes how Merlin deals with actuals.

Assuming you have created the following project:
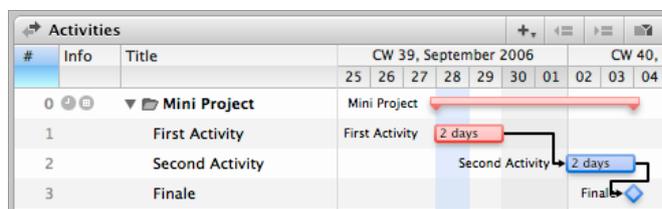
After the planning is finished, the project begins. Promptly the start of the first activities is delayed. You enter the actual start in the Inspector under the tab "Actual Values:"

The Gantt chart will look like this:
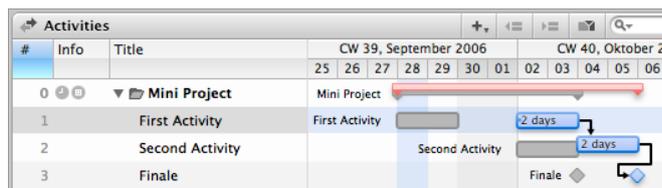
The gray bars represent the planned values and the colored bars now represent the expected values. This means that the project can end at the earliest (when no other delays occur) on the October 6th.

Note: If you need to create a report in which the planning values are not visible, you can deactivate the gray bars in the view options:

The Gantt chart looks like this:

Notes

- As long as **no** actual values are given for an activity, it is in the planning stage.
- The moment you define the "actual start date" for an activity or a completion value (in % or absolute) this activity will change to the execution stage. Meaning you can't move it as its start is now anchored in time.
- If you have dependencies between some activities, the successor activities display the planned values in gray (background bars) and the expected values in a colored bar.
- This means that each activity will be handled separately. So you can execute your project even while other activities are still in the planning phase.
- The planned (gray) bars can be understood as a kind of a baseline. These values can't be moved with the mouse. However you can change the planned values in the inspector.

The behavior in the Utilization View is pretty much the same.

Budgets

There are different ways to manage your budgets in Merlin. Basically, you can plan and organize your budget top-down (based on the project) or bottom-up (calculated from the activity).

Working without an Approval Workflow

To enter a budget in a project without going through the approval process enter the amount in the Finance Inspector in the closed "Budget" section. This amount is taken over as an approved budget. All other fields in the section will be automatically filled out with the actual data.

Working with an Approval Workflow

To follow the approval workflow. Expand the "Budget" section and enter the necessary values.

Distributing the Budget "Top down"

When you insert the first activities of phases (groups) into your project, you will want to allocate a portion of the total budget to these activities. You can do this either in absolute or relative values.

Allocating an Absolute Portion to the Budget

After you have inserted an activity, allocate a budget in the Finance Inspector. Enter in the appropriate field an amount e.g. $2,000. Merlin uses the format and the currency set in the system preferences and applies this to the amount entered: "$2,000.00.".

Allocating a Relative Portion to the Budget

Alternatively you can allocate a percentage to the budget by simply adding the percent sign (%) to your entry.

You can also check the fraction box in the - Approved Amount - section. Merlin calculates the percentage from the budget of the parent group (in this case from the project) as the approved budget.

In your project you can mix the budgets with absolute and relative portions as desired.

Distributed and Not Distributed Budget

Distributed means that a portion of the budget has been associated with a specific activity or group of activities. If you have a budget or $10,000 and you assigned $2,000 to several tasks. The $2,000 is considered distributed budget. The other $8,000 will remain as not distributed.

This distribution is always calculated for the group located above the activity. When you, for example, add sub-activities to an activity, creating a group, the budgets of the activities are added to the group. The budgets of the groups are then added to the project.

Costs

Base Cost

Base cost can be assigned to Project, Group or an Activity. When "Base Cost" is closed in the Inspector, you can enter the total cost as a single entry. If you expand the disclosure triangle, you will be able to allocate multiple costs. If more than one amount is entered in the Base Cost, the combined base costs cannot be changed. This behavior applies to every Project, Group or Activity.

You can also determine the cost accrual. Your options are Start, Prorated, Immediate or End.

The Planned Resource Costs

These costs are calculated either out of the standard resource costs (which you can allocate in the project settings), or from the costs of the assigned resources (which you can allocate in the Resource view). These costs are subtracted form the approved budget of the relevant activity.

The groups located above this add up these amounts so that in the topmost group (the project) has a sum of all the planned resource costs.

The Element Costs

The Element costs are displayed as a sum of all attached Elements to an activity. These are also added to the groups located above the relevant activity. All groups are then added to the next higher group.

The Sum of the Element Costs

The costs of the elements attached to an activity and the costs for all the Elements located below this activity are added here. If an activity does not have any lower level activities (is therefore not a group), the Element costs are the same as the sum of the Element costs.

The Budget/Cost Balance

The balance is derived from the approved budget, the planned resource (base and work costs) and the sum of the Elements costs.

Resources and Assignments

Resources are the backbone of any project. A resource can be a person, material, equipment, or a company. In Merlin's help, we will refer to all of them as "resources".

Topics

- Working With Resources
- Working With Assignments
- Assignments and Utilization
- Resource Leveling
- Resource Groups
- Users

Resources

Inserting Resources

You have several different possibilities for inserting resources into your project:

- From the Mac OS X Address Book.
- From MS Entourage.
- From the Library (which is taken from the Mac OS X Address Book and MS Entourage).
- Manual resource entry.

Whenever you would like to create or transfer a new resource in your project, simply drag it from its source into the resource well (on the bottom right of the Merlin main window). Alternatively, you can click on the plus symbol in the resource list or use the Resource view
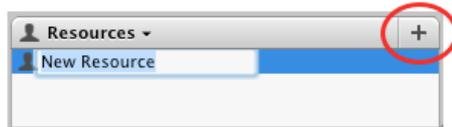
Resource Information

When you select a resource in the Resource view or double-click on a resource in the resource list, the details of this specific resource are displayed in the Inspector.

Address Details

When this icon or this icon is displayed next to the name of the resource, it is an indication that the resource has been inserted from either Mac OS X Address Book or MS Entourage. Clicking on the icon will start the relevant application and display the person in the address book. As the resources are linked to the relevant data record, all modifications you make in the source application will immediately be reflected back in Merlin.

Type

Merlin supports many types of resources. They are:

- 👤 **Person:** equivalent to a worker or individual.
- 🏢 **Company:** Contractor (group or individuals), suppliers, etc.
- 🔧 **Equipment:** Machinery, tools, etc
- 🎨 **Material:** Raw materials, supplies. **Materials differ from the other types** in that it doesn't have overtime rate and the option to determine the measuring unit (not just time unit). For example, you can choose "Kg" for measuring your material amount and your standard rate becomes cost per Kg and not per time unit like all other types.

Price

It is possible to enter the resource costs. Entering an amount when a rate is expected will automatically change it into a rate/hour when you leave the relevant field. The currency type defined in the Project Settings is applied. If you would prefer to use a time unit other than hours, simply use the costs in the "Rate/Time" unit notation. The following abbreviations can be selected:

- "y" for years
- "mo" for months
- "w" for weeks
- "d" for days
- "h" for hours
- "m" for minutes
- "s" for seconds

Whenever you assign a resource to an activity, the entered rates will be used as a basis for the cost calculations:

Standard Rate: Rate per assignment in the specified unit. For example, $10/hour or $100/Kg.

Overtime Rate: For all assignments, working more hours than considered working hours. For example, $10/hour

Cost per Project: One time cost when the resource is assigned to any activity in this project. If the resource is assigned more than once, this cost will be counted only once.

Cost per Assignment: It is added each time this resource is assigned to an activity.

Accrual: You can decide how to accrual your costs. The choices are start, prorated, immediate or end

Actual: Actual Standard, Overtime and Cost per assignment can be added here so you can compare the planned vs. the actual values.

Default utilization:
This is a the utilization that is given to a resource when assigned to an activity.

Status
The automatic **Status** shows whether a resource is over or under utilized. If you manually select a flag, the automatic function of this feature is deactivated and the selected flag will always be displayed. Please see Utilization to discover the meaning of the flags colors.

Resource Calendar
Each resource has its own calendar. By default, the calendar is based on the project calendar. If you wish to make specific changes to a specific resource, such as marking their vacation time, you have to do it in the resource calendar.

How to edit a resource calendar

1. Select the desired resource in the Resources View
2. Click on the calendar tab in the inspector
3. Select the calendar the resource calendar is based on. By default, it is based on the project calendar.
4. Under the "Regular" tab, select any changes to the resource working hours. These changes will happen every day for every selected day of the week so they are recurring in nature.
5. If you wish to mark one-off type events such as vacations and sick time, use the "Exceptions" tab to enter your dates.

Regular	Exceptions	
Reason	Start Day ▲	End Day
Vacation	20-Nov-07	23-Nov-07
Sick Day	7-Jan-08	7-Jan-08

Work intervals

☾ 2   4   6   8   10 ☼ 2   4   6   8   10 ☾

6. Click the "+" to add an entry to the exceptions list.

When a resource calendar is specified, Merlin intersects the resource calendar with the Project calendar. This behavior can be overridden by specifying which "Precedence" the assignment calendar should take.

Assignments

Assignment is a resource that has been allocated to an activity. The resource can be a person, equipment, company or a material.

In Merlin, an assignment is structurally displayed below the activity.

▽ Paint Walls
    ↱ John Doe ▾

You can toggle showing/hiding the assigned resource per activity by clicking on the white (▷) triangles.

How to assign a resource to an activity

There are many ways to assign a resource to an activity.

1. **Drag & Drop** onto an activity. Resources can be dragged from:
   - The Library
   - Mac OS X Address Book or MS Entourage
   - The resource Well
2. Selecting **"Edit - Assignments"** menu or right clicking on the activity to access the **context menu**.
3. Entering the name in the **column "Assigned Resources"**. Merlin will add the entered resource to the list of available resources if it wasn't already present.

You can assign multiple resources to the same activity using methods 1 and 2.

How to delete a resource assignment

You can delete a single or multiple activity resource assignment

1. Select the desired resource assignments
2. Press the "delete" button on your keyboard **or**
3. Select "Edit - Delete" menu

How to change a resource assignment

There are multiple ways you can change the resource assignment for an activity

1. Select the activity that has the desired assignment
2. Expand the resource assignments assigned to this activity

   ▽ Paint Walls
       ↱ John Doe ▾

3. Select the desired resource you wish to change
4. Click on the triangle to the right of the resource title to get a drop down list of all the available resources in the project **or**

   ▽ Paint Walls
       ↱ John Doe ▾
       Jane Doe
       John Doe

5. Double click or press "Enter" to enter the name of the resource. Merlin will autocomplete the name for you.

You can also:

- Use the "Edit - Assignments" menu. De-select the relevant resource and add the desired one in its place.
- Open the activity and drag the new resource onto the assignment that you would like to exchange.
- Delete and re-enter a resource in the "Assigned Resources" column.

How to change assignment work share (% of task assigned)

Let's assume you have allocated two resources to an activity and know that one of the resources will be working 75% on the activity and the other only 25%.

To solve this issue remember one of Merlin's basic concepts. **Top-Down & Bottom-Up!**

When opening the activity containing both the assignments, you can directly enter these percent values in the column "Given Work." Merlin calculates the exact times based on the activity work.

#	Title	Given Planned Work	WK 6, February 2008
			05	06	07	08	09
0	▼ 📁 **My Project**		My Project				
1	▽ Paint Walls	2 days	Paint Walls				
2	↱ John Doe	75 %			1.5 days		
3	↱ Jane Doe	25 %					4h

In that case, you will notice that 75% of 2 days of work is equal to 1.5 days and 25% of 2 days of work is 4 hours (0.5 day)

Additional Information

For additional tutorials and help, please visit www.ProjectWizards.net

Utilization View

Activity view is focused on displaying the schedule from the context of an activity since it is used as the main building block of that view. Utilization view displays the same project but from the resources context.

Utilization view lists all the activities grouped per resource. The Gantt chart is replaced with utilization blocks that represent resources allocation.

Title	December 2006					
	24	25	26	27	28	29
▶ 👤 Miss Weber		12%	12%	12%	12%	12%
▶ 👤 Moving company Verladnix						
▶ 👤 Mr. Anton						
▶ 👤 Mr. Becker						100%
▶ 👤 Mr. Meier		200%	100%	100%	100%	

The colors of the boxes follow these rules:

- **Red:** The resource is over utilized (over-allocated)
- **Yellow:** The resource is not over utilized (not over-allocated)
- **Green:** The resource is ideally utilized (fully allocated)

By default, over allocation is defined above 100% and a under utilization below 25%. However, you can define it in the resource leveling settings.

Details in the Utilization View

If you select the button "Enlarge the cumulation" in the functional toolbar, the selected rows will be expanded. This switches the display to show you a histogram of the resource utilization in detail, based on the time scale. You can also expand or contract the rows by grabbing the bottom of the row with the mouse and dragging it to the desired size. If you press the Option (⌥) key while doing this, all the rows in the view will be expanded.
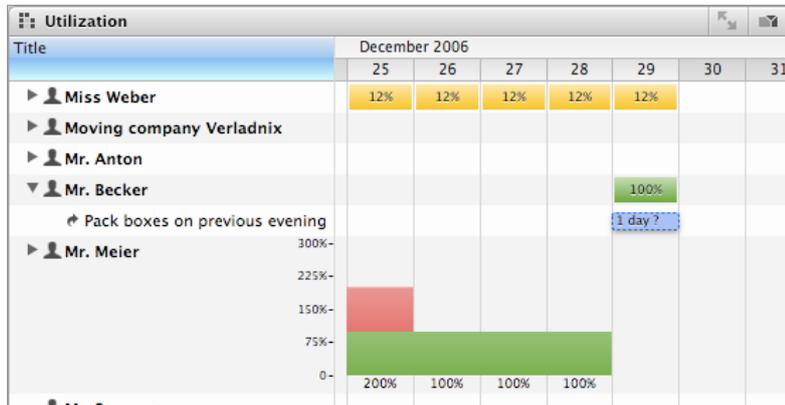
By clicking on the triangle in front of the resource name, Merlin displays all the assignments for the respective resource. **This is important:** The resource assignments are displayed and **not** the activities

Combined Projects

As in all Merlin views with many combined or multiple projects, there is a special function in the Utilization view: When common resources are inserted in the combined projects, these "Master Resources" automatically change and show all assignments of the contained projects.

Manual Leveling

When assignments are visible, their respective bars in the graphical view can be moved to the right or left with the mouse so you can manually level your resources.

You can modify the resources and assignments in this view; however, keep in mind: These are not activities!

Notes

Following this simple example, here is a little further background information:

- As long as **no** actual values are given for an activity, it is in the planning stage.
- The moment you define the "actual start date" for an activity or a completion value (in % or absolute) this activity will change to the execution stage. Meaning you can't move it as its start is now anchored in time.
- If you have dependencies between some activities, the successor activities display the planned values in gray (background bars) and the expected values in a colored bar.
- This means that each activity will be handled separately. So you can execute your project even while other activities are still in the planning phase.
- The planned (gray) bars can be understood as a kind of a baseline. These values can't be moved with the mouse. However you can change the planned values in the inspector.

The behavior in the Activity View is pretty much the same.

Resource Leveling

Resource leveling is part of every project managers arsenal of skills to ensure realistic delivery dates and maximum resources utilization. Utilization view is the most fitting view for monitoring resources utilization.

In addition to being able to manually level resources, Merlin provides a powerful auto-leveling feature. Resource leveling can level all assignments across the entire project or in a given date range. Merlin uses "Leveling Delay" to move the activities around in order to level your resources.

> **How to level your project**
>
> You can instruct Merlin to level your entire project or just the selected activities. Merlin uses the "Leveling Delay" values to level your project.
>
> 1. Select "Edit - Resource Leveling - Level All" to level your entire project
> 2. Select "Edit - Resource Leveling - Level Selection" to level your selected activities
>
> You can select "Reset All" or "Reset Selection" from the "Edit - Resource Leveling" to remove the values in the "Leveling Delay".

Resource Leveling Settings

To modify the resource-leveling setting, select "Edit - Resource Leveling - Leveling Settings…". You will be presented with the following dialogue box.

Detect Over-utilization allows you to select the time unit you wish Merlin to use when detecting over utilization. Typically, use the unit your planned your project in. For example, if you planned your project in days, use days.

Select whether you want to level the **entire project** or a **date range** using the radio buttons.

If you already leveled your project, it is recommended that you **clear the leveling delays** before leveling again.

Select if you choose to level resources **within available slack**. In addition, you need to select the leveling order you wish Merlin to use.

Leveling order options are:

- **Standard**: (criteria used when leveling)
    - Predecessor relationship
    - Constraints
    - Available slack
    - Priority (lowest priority will be shifted first)
    - Duration (longer duration will be shifted before shorter duration)
    - The manual-order (#-order) (activities with higher # will be shifted

first)
- **Priority**: (criteria used when leveling)
  - <u>Priority</u> (lowest priority will be shifted first)
  - Predecessor relationship
  - Constraints
  - Available slack
  - Duration (longer duration will be shifted before shorter duration)
  - The manual-order (#-order) (activities with higher # will be shifted first)
- **#**: (criteria used when leveling)
  - <u>The manual-order</u> (#-order) (activities with higher # will be shifted first)
  - Priority (lowest priority will be shifted first)
  - Predecessor relationship
  - Constraints
  - Available slack
  - Duration (longer duration will be shifted before shorter duration)

Should I level within available slack or not?

Leveling within available slack has the advantage of not changing your project end date. However, this will restrict your leveling because of the limited free space in your project plan. If you disabled this option, Merlin will attempt to level your schedule even if it means pushing your project end date forward.

Threshold values serve two purposes. First; The display settings for the resource utilization in the Utilization view are affected by these values.

Example:

If you have a project with the following threshold settings:

Over utilization at:	100%
Under utilization at:	25%

Merlin will use these settings to determine the colour of the resource utilization:

- `150%` It is coloured red because the resource is over-utilized (greater than 100%)
- `24%` It is coloured yellow because the resource is under-utilized (less than 25%)

Secondly, Merlin uses the over-utilization threshold to define at what utilization percentage Merlin considers the resource to be over utilized. In the above example, it is 101% is the point where Merlin considers the resource over-utilized and starts leveling the activities for that resource.

When enabled, the **"relative to default utilization"** check box allows you to select the leveling values of a resource relative to the default utilization value of that resource.

Example:

Imagine you have a bricklayer crew made up of five people. You have the crew represented as a single resource titled "bricklayers" because you always plan this crew as a unit. Since the create is made up of 5 actual individuals, you set its default utilization to 500% (100%/individual). Because you assign the activities with the work for five people, you have a utilization of 500%. Merlin will consider this resource to be over-utilized (>100%).

By checking the "relative to default utilization" check box, the value (500%) will be used as the new basis and the resource will only then show over-utilization when it is at 501%.

Resource Groups

You can group your resources within Resource Groups you define your self. This will allow you to manage a large number of resources. Like Users, groups can be given permissions as well.

How to create a resource group

1. Call "Insert - Resource Group"
2. Enter the group name

To show or hide the groups area, press the button

You can also use the "+" on the top right side of the resource groups area to add groups

How to add resources to your group

1. Select the Resources view.
2. Show the Resources Group area (use the button to toggle the display of the Resources Group area)
3. Select the project name (top most entry) in the Resources Groups area to get a list of all your resources in your project file.
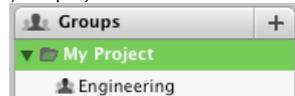
4. Drag & drop your resources onto the groups you wish them to be part of. **Resources can belong to multiple resources groups**

How to add / edit Resources Group Permissions

1. Select the desired Resource Group
2. In the inspector, select the desired permissions

Members of the resource group will inherit the resource group permissions unless they were set explicitly.

The following description should help you determine the access rights for Resources Groups.

Title	Permission
Users	**Read:** Be able to read user permissions only. **Read & Write:** Be able to view users permissions and modify them.
Settings	**Read:** Read project settings only. **Read & Write:** Read and Modify project settings.
Data from Others	**Read:** Read data entered by other users **Read & Write:** Read and write end users data **No Access:** Prevent from viewing or editing other users data
Activities	**Read:** Able to view project activities **Read & Write:** Able to view and modify activities
Resources	**Read:** View the resources and their settings **Read & Writer:** **No Access:** Prevent from viewing or editing resources and their data
Assignments	**Read:** View assignments

	Read & Write: View and modify assignments **No Access:** Prevent viewing or modifying assignments
Elements	**Read:** View elements **Read & Write:** View and modify elements **No Access:** Prevent viewing or modifying elements
Financial Data	**Read:** View financial data **Read & Write:** View and modify financial data **No Access:** Prevent viewing or modifying financial data
Actual data	**Read:** View actual data **Read & Write:** View and modify actual data

We strongly recommend that you review the Users help page to learn more about
the concept of Merlin users and permissions.

How to assign a resource group to a task

1. Ensure that your group is assignable first. Otherwise, you will not be able to assign it to any tasks.
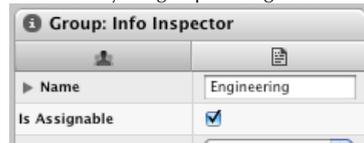
2. Drag and drop the desired Resources Group from the resources well and onto the intended activities.

When assigning Resources Groups to tasks, Merlin will add the members of the Resources Groups to the task as assignments and not the group itself.

How to remove a resource from a group

1. Select the group you wish to remove the resource from.
2. Press the "delete" key.

How to delete a group

1. Select the group you wish to delete
2. Press the "delete" key.

Deleting the Resources Group doesn't remove the resource members. Resources have to be removed explicitly

Users

Merlin introduced the concept of "Users" to control access to shared project files. Any resource can be designated as a user. Merlin project file can have multiple users each with their own password and or set of permissions.

Resources can be designated as users using the "Is a User" option in the resource inspector.

How to designate a resources as a user with permissions

1. Select the Resources View
2. Select the resource you wish to have the password or permissions assigned to. You can select multiple resource at one time using the ⌘ or ⇧ keys.
3. Select the Permissions tab in the inspector and determine the password and permissions.

Please note that permission changes will apply immediately. However, password changes will apply upon login.

The following description should help you determine the access rights for users.

Title	Permission
Users	**Read:** Be able to read user permissions only. **Read & Write:** Be able to view users permissions and modify them.
Settings	**Read:** Read project settings only. **Read & Write:** Read and Modify project settings.
Data from Others	**Read:** Read data entered by other users **Read & Write:** Read and write end users data **No Access:** Prevent from viewing or editing other users data
Activities	**Read:** Able to view project activities **Read & Write:** Able to view and modify activities
Resources	**Read:** View the resources and their settings **Read & Writer:** **No Access:** Prevent from viewing or editing resources and their data
Assignments	**Read:** View assignments **Read & Write:** View and modify assignments **No Access:** Prevent viewing or modifying assignments
Elements	**Read:** View elements **Read & Write:** View and modify elements **No Access:** Prevent viewing or modifying elements
Financial Data	**Read:** View financial data **Read & Write:** View and modify financial data **No Access:** Prevent viewing or modifying financial data
Actual data	**Read:** View actual data **Read & Write:** View and modify actual data

Passwords

Please note that you need your old password in order to change the password. If

you have forgotten your password, and you are the only designated user, you will lose access to the file indefinitely. Merlin attempts to capture this situation and warn you before it happens. If you lose your password, contact support for further help.

Elements

The Elements concept provides you with a single collection point for the many types of information obtained during the life of a project. Imagine an attachment to an email. The same principal is used for the elements concept in Merlin. Which is why the toolbar paper clip icon represents the Elements feature.
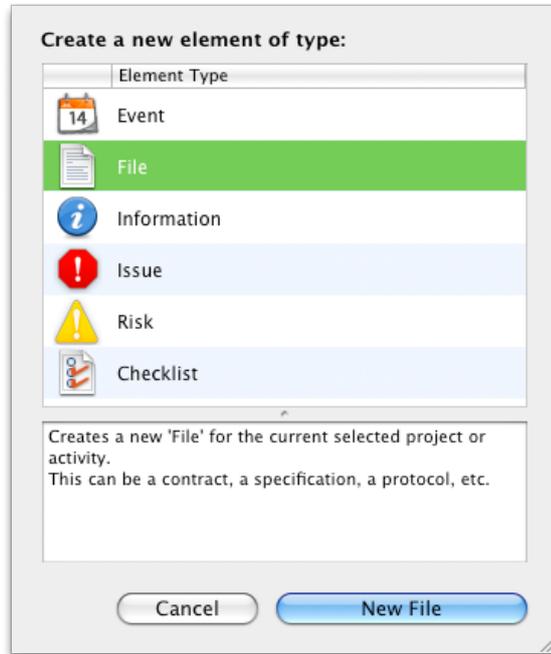
Types of Elements

Merlin provides several types of elements to choose from, each serving a different purpose:

- Event
- File
- Information
- Issue
- Risk
- Checklist

Displaying an Element

You will find the Elements section below each of the views offered in Merlin. You can expand or contract this section using the separators or by clicking on the paperclip toolbar button or pressing the F2 key.

Modifying the Amount of Elements Shown

In the upper right corner of the Element table, you will find an arrow that you can use to modify the amount of Elements displayed per activity (or project).

When the arrow points down (this means it is expanded), all Elements within the selected activity will be displayed. Furthermore, all those Elements that are listed in the outline for the sub-activities will also be displayed.

When the arrow points to the right (minimized), only those Elements that are contained within the selected activity will be shown.

Filtering Elements List
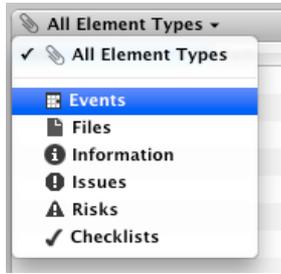
The Elements bar on the top left corner of the Elements view is clickable. It allows
you to filter the listed Elements by type. When a specific type is selected, pressing
the "+" button will add that specific type of Element making it more convenient to
add a type of elements quickly.

How to create an Element

1. Select the relevant activity, group or project to which you would like to attach an Element to.
2. Select "Insert - Element" or the keyboard shortcut corresponding to the type of element you wish to create.
   Alternatively, you can also click on the plus symbol in the Element section below the outline.

You can **delete** an element by selecting it then pressing "delete" button

Checklist Element

Checklists are a common tool that many PMs use. Merlin helps the PMs by providing a Checklist Element that can be attached to any activity.

With Merlin Checklist Element, you can track all your lists easily. You can even generate a report for all the lists in your project to make sure that none of them slip through the cracks.

How to create a checklist

Here we will walk through how to create a check list element attached to a task then populate the elements with several items

1. Select the task you wish the Checklist element be attached to
2. Add a check list item by choosing "Insert - Element - Checklist"
3. Press the "+" button to add check list items in the inspector of the Checklist element
4. Enter the content of the checklist item. You can add additional checklist item details in the "Entry Description" field.

Merlin has other features to help you manage your checklists. It allows you to mark your checklist items with simple checkboxes. Save them to a separate file, load them from an external file and of course copy and paste them.

How to Import/Export your checklist

- To save your checklists to an external file, you can press the "Export" button in the Checklist Element inspector. Merlin saves your checklist as an OPML file
- If your checklist items are documented in an OPML file, you can import them by pressing the "Import" button in the Checklist elements inspector. **Please note** that importing a checklist will append items to the current checklist.

To successfully import your checklists, you need to have them saved as OPML. To learn more about OPML, check out OPML page on Wikipedia here.

How to generate a report of your project checklists

- To generate a report listing all your project checklists and their status, Select "File - New Report…" and choose the "Checklist Report"
- To generate a report for a specific Checklist Element, select the Element then press the "Report" button in

the Element's inspector. Select multiple items if you want to generate a report for a selected set of tasks or resources.

If your report doesn't list all of the intended checklists, check your report options by pressing the "Options" toolbar button in the report dialogue box

The File Element

Of all the information a Project Manager is expected to manage during a project, Files are the most difficult to track and organize. The shear number of files, their relevance to parts of the project and the number of versions each file has can take a big chunk out of the PM's daily work.

To organize your project files, you can use Merlin's File Element. The File Element will allow you to easily store your files as attachments to tasks or resources. You can keep track of certain information related to the files such as who authored the document, its priority, and status. You can even keep older versions of your file as Merlin keeps track of your document versions as they change.
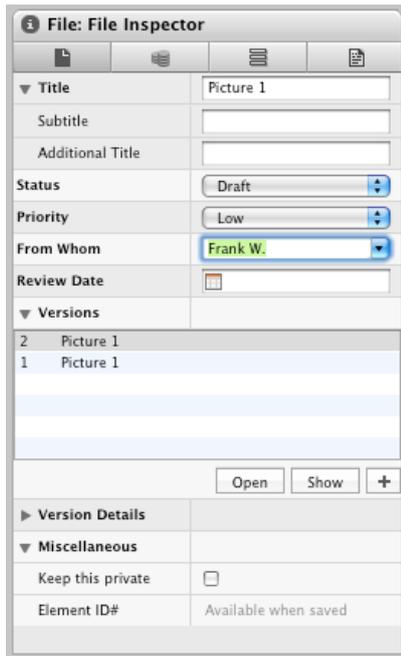
How to add a File Element

You can add a File element to your Merlin file in two ways

1. You can drag & drop your file onto an activity to attach a file element to it. Merlin will prompt you with the following dialogue box.
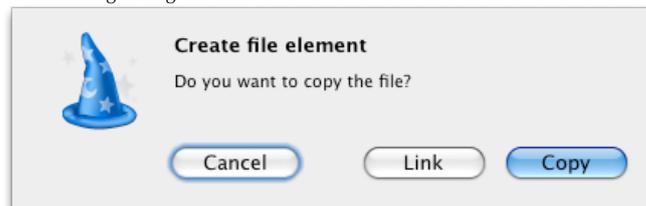
   - **Link:** The file is referenced from Merlin. If the file is moved, Merlin will lose the file reference.
   - **Copy:** The file is copied into Merlin project file.
2. Select "Insert - Element - File". Merlin will automatically prompt you for the file. Merlin will copy the file in this case.

If you wish to delete the file element, simply select it and press the delete button.

How to create a new version of an already included File Element

1. In the Inspector, select the version that you would like to modify and click on the button "Open" to open the file.
2. The file will be opened using the relevant application.
3. Modify as desired and save the file.
4. When you return to Merlin, you will be prompted on how you would like to proceed with the modifications:

Element files were edited externally

External edits in: Weekly Report.pages. What to do with the changes?

(Ignore)   (Create new version)   (Incorporate last version)

- **Create new version** will add an entry in the version and linking it to the current version of the file.
- **Incorporate last version** will replace the last version of the file with the current one.
- **Ignore** will ignore the changes.

Event Element

It is no secret that PMs have a large number of events that happen during their projects. Most of these events involve project stakeholders, external contractors, management, etc. Merlin helps the PM better organize these events by providing an Event Element that can be added to any activity or resource. With iCal integration, you can export this element to your calendar.

How to create a new Event Element

1. Select the item you wish to attach the Event element to.
2. Select "Insert - Element - Event"
3. Press "+" to add attendees to the list.

Recommendation

When adding an attendee that is not part of the resources list, he/she will be automatically added to the resources list of the project. **We recommend** that you use the drop down menu in the "Resources" column when adding attendees to avoid accidentally adding resources.

How to export your events to iCal

You can export your events to iCal using two methods.

1. **Static method:** Using "File - Export" then choosing iCal. For more information, click here for more information
2. **Dynamic method:** Using "File - Publish…". Click here for more information.

Information Element

Every project manager knows how much information is exchanged outside the official project planning sessions (whether it is in meetings or even around the water cooler). Some solve this problem with a Post-It notes all over their monitors, others have more creative methods. In larger projects, this becomes an impossible task.

Merlin solves this problem by providing the Information Element as a conduit to this type of information. Like all other elements, it can be attached to any specific resource or activity. Since Merlin is Spotlight compatible, finding these elements in a large group of Merlin projects is very straight forward.

How to create an Information Element

1. Select the relevant activity, group or project to which you would like to attach an Information Element to.
2. Select "Insert - Element - Information" or the keyboard shortcut ⌘⌥3 to create a new Information Element. Alternatively you can also click on the plus button in the Element section below the outline.

Element Data

From Whom: In this list select the origin or the person who originally delivered the information. You can also manually enter the details in this field. When you expand this section you can enter the date the information was given to you. The default is always the current date.

Review Date: If you would like to review this Element on a specific date, enter a date in the field "Review Date" or select a date by clicking on the mini calendar.

Kind: By default Merlin has three different ways of conveying the information: Telephone, Written, Personal. Selecting one of the "Kinds" will also cause the contents in the field *Status* to change accordingly. The contents of this list can be modified in the Project Settings.

Status: Select the relevant state of the Information from the Status list. The contents of this list can be modified in the Project Settings.

Priority: Select the priority for the Information. The contents of this list can be modified in the Preferences.

URL: You can attach an URL to an Information Element. If this URL does not start with a protocol (http, ftp oder auch mailto), "http://" will automatically be added once you have left the field. To open the link, click on the ⊕ symbol behind the field.

Note: If you wish to add more information, you can always click on the "Text" tab and add all the text, history, notes you wish attached to this Information Element.

Issue Element

No project ever runs without at least one problem or issue. These issues can range from small, everyday catastrophes to a major crisis, where suddenly nothing runs as expected and the whole project threatens to collapse. For this reason, an experienced project manager conducts an "issue" list and tries to keep this synced to the project planning. Furthermore, certain contents of the project may change over the course of your project planning

Merlin helps the PM keep track of these issues by providing an Issue Element. Add your problem case as an Issue Element to your project and supervise it until it has been resolved.

How to create an Element Issue

1. Select the relevant activity, project to which you would like to attach an Event Element to.
2. Select "Insert - Element - Issue" or the keyboard shortcut ⌘⌥4 to create a new Element. Alternatively you can also click on the plus button in the Element section below the outline.

Element Data

Reported by: In this list select the origin or the person who originally reported the issue. You can also manually enter the details in this field. When you expand this section you can enter the date the issue was given to you. By default it is always the current date.

Assigned to: Enter the name of the person to whom you have assigned the Issue to in this field. When you expand this section you can enter a date or select the "As Soon As Possible" button.

Supported by: You can select an additional resource to support with the Issue. When you expand this section you can enter the review date for this issue.

Category: Select the desired category to which your issue belongs to from the drop down list. The contents of this list can be modified in the Project Settings.

Kind: The issue type can be selected in this field. The contents of this list can be modified in the Project Settings.

Status: Select the relevant state of the Issue from the Status list. The contents of this list can be modified in the Project Settings.

Priority: Select the priority for the Information. The contents of this list can be modified in the Preferences.

URL: You can attach an URL to an Issue Element. If this URL does not start with a protocol (http, ftp or mailto), "http://" will automatically be added once you have left the field. To open the link, click on the ⊕ symbol behind the field.

Risk Element

Planning, tracking and mitigating risks during a project is one of the challenges
project managers face on daily basis.

With Merlin you can add risks to your project's activities, phases or entire project.
This will allow you to mitigate the risk and during the post-mortem, you can visit all
your risks and evaluate how successful the project was in dealing with them.
Retaining your risk data in your project provides a unique perspective on it later on.

How to create a Risk Element

1. Select the relevant activity, group or project to which you would like to attach a Risk Element to.
2. Select "Insert - Element - Risk" or the keyboard shortcut ⌘⌥5 to create a new Element. Alternatively you
   can also click on the plus symbol in the Element section below the outline.

Structuring the Risk

Risks are multifaceted by nature. In order to classify them easily, a few pop-up lists
have been added. This concerns the:

- Risk Group (as a thematic concept)
- Probability (of the occurrence)
- Risk Class (of the necessary measures)
- Found By (the person who discovered the Risk)
- Responsible (for the supervision)
- Risk Description

When the risk has been recorded you can begin to assess the **impact**, or its effect on
your project should it actually occur. Based on:

- the contents
- the cost
- the deadlines

The result is the **Risk Factor**, which is displayed by a colored flag:

- Low risk factor
- Medium risk factor
- High risk factor

The results are calculated through a matrix calculation, which can be seen, when
the Risk factor section is expanded. The calculation of the risk factor cannot be
modified.

Your findings and the planned actions for the risk can be recorded in the text box
Risk Actions and Closing.

View Options

In Merlin you can change the appearance of your Gantt, columns, styles, etc.

The Columns

Merlin contains a wide range of columns. A brief description of the contents of each column can be found in the relevant activity, Elements or the resources "View Options" dialogue.
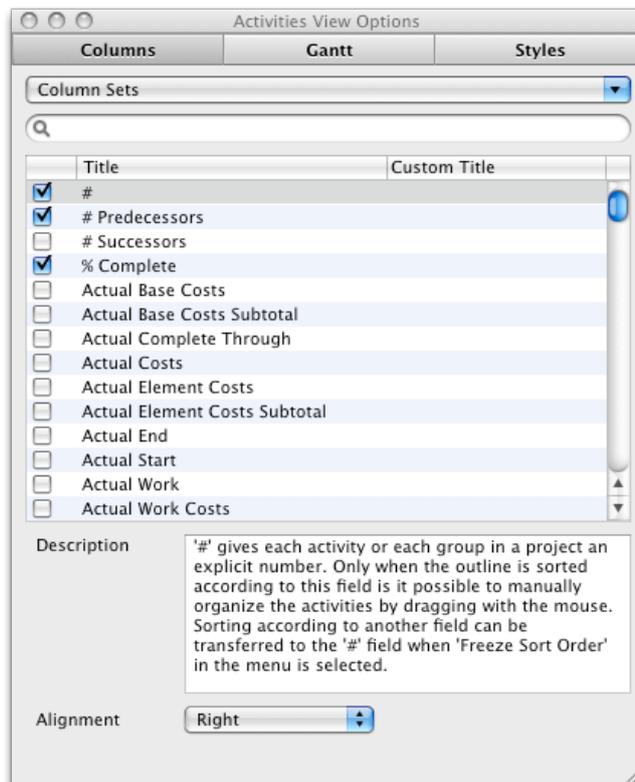
How to enable/disable columns

Although you can right click on a the column header to see a listing of all the possible columns you can show/hide, when wanting to enable more than one columns you will find it easier to do this in the View Options dialogue.

1. Select the View you wish to change (Activities, Netplan, Resources, or Utilization)
2. Select "View - Show View Options" or press ⌘J
3. Enter a keyword to search for all the possible fields. Your keyword search will search the "title, custom title and description" of each column
4. Click on the check box next to the desired columns to show the columns or uncheck the ones you wish to hide

Columns headers are sortable so if you want to see all the enabled columns, click on the checkboxes column heading to sort according to checkbox status

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How to save a set of columns

In Merlin you can save a set of columns that you can activate at any time you wish.

1. Search and select the columns that you wish to group
2. Click on the "Column Sets" popup menu and select "Save"
3. Give the column set a name and define if it should be available for all projects or just for the current project.

You can also delete, modify or set-as-default any column set over the "Manage..." dialogue in the "Column Set" popup menu

---
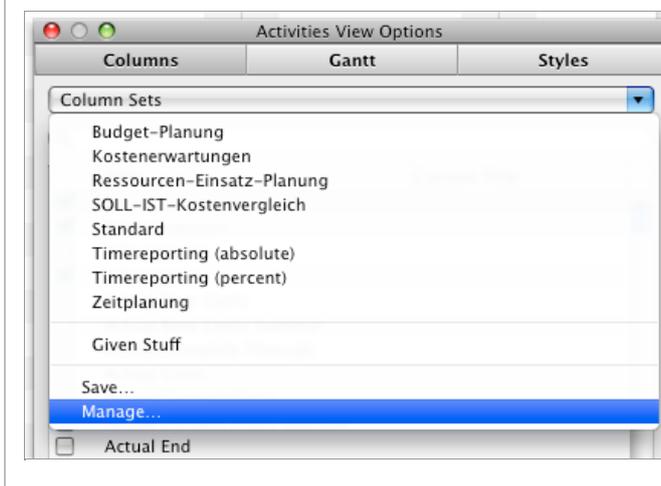
How to give some columns custom titles

You can define a custom title to be displayed instead of the predefined column names.

1. Select the column you wish to give a custom title to
2. Double click the area under the "Custom Title" column to edit its content
3. Enter the title and press enter
4. If you want, you can change the alignment of the title by choosing the desired alignment from the popup menu

Alignment applies to given title or custom titles

Gantt Settings

Besides using the style information it is possible to modify the Gantt chart with several different available options.
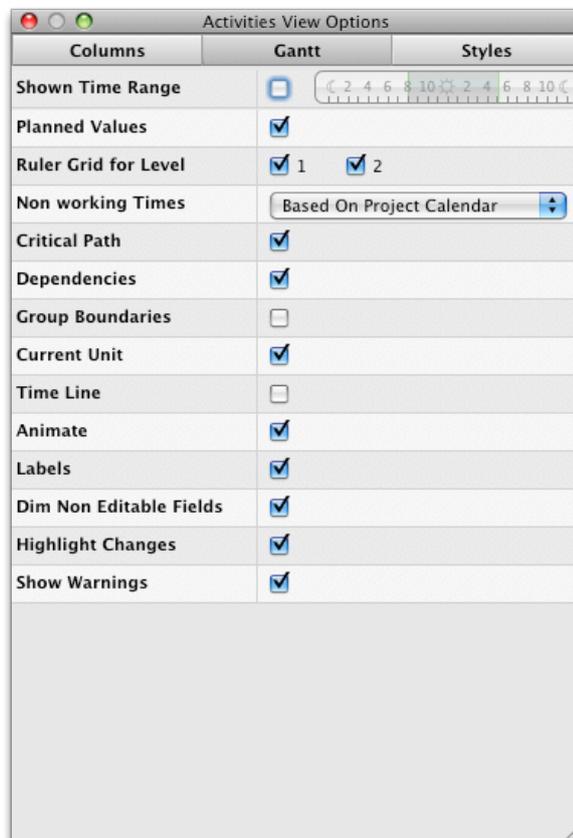
Shown Time Range
Merlin can use a different project working time to display the Gantt bars than the project calendar settings

Planned Values

As described in the Actual Values page, the bars in the Gantt chart are displayed in gray when actual values have been entered for an activity. Uncheck this option to disable it.

Ruler Grid for Level

Depending on the amount set in the time scale, you will find one to four checkboxes here. With this option it is possible to display a gray line in the Gantt chart for each time scale. This could make it easier to read the Gantt chart of projects with multiple levels.

Q1				
January 2008			February 2008	
WK 3, January 2008	WK 4, January 2008	WK 5, January 2008	WK 6, Febr	
13 14 15 16 17 18 19	20 21 22 23 24 25 26	27 28 29 30 31	01 02	03 04 05

Non working Times

With this option you can decide if the non working time is displayed in gray in the Gantt chart. You can select whether the project calendar should define the working hours for all activities or each row should be handled individually. The non working time refer to the time defined in the project calendar.

Critical Path

With this option you can activate or deactivate the display of the critical path in the Gantt chart. The critical path plays an important role in many projects. The critical path concerns all activities in a project that cannot be automatically deferred to the left (=in the past) or to the right (=in the future) and that directly influence the project (for a detailed definition please read the article on Wikipedia).

Dependencies

With this option you can enable or disable the display of the dependency lines in the Gantt.

Current Unit

If you activate this option, the actual unit of the lowest time scale will be highlighted in light blue in the Gantt chart.

Time Line

The time line function displays the current point of time with a vertical red line in the Gantt chart.

Animate

If you have this option activated you will notice that the changes you make in the Gantt chart are animated. This means that, for example, when you drag a bar, the actual dragging to the new position becomes visible. However, if you are working on an older Macintosh model, which does not have an powerful GPU, it might be a good idea to deactivate this option enhancing Merlins performance.

Labels

Activating this option displays all the labels in the Gantt chart (in front of, within and behind the bars).

Dim Non Editable Fields

When enabled, calculated values in the outline portion of the view will be displayed in dimmed color (gray). We recommend that you enable this option.

Highlight Changes

When enabled, directly and indirectly (due to calculations) fields will have their background change color to indicate changed values. We recommend that you enable this option.

Show Warnings

When enabled, warnings will be shown in the outline portion of the view as well as the resources well.

The Netplan Settings

Besides using the style information it is possible to modify the Netplan in the "Net Plan" tab when applying various available options.

Critical Path

With this option you can enable or disable the display of the critical path in the Gantt. The critical path plays an important role in many projects. The critical path concerns all activities in a project that cannot be automatically deferred to the left (=in the past) or to the right (=in the future) and that directly influence the project (for a detailed definition please read the article on Wikipedia).

Dependencies

With this option you can activate or deactivate the dependency lines.

Completion Crosses

In a traditional PERT graph, and other graphs based on the Netplan method, it is often the case that an ongoing activity is displayed with a diagonal line within the box and then, upon completion, a second diagonal line is displayed (more information regarding this can be found on Wikipedia). It is possible to reproduce this behavior in Merlin by selecting this option.

Horizontal and Vertical Spacing

Both of these options can be used to specify how much spacing should be displayed between the boxes horizontally and vertically.

Dim Non Editable Fields

When enabled, calculated values in the boxes will be displayed in dimmed color (gray).

Highlight Changes

When enabled, directly and indirectly (due to calculations) fields will have their background change color to indicate changed values. We recommend that you enabled this option.

Show Warnings

When enabled, warnings will be shown in the resources well.

Styles

The Styles

With the help of the styles it is possible to format your project look according to rules. You can change the look of:

- Activities
- Gantt chart
- Netplan
- Resources
- Utilization
- Elements

The styles comprise the following areas:

- Displayed contents
- Row height
- Fonts
- Foreground and background color
- Border style
- Shadow

After selecting the view options in the "View" menu, you can access the "Styles" tab in the upper right corner of the window.
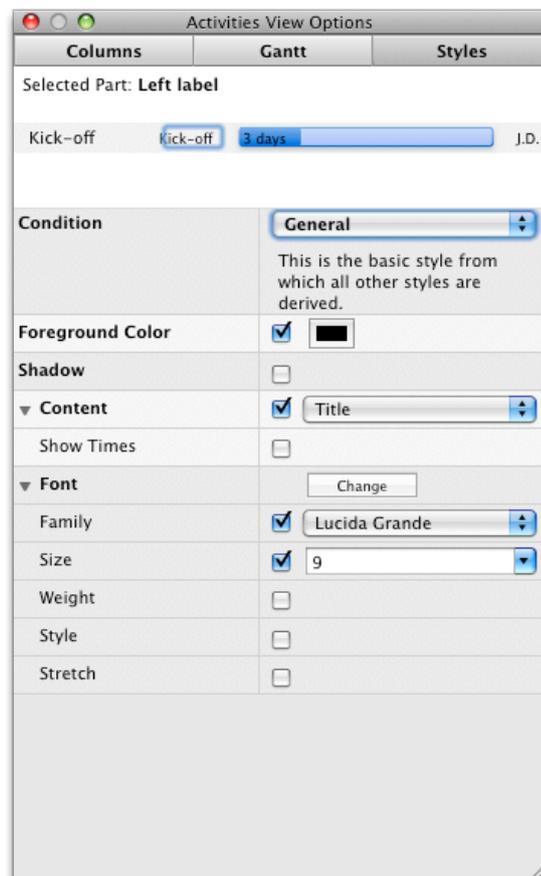
In the section "Selected Part" we have developed a "click-able preview," in which you can select the part to be formatted by clicking it. You will find several categories in the "Condition" section, which can be applied to an activity while formatting. Furthermore, you will find a list for groups, status flags and other project planning topics. In the section below it all other available settings will be listed according to the selected part.

Styles hierarchy

The condition "General" is the basic format from which all other conditions are derived. This means that when, for example, you change the color of the General formatting, all other styles that have not been explicitly modified in color will inherit their display from the General condition. The hierarchy is displayed in the popup menu.

```
        General
        Green flag
        Yellow flag
        Red flag
    ✓   Level 1
        Level 2
        Level 3
        Level 4
        Level 5
        Level 6
        Level 7
        Level 8
        Activities
        Activities with assignments
        Group
        Project
        Assignment
        Milestone
        Very low priority
        Low priority
        Normal priority
        High priority
        Very high priority
        Critical path
        Warning
        Conflicts
        Collapsed
        Expanded
        Filtered
        Changed
```
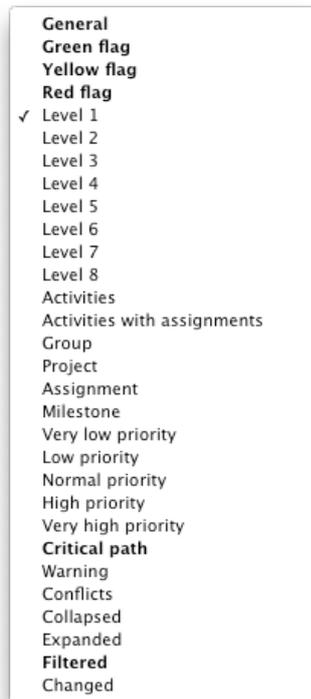
Bold items in the popup menu have explicit values set.

How to save style sets

In Merlin you can save a set of styles that you can activate at any time you wish.

1. Modify the styles you need changed
2. Click on the "Style Sets" popup menu and select "Save"
3. Give the style set a name and define whether it should be available for this project only or for all projects.

You can also delete, modify or set-as-default any styles set from the "Manage..." option in the "Column Set" popup menu
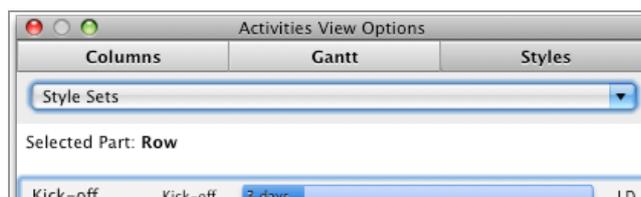
Example

If you want to change the color of the bars to represent the critical path instead of the blue, green, yellow, red colors of the status flags. This scenario is quickly realized by the following few steps :

1. Select the Gantt bar in the preview
2. In the condition switch to green flag
3. Deactivate the foreground and background color with the help of the checkbox
4. Repeat steps 2 and 3 for both the yellow flag and the red flag status
5. Switch to the condition critical path
6. Activate the foreground and background color with the help of the checkbox
7. Select the desired color with the help of the color palette.

You have now formatted your Gantt bar to highlight the critical path

Importing Files

Import Formats

You can import the following formats

- MS Project (.mpx, .mpp, .xml)
- OmniOutliner (.ooutline, .oo3)
- OmniPlan (.omniplan)
- NovaMind (.nmind)
- MindManager (.mmap)
- Merlin 1 (.merlin)
- Merlin 2 (.xml)
- Text files (.txt, .csv, .tsv)
- OPML files (.opml)

How to import your file

1. Drag & Drop your file onto the Merlin icon. Merlin will immediately start importing the file.
2. Alternatively, you can import the file by using the "File - Open" menu item.

MS Project

Merlin can import .mpx, .xml, and .mpp MS Project formats. There are a few limitations that need to be considered:

- Budgets and base costs are not imported.
- Base plans are not imported.
- Besides "Actual Start," "Actual End" and "% Complete," no other actual values are imported.
- Grade resource prices are not imported
- Split activities or reoccurring activities are not imported.
- WBS codes are not imported.
- User value fields are not imported.
- The priority range of 0-1000 is displayed in Merlin's priorities as very low, low, normal, high, very high.
- Linked projects are not imported.
- Resource leveling values are not imported.

Omni Outliner

- The structure is imported as defined in Outliner.
- Attached files are converted to File Elements in Merlin.
- Attached URLs are converted to Information Elements in Merlin.

MindManager and NovaMind

- The structure of the tree and its branches
- The attached resources
- The duration
- The relationships (links)
- The priorities

Exporting Files

Merlin allows you to share your project files with a large group of applications. You can export your Merlin project file to make it available to PC users using MS Project or export it as an OPML file that you can edit in Omni Outliner
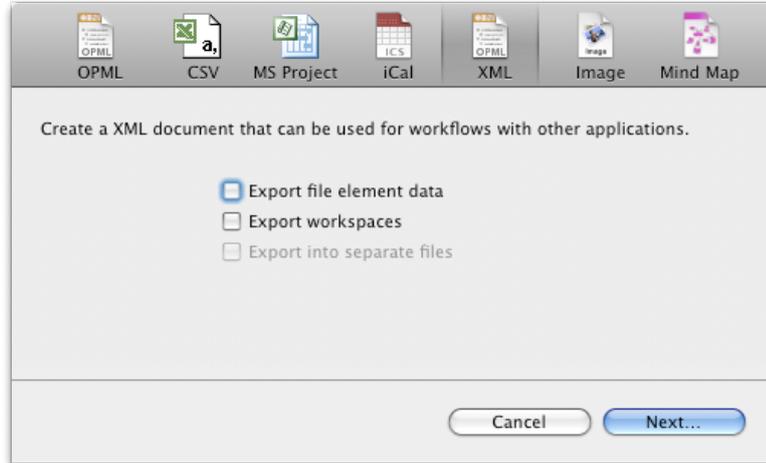
Export Formats

You can export your Merlin file to:

- MS Project (.xml, .mpx) - XML is recommended
- iCal calendar (.ics)
- Merlin XML Format (.xml)
- Mindmaps for NovaMind, MindManager or Freemind (.nmind, .mmap)
- OPML (.opml)
- Images (.pdf, .jpg, .jpg2000, .png, .tiff, .bmp)
- Text files (.csv, .tsv)

How to export your project

1. Go to File - Export
2. Choose the type of file you wish to export to
3. Select desired export options, if available
4. Click "Next…"
5. Select the destination you wish to save your exported file to

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MS Project Export Notes:

- Activities:

    - The activity budgets and the base costs are not exported.
    - Of the four date restrictions offered by Merlin per activity, a maximum of one is exported.
    - The start and end of an activity are always exported in the same direction (ASAP, ALAP).
    - The percent values of durations and work are exported with absolute values.
    - Work values are always exported only in the "hours" unit.
    - The behavior of the "Optimize Duration" button of an activity cannot be displayed in the export.
    - Date restrictions and dependencies of assignments are not exported.
    - Linked projects are exported as one project.
    - At present the following columns are not exported: Remaining Work, Actual Work, Actual Work Overtime, Last Report Date
    - Description text is exported without the formatting.
    - When using the .mpx format, material resources are exported as work resources.
    - WBS code format cannot be exported.
    - Resource leveling values are not exported.

- Resources

    - Reasons for calendar exceptions are not exported.

- Elements

- Elements are not exported.

Mindmaps

You can export your project file as a mind map using the Mind Map - Freemind
option. All you need to view your mind map is a web browser. This is a great way
of sending your Merlin Project file mindmap to other users.

Publishing

Merlin has very powerful publishing features that allow you to publish your project file to share with other users or other applications.

You can publish your saved project file to:

- Other users using Merlin's powerful **Project Sharing**. This will allow you to collaborate with other Merlin users using the same project file.
- The Web using Merlin's own **Web Module**
- The iPhone or iPod touch using Merlin's own **iPhone Application**
- **iCal** so you can synchronize your activities with iCal

Use the Publish tool bar button   to activate the publishing dialogue in Merlin or use "File - Publish…"

Library

The Library is a source for project specific information that can be used via dragging and dropping a variety of objects into the project. The Library contains a wide range of documents and activities, which are useful for general projects.

You can use the library to store you own activities snippets so you can use them later on.

Working with the Library

You can easily access the Library with the ![icon] toolbar button, by using the menu "Window - Show/Hide Library" or the shortcut F3. The following properties can be found in the Library when you first start Merlin:
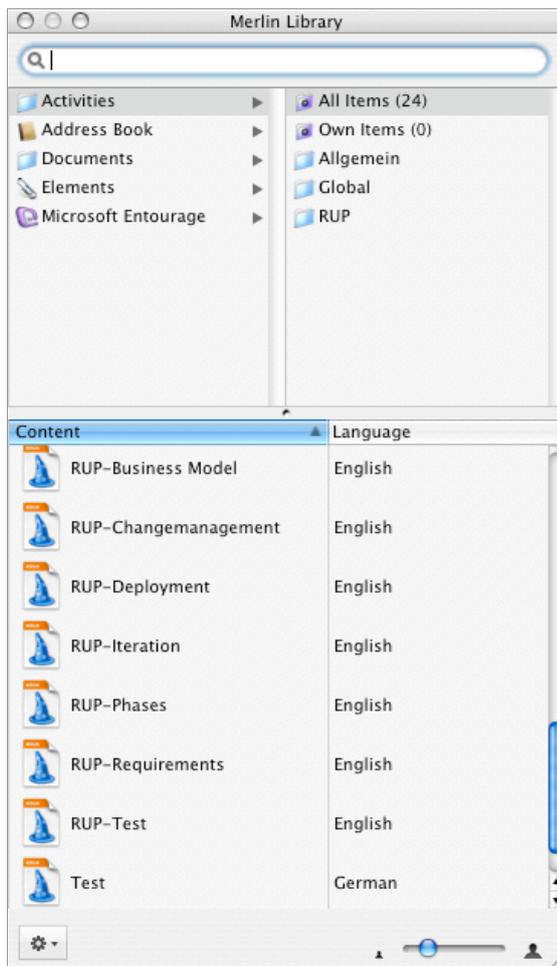
Address Book: The Library uses the addresses from Mac OS X Address Book and MS Entourage as a basis for project resources. The source application can be defined in the Preferences.

Documents: It is now possible to access important documents at any time during the project. By customizing this part of the Library with your own documents, Merlin allows you to create a valuable core of information that can continuously expand.

Elements: You will also find the elements in the Library. They can be easily allocated to any activity by drag & drop.

Activities: Merlin allows you to drag and drop individual activities or phases (groups) into your project. This is very useful for iterative process such as Agile project management.

Working with Addresses in the Library
To allocate a resource to an activity, drag the address directly onto the relevant activity. If this address is not already contained within the project, Merlin will add

this automatically as a resource in the resource list.

You can also drag the addresses from the Library directly into the resource list in the additional area to define them as resources for the project.

Working with Elements in the Library
Drag the desired Element onto an activity, group or project. Merlin attaches the Element immediately to the selected object ready for editing or modifying.

Working with Activities in the Library
When you drag an activity from the Library and drop it onto the target activity (or group) in the outline, Merlin creates a group out of the target activity. The activity dragged from the Library can be found within this group.

You can also place an activity (or a group) from the Library between other activities in the outline.

Working with Files in the Library

When you drag a file from the Library onto an activity, Merlin automatically creates the File Element and attaches it to this activity. This can then be edited in the Elements section.

Finding Contents in the Library

There are two ways in which you can find desired contents in the Library. You either browse by clicking through the Library structure or you search for the desired object by specifying the relevant name in the Library search field.

The Structure

All of the Library's contents are categorized so that they can be located easily. For example, to attach a RUP method file (abbreviation for "Rational Unified Process" - read more in Wikipedia) as a File Element, click on the documents folder, which is located in the left column of the Library. In the right column the Library will display all the sub-categories of this folder. You will also find the folder "RUP." By clicking on this folder you will be offered all documents contained in the content list. Select the desired document and simply drag this to the relevant activity. Merlin automatically creates the File Element and attaches it to the activity.

The Search Field

A second, and not less comfortable, option for finding contents in the Library is to search for the name of the file. Enter the key word in the search field located on top of the Library sections. As soon as you enter the first letter, Merlin starts searching and lists all the contents found in the Library. Further specification of the key words will help Merlin reduce the list of matches.

Merlin searches only for the names. A search with regards to the contents does not take place. The list of the categories displayed will match the key words entered. The same applies for the sub-categories. Click on a sub-category and Merlin will display all the matches in the content list. In this case as well, simply drag the desired content and drop it into your project.

Customizing the Library

The Library can be expanded by each respective user. To do this, simply drag the desired objects into the Library window. The following project contents can be

dragged into the Library:

- Activities
- Elements
- Documents

It is even possible to drag files from the Finder into the Library. Simply grab the file in the Finder with the mouse and drop it into the Library window.

Settings for the Library

In Merlin's application preferences you will find a separate icon for the Library. In this section you may customize how the Library displays its contents, change the location for writable folders and select the source for addresses. More details on customizing the Library can be found in the section Preferences.

User Defined Fields

Merlin allows you to define your own custom fields in a project. These fields can be used with different items in:

- Projects
- Activities
- Resources
- Elements

You can manage and edit the User Defined fields in the Inspector. For each of the objects mentioned above, you will find the corresponding section in the Inspector behind the second to last tab - User Defined Inspector.
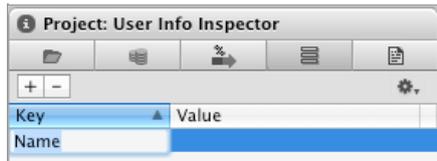
Columns in the Outline: The User Info fields can be displayed in the outline as columns. You will find how to activate/deactivate the columns in the section View Options

Fields in the Netplan: User Info fields can also be displayed as fields in the Netplan boxes.

Search: User Info fields can be searched for and also used in the search editor. You will find more information regarding the search here.

How to create a user defined field

You can create any number of user defined fields using the inspector user defined field tab.

1. Select the object type you wish to add the user defined field to
2. Press the "+" button to add an user defined field to the list
3. Enter the value of the "key" to identify the field uniquely
4. Click the gear wheel to select the type of data you want to restrict the user defined field to
    - Text (default)
    - Number
    - Currency
    - Date
    - Date with Time
5. If you want, you can enter a value

You can delete any user defined field using the "-" button or pressing the "delete" button.

Changing the type of an user defined field

You can change the user defined field data type. However, the **contents will be lost**. The contents can only be maintained when a field is changed into a text type.

Search

In Merlin each section and view has its own built-in search field, which you will find on the respective functional toolbars of each section.

This means that you can search for information specifically in the relevant or required section. The search field has two different functions.

- Keyword Search
- Advanced Search

Keyword Search

As you start entering a key word into the search field, Merlin will immediately hide
all the non-matching items, showing only those that apply. The items displayed in
grey show you the path where the matching hits of your search can be found.

Advanced Search

Merlin provides an advanced search feature. Using this feature, you can define
complex search criteria and save them for future reuse.
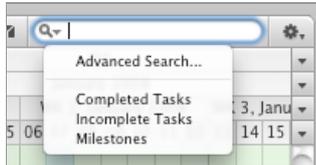
How to define complex search criteria that you can reuse

1. Click on the magnifying glass icon in the search field
2. Select "Advanced Search…" to open the advanced search dialogue box.
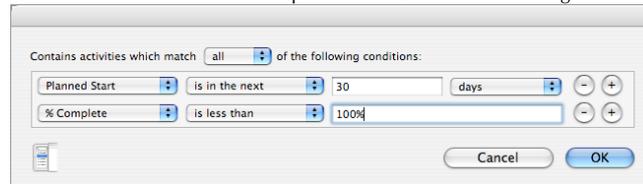
3. Build your desired search criteria
4. If you need to save your search results click the drawer icon in the left bottom corner
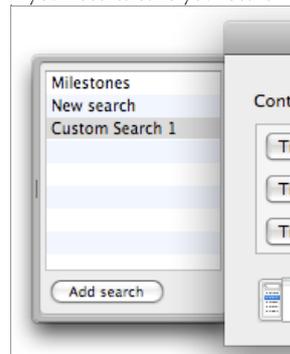
5. Click the "Add Search" button to save your advanced search under a custom heading

You can double-click the added entry to edit the search name or press "delete" to remove the selected search

Refine your advanced search

When an advanced search is in effect, its name is displayed in grey. You can enter
a keyword to further refine the search.

Printing

General

This section will show you how to effectively use Merlin's printing capabilities.

The print dialog is displayed by selecting "File - Print" in the menu or with the ⌘P keyboard shortcut. In the displayed dialogue you can make all the required settings for your printout and send the results to a printer or create a PDF file.
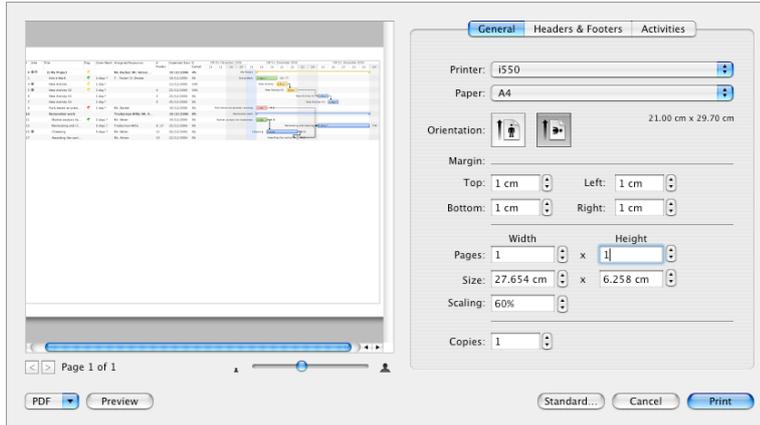
All the settings you make here are persistent across projects including new ones.

How to create a specific workspace for printing

If you want a specific printout look

Use workspaces to provide an easy way of customizing the look and feel of the active view you wish to view on the screen or print.

Headers and Footers

You have the option of adding a header or footer to your printout.
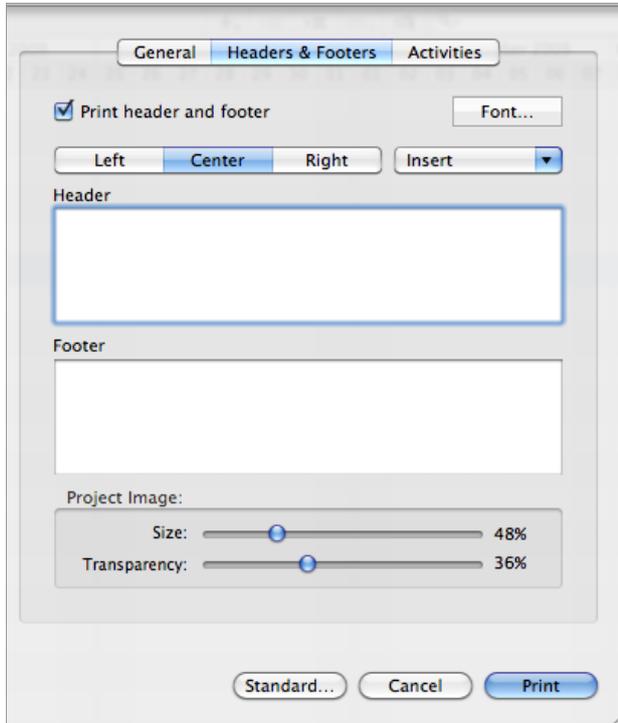
By enabling **Print header and footer** checkbox, you can activate this function. Each footer is broken into 3 zones. Left, center and right. Select the desired zone then click on the "Header" or "Footer" text area to enter the desired text. If you wish to

use automatically generated entries, simply select the item from the "Insert" popup menu and Merlin will insert a tag to the right of the cursor in whichever area the cursor was last active in.

Further customization can be achieved by pressing the "Font…" button. Please note that font changes apply to the entire header and footer.

Possible auto-entries are:

- **Title:** The title of the project
- **Page Count:** The total number of pages for this printout
- **Page Number:** The page number
- **Project Image:** The project image as entered in the Project settings.
- **Print Time:** The date/time stamp of the printout

You can adjust die size and transparency of the project image by the use of the according slider.

Settings According to the Selected View
It is imperative that the printout deliver ideal results in each of the views; therefore, Merlin provides individual settings for each view. The last tab in the print dialogue box has been reserved for the relevant views

Activities View
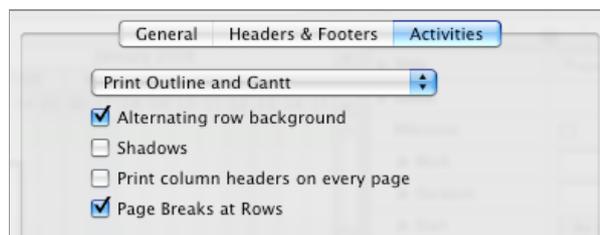
In the drop down menu, you can select how you would like to print your project. Only the outline, only the Gantt chart or both.

The **Alternating row background** can be difficult to view on some printers (or plotters). If you experience problems, uncheck this option.

The same applies for the **shadows**. Some plotters do not implement shadows in the printout.

If you would like to **Print column headers on every page**, enable this option. Otherwise, Merlin will print the column headers on the first page only.

The **Page breaks at Rows** will create controlled page breaks at the end of each page without cutting any rows.

Netplan View
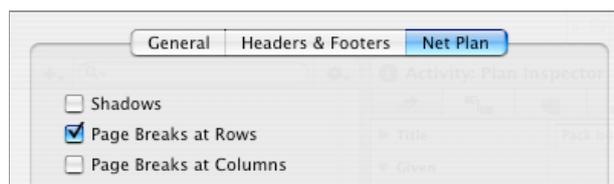
As the **Shadows** cannot be printed by certain printers or plotters, it is possible to deactivate this option here.

The **Page Break at Rows** will create controlled page breaks at the end of each page without cutting any rows.

The **Page Breaks at Columns** will create controlled page breaks at the end of each column without cutting any boxes vertically.

Resources View
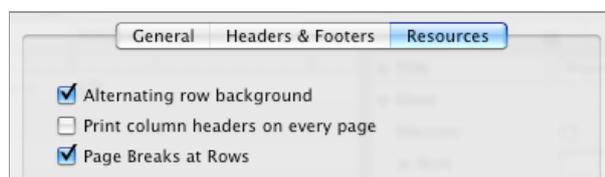
The **Alternating Row Background** option can be difficult to view on some printers (or plotters). If you experience problems uncheck the box.

You can **Print column headers on every page** using this option.

The **Page Breaks at Rows** will create controlled page breaks at the end of each page without cutting any rows.

Utilization View
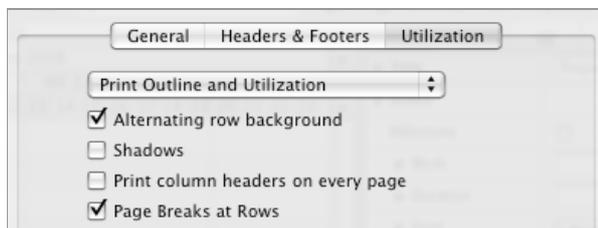
In the drop down menu, you can select how you would like to print your project - only the outline, only the Gantt chart or both.

The **Alternating row background** can be difficult to view on some printers (or plotters). If you experience problems, deactivate this option.

The same applies for the **Shadows**. Some plotters do not implement shadows in the printout.

If you would like to **Print column headers on every page**, activate this option.

The **Page Break at Rows** will create controlled page breaks at the end of each page without cutting any rows.

Reports

Merlin has a powerful built in reporting system. To help most users, Merlin comes bundled with a group of pre-defined report templates. Reports can be either printed, e-mailed or made into PDFs.

How to create a report

1. Open the project for which you would like to create a report for
2. Select "File - New Report…"
3. Select the desired template then click "Ok"

Once you are in the reports preview dialogue, you will be presented with several tool bar buttons. You can use these toolbar buttons to further interact with the reports, send them to other applications or modify the template you are pre-viewing.

Templates
At any time, you can easily change the current report template. Click the "Template" button and a sheet will list all the available templates.

Options
Some reports can be further modified. These changes can be made by clicking on the "Options" button.
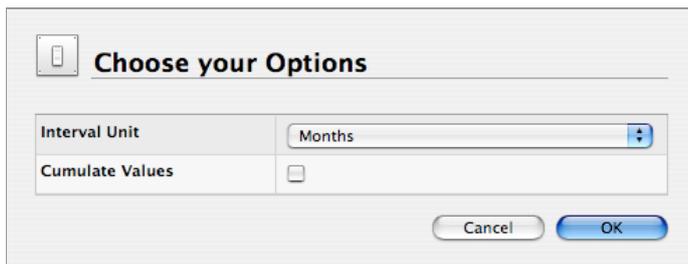
Refresh
If you happen to change your project file while previewing your reports, you can refresh the report by pressing the "Refresh" button.

Create E-mail
To send the previewed report by eMail. Press the "Create E-Mail" button and Merlin will do the rest. Merlin will create a PDF of the report and attach it to a new email message.

Save
Press this button if you wish to save your report. You can save your report as either a PDF or HTML file.

Print
If you wish to print your report, press the "Print" button and you will be presented with the standard Mac OS X print dialogue.

Reports Logo

If you wish to include a specific logo or image in place of the standard "Merlin" logo, you can do is the project settings

Customizing or creating new reports

As the requirements for reports can vary from case to case, customization of reports might be necessary. Merlin reports use two distinct technologies for generating their content. XML/XSLT and Weblitz. Currently, the only way to modify or create new reports is programmatically.

Preferences
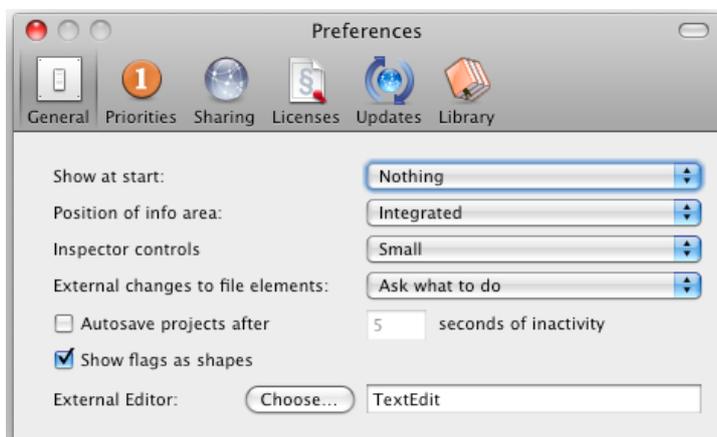
General

Show at Start: Decide what Merlin will prompt you with when starting.

Position of Inspector: Choose whether you want the inspector to be part of Merlin's main window or a separate dialog.

Inspector Controls: Choose the size of the controls within the Inspector window.

External changes to file elements: Choose desired behavior when external file elements have changed.

Autosave projects after x seconds of inactivity: Activate the automatic saving of a project and define the intervals in which Merlin saves the project. Auto save will only function when the project has been saved at least once.

Show flags as shapes Toggle between colored flags or colored shapes. This is ideal if you have difficulty distinguishing the flags colors.

External editor: Select your preferred text editor.

Priorities

Merlin differentiates among five priorities. For each priority you can define your own title. You can either choose to leave the values from "Very low" to "Very high," or change them from "A to E" or maybe even "I, II, III ....".

Sharing

Sharing Name: The name of the server that will show up when people locate your machine on the local area networking using Bonjour.

Project Sharing TCP Port #: The port Merlin server will offer its connection for other Merlin users. This port can be given to the system administrator to configure the firewall appropriately so remote users, over the internet, can connect.

Port Forwarding: if checked, Merlin will attempt to configure the port forwarding of the firewall using UPNP protocol.

Web Sharing TCP Port #: The port Merlin server will offer its connection for other web browsers. This port can be given to the system administrator to configure the firewall appropriately so remote users, over the internet, can connect.

Port Forwarding: if checked, Merlin will attempt to configure the port forwarding of the firewall using UPNP protocol.

Licenses

In here you can manage all your Merlin licensing. You can add new licenses by dragging the license key to the table. Alternatively you can click on the "Add" button and enter the license key number or import an existing license file. However, **the easiest way to transfer the license key to Merlin is by dragging and dropping the license key onto the Merlin application icon.**

The individual columns display the following information:

- **License:** Title of the product.
- **Seats:** The number of users that can use Merlin at the same time.
- **Expires:** Expiration date for the license
- **Owner**: The name of the owner to whom the license is registered to.

With a click on the "Buy" button, you will be forwarded to our web shop where you can purchase additional Merlin licenses.

If your license is not yet personalized, click onto the "Register" button to enter your name. The entered information will be added to your license and sent to ProjectWizards.

Updates

We recommend leaving the "check for updates at startup" enabled. This will ensure that your Merlin version is always the latest and greatest. You can also select the interval between checks. This way it is possible to define either daily, weekly or monthly.

To read the latest release notes, click on the **RSS** Symbol.

Library

Here you determine the behavior and content of Merlin's library.

You can choose the languages the library should offer during use. If you want to only view English documents available in the Library then simply deactivate the "German" language entry.

As a project manager you will most likely have your own set of documents and files which you often use in your own projects. To be able to access these files directly in the Library without having to drag them into the Library, you can simply add the directory to the list with the help of the "Add" button. All the contents will be categorized by Merlin and displayed in the Library.

You can also choose the location where you want the library to save any items you drag & drop on it. This is important if you wish to collect all your project snippets into one location.

Show and Reload library will help you examine the effects of your changes to the library.

Activity Columns

These are the descriptions of columns in the Activity view.

'#' gives each activity or each group in a project an explicit number. Only when the outline is sorted according to this field is it possible to manually organize the activities by dragging with the mouse. Sorting according to another field can be transferred to the '#' field by the use of the 'Freeze Sort Order', as listed under the Edit menu.

'# Successors'Successors' records a list with numbers (#) - separated by semicolons - of the groups and activities that chronologically follow the end of this activity. The type of relationship to each respective successor can be given in shorthand form: FS, FF, SS, or SF.

'# Predecessors' Predecessors' records a list with numbers (#) - separated by semicolons - of the groups and activities that chronologically precede the start of this activity. The type of relationship to each respective predecessor can be given in shorthand form: FS, FF, SS, or SF.

'% Complete' reflects the progress of the activity or the group in an ongoing project. A direct percent value can be given for activities. This field is calculated automatically for the groups or when using the fields 'Given Actual Work' or 'Given Remaining Work'.

'Actual Costs' contains the sum of costs, which results from the actual work.

'Actual End' records the date when the activity was actually completed. For groups no value can be given. When working with resources, the actual end can be set either for the individual assignments or for the activity as a whole.

'Actual Start' records the date when the activity actually started. For groups no value can be given. When working with resources, the actual start can be set either for the individual assignments or the activity as a whole.

'Actual Work' contains the total work that has actually been completed on an activity.

'Actual Work Costs' contains the costs that are generated by the actual work of resources assigned to the activity.

'Additional Title' describes the activity even further.

'Approved Budget' records the budget that has been approved for the activity and is therefore available for further calculation. Percent values can be entered which then relate to the approved budget of the containing group.

'Approved Budget Absolute' contains the same information as 'Approved Budget' except that percent values are converted to absolute ones.

'Approved Budget Distributed' contains the sum of the approved budgets of all subsidiary activities. It shows which part of a given budget is already distributed to subsidiary activities.

'Approved Budget Undistributed' contains the difference between the approved and the already distributed budget. It shows which part of a given budget still remains for distribution to subsidiary activities and groups.

'Actual Base Costs' records the fixed actual base costs of an activity.

'Actual Base Costs Subtotal' contains the sum of all actual base costs. Included in the groups are the sum of the actual base costs of all subsidiary activities.

'Actual Element Costs' contains the sum of all actual costs of the elements directly attached to an activity or group.

'Assigned Resources' lists the names of all the employees assigned to the activity, separated by semicolons. To assign resources to an activity, drag them from the resources list and drop them directly onto the activity or choose the menu item 'Insert - Assignment'.

'Assigned Resource Initials' lists the initials of all the employees assigned to the activity, separated by semicolons. To assign resources to an activity, drag them from the resources list and drop them directly onto the activity or choose the menu item 'Insert - Assignment'.

'Base Costs' records the fixed base costs of an activity.

'Base Costs Subtotal' contains the sum of all base costs. Included in the groups is the sum of the base costs of all subsidiary activities.

'Budget Info' records a text description of the budget.

'Budget Status' records the status of the budget for an activity. It can be used to implement an approval procedure with several stages.

'Budget Status Date' records the date of the last change to 'Budget Status'.

'Budget-Approving Resource' records the name of the resource approving the budget of the activity.

'Budget-Req. Resource' records the name of the resource requesting the budget of the activity.

'Budget/Actual Cost Saldo' contains the difference between the fields 'Approved Budget' and 'Actual Costs'.

'Budget/Expected Cost Balance' contains the 'Approved Budget' minus the fields 'Expected Work Costs' and 'Element Costs Subtotal'.

'Budget/Planned Cost Balance' contains the 'Approved Budget' minus the fields 'Planned Work Costs' and 'Element Costs Subtotal'.

'Element Costs' contains the sum of all costs of the elements directly attached to an activity or group.

'Element Costs Subtotal' contains the sum of all costs of the elements directly attached to an activity or group. Included in the groups is the sum of the costs of all subsidiary activities.

'Expected Costs' contains the sum of the costs that are expected during the process of a project

'Expected Duration' defines the working time span between the expected 'Start' and 'End'. Non-working times are hereby taken into account.

'Expected Early End' contains the earliest date that an activity could possibly end, based on the early finish dates of predecessor and successor activities and other constraints.

'Expected Early Start' contains the earliest date that an activity could possibly begin, based on the early start dates of predecessor and successor activities and other constraints

Expected Elapsed Duration' defines the time span between the expected 'Start' and 'End'. This duration is given in calendar units and includes non-working times.

'Expected End' contains the date at which the actual end of the activity is expected. If an actual end is known, 'Expected End' will contain this value.

'Expected Late End' contains the latest end date on which an activity can be ended.

'Expected Late Start' contains the latest start date on which an activity can begin.

'Expected Maximum Possible Work' contains the maximum amount of work that can be spent between the expected start and the expected end of an activity respective of the work calendars.

'Expected Free Slack' the working duration an activity can be delayed without delaying any successor activities. If an activity has no successors, the free slack equals the total slack.

'Expected Start Slack' contains the working duration between the 'Expected Early Start' and 'Expected Late Start'

'Expected Total Slack' contains the smallest of the 'Expected Start Slack' and 'Expected End Slack' values. It describes the working duration an activity can be delayed by without delaying the project's finish date.

'Expected Start' contains the date at which the actual start of the activity is expected. If an actual start is known, 'Expected Start' will contain this value.

'Expected Utilization' contains the ratio of work expected to be spent on the possible work between the start and end.

'Expected Work' contains the total work that is spent on an activity.

'Expected Work Costs' contains the costs that are generated by the work of resources assigned to the activity.

Checking **'Fixed End Window'** prevents dependencies from pushing the end of an activity out of its given window. By this, potential scheduling conflicts are deflected from the activity to the dependencies.

Checking **'Fixed Start Window'** prevents dependencies from pushing the start of an activity out of its given window. By this, potential scheduling conflicts are deflected from the activity to the dependencies.

'Flag Status' maps the status of the activity to a flag. This can be carried out automatically or manually.

'Given Actual Work' records the work that has been completed so far on an activity.

'Given Actual Work Overtime' records the part of the actual work that has so far been completed as overtime work on the activity.

'Given End Mode' specifies how the planned end of an activity is calculated.

'Given Planned Duration' defines the planned duration of an activity independently from its work. Durations given in e-units are interpreted as real time values that are not affected by the calendars defining the working time.

'Given Planned Duration Absolute' contains the same information as 'Given Planned Duration' except that percent values are converted to absolute ones.

'Given Planned Earliest End' constricts the planned chronological end of an activity. When it is highlighted in red, the specification cannot be complied with because as a conflict exists.

'Given Planned Earliest Start' constricts the planned chronological start of an activity. When it is highlighted in red, the specification cannot be complied with because a conflict exists.

'Given Planned Latest End' constricts the planned chronological end of an activity. When it is highlighted in red, the specification cannot be complied with because a conflict exists.

'Given Planned Latest Start' constricts the planned chronological start of an activity. When it is highlighted in red, the specification cannot be complied with because a conflict exists.

'Given Planned Utilization' records the percentage of effort with which the activity should be executed. 100% represents the complete work that is available in the calendar.

'Given Planned Work' records the amount of work (e.g. Hours, Days, Weeks) planned for the activity. Percent values can be entered which then relate to the given planned work of the containing group.

'Given Planned Work Absolute' contains the same information as 'Given planned Work' except that percent values are converted to absolute ones.

'Given Remaining Duration' defines the actual time that is still needed in an ongoing project to complete the activity independently from the given work. Durations given in e-units are interpreted as real time values that are not affected by the calendars defining the working time. For groups no value can be given. When working with resources, the remaining work can be set either for the individual assignments or the activity as a whole.

'Given Remaining Work' defines the amount of work that is still to be spent on the activity in an ongoing project. For groups no value can be given. When working with resources, the remaining work can be set either for the individual assignments or the activity as a whole.

'Given Start Mode' specifies how the planned start of an activity is calculated.

'ID' is a unique number in a project. It will be generated while saving a file and does not change afterwards.

'Info' shows with symbols whether a conflict or warning exists for an activity, whether there are limitations with fields like 'Given Planned Earliest Start,' whether an element is attached to an activity and whether a text has been deposited.

'Last Actuals Reporting Date' records the base date absolute actual values for an activity that have been reported. It is interpreted as the start of the remaining work or duration of an activity.

'Leveling Delay' records the time units in which an assignment is delayed according tho the "Resource Leveling" function.

A **'Milestone'** can be set for an activity if this activity has only a symbolic meaning for reaching a part of an objective. A milestone contains no work and no duration.

When **'Optimize Duration'** is checked, scheduling calculation tries to achieve the shortest possible duration for the activity. This is important for Start-Finish and Finish-Finish dependencies.

'Planned Costs' contains the sum of costs that are planned for an activity.

'Planned Duration' defines the working time span between the planned 'Start' and 'End.' Non-working times are hereby taken into account.

'Planned Early End' contains the earliest end date on which an activity can be ended.

'Planned Early Start' contains the earliest start date on which an activity can begin.

'Planned Elapsed Duration' defines the time span between the planned 'Start' and 'End'. This duration is given in calendar units and includes non-working times.

'Planned End' defines the calculated date for the planned end of an activity.

'Planned Late End' contains the latest end date on which an activity can be ended.

'Planned Late Start' contains the latest start date on which an activity can begin.

'Planned Maximum Possible Work' contains the maximum amount of work that can be spent between the planned start and the planned end of an activity respective of the work calendars.

'Planned Start' defines the calculated date for the planned start of an activity.

'Planned Utilization' contains the ratio of the total work to the maximum possible work between the expected start and end of an activity.

'Planned Work' contains the total work that has been planned for an activity based on the complete calculation of the project schedule.

'Planned Work Costs' contains the planned costs of an activity caused by assigned resources. When no resources are used, the costs are calculated from the default work rate of the project.

'Predecessors' contains a list of all the titles of the groups or activities that chronologically precede the start of the activity. It is the counterpart of the field 'Successors.'

'Priority' describes the priorities of an activity.

'Private' may be switched on or off depending on whether the information of an activity may be published.

'Remaining Work' contains the amount of work which is left to complete after a full calculation of the project schedule.

'Requested Budget' records the budget requested for the activity. When the field 'Approved Budget' is filled with an amount, the budget counts as approved and enters into further calculations.

'Subtitle' further describes the activity.

'Successors' contains a list of all the titles of the groups or activities that chronologically follow the end of the activity. It is the counterpart of the field 'Predecessors'.

'Text' records a text describing the activity.

'Title' describes the activity.

'WBS-Code' contains the outline number of the activity calculated by a given scheme.

'Expected Slack' contains the working relation between the **'Expected Early End'** and the **'Expected Late End'** date.

Elements Columns

These are the descriptions of the columns available in Elements

'Actual Cost' contains the sum of all actual costs of the element.

'Additional Title' describes the element further.

'Cost' contains the sum of all costs of the element.

'Cost Accrual' records the accrual when the base costs will be added to the 'Actual Costs Subtotal'.

'Cost Total' contains the sum of all costs of the element.

'Flag Status' maps the status of the element to a flag. This can be carried out automatically or manually.

'ID' is a unique number in a project. It will be generated while saving a file and does not change afterwards.

'Private' prevents an element from being published. If it is disabled the element will be published. This information will also get considered, when exporting to iCal.

'Review Date' records the date when the element should be reviewed.

'Status' maps the status of the element to a flag.

'Subtitle' further describes the element.

'Text' records a text describing the element.

'Title' describes the element and can be chosen freely.

'Type' is the type of the element.

Resources Columns

These are the descriptions of all the columns available in the Resource View.

'Actual Costs per Assignment' is a constant amount that actually has been charged for the assignment of the resource.

'Actual Elements Costs' contains the sum of all actual costs of the elements attached to a resource.

'Actual Standard Rate' for working resources describes the resources actual price per working time unit. For material resources it contains the price of the material per unit.

'Actual Overtime Rate' for working resources describes the resources actual price per time unit for doing overtime work. For material resources it is the price of the material per unit.

'Actual Work' contains the sum of the actual work of all assignments of a resource.

'Actual Work Costs' contains the sum of the actual costs of all assignments of a resource.

'Additional Title' describes the resource in more detail.

'Cost Accrual' records the accrual when the base costs will be added to the 'Actual Costs Subtotal'.

'Costs per Assignment' is a constant amount that is charged every time a resource is assigned.

'Default Utilization' is a percent value which is used for the field 'Planned Utilization' in new assignments of a resource.

'Elements Costs' contains the sum of all costs of the elements attached to a resource.

'Expected Work' contains the sum of the expected work of all assignments of a resource

'Expected Work Costs' contains the sum of the expected costs of all assignments of a resource.

'Flag Status' maps the status of the resource to a flag. This can be carried out automatically or manually.

'Global Cost' is charged once to the project's total resource cost if the resource is assigned at least once.

'Groups' contains the titles of all groups the resource belongs to.

'ID' is a unique number in a project. It will be generated while saving a file and does not change afterwards.

'Info' shows with symbols whether an element is attached to a resource and whether a text has been deposited.

'Initials' is filled with the first letter of each word in the resource's title. You can specify custom initials.

'Material Unit' determines the unit in which amounts of the material are measured.

'Overtime Rate' or working resources describes the resources base price per time unit for doing overtime work. For material resources it is the price of the material per unit.

'Phone' contains the telephone number at which you can reach the resource.

'Planned Work' contains the sum of the planned work of all assignments of a resource.

'Planned Work Costs' contains the sum of the planned costs of all assignments of a resource.

'Private' specifies if a resource is not allowed to be published.

'Role' specifies the resource's role in the project.

'Standard Rate' for working resources describes the resources base price per working time unit. For material resources it contains the price of the material per unit.

'Subtitle' describes the resource further.

'Text' records a text describing the resource.

'Title' describes the resource and can be chosen freely.

'Type' determines whether the resource is a 'working' or a 'material' resource.

'eMail' contains the eMail address at which you can reach the resource.

File Menu

New Project To create a project based on a template, select this option. A window is displayed in which you can select a template and customize it. More info…

New Empty Project Creates an empty project that can be used to build your own project from scratch.

Combine Projects Select this option to combine projects

New Report Generate a new report. A dialogue box will be displayed in which all the available reports are listed. More Info…

Open Open a local, remote Merlin files or import files in other formats.

Open Recent Recently opened files are listed in this sub menu. Select a file to open it.

Close Closes the active project.

Save Saves the current project. If the project is being saved for the first time you will be prompted to enter the file name and its location.

Save As Save a project under a new name. Will be prompted for the file name and location.

Save as Template If you would like to use a specific project often, it is a good idea to save it as a template. With this option you save your project in your home directory as a template. The default path for this is: `~/Library/Application Support/Merlin/Project Templates/` The project is immediately available to use as a template and can be accessed over "File - New Project".

Separate Selection With this option it is possible to divide the project into a main and a sub-project. More Info….

Revert You can use this function if you have made several extensive modifications to your project and would like to go back to the status of the project since the last time it was saved.

Export Export your Merlin file to other formats. More Info…

Publish Publish your project file on the network to other Merlin users, iCal or other applications. More Info…

Project Settings Each project has certain particularities. You can set these specific details in the settings for the relevant project. Read this section for more details.

WBS Code Definition The numbering of the outline in a project can depend on the use, the client or other structures. Define your custom WBS code .

Page Setup Setup your page format for printing.

Print Print the active project current view to paper or PDF. More Info….

The Edit Menu

Undo If you would like to undo your last action(s) in an open project, select this option. It is possible to undo each step you have made since the opening or creating of a project in the current Merlin session. Merlin supports unlimited Undos.

Redo All changes that can be undone can also be redone. In combination with "undo" and "redo" you can try out different situations in Merlin without worrying about creating chaos in your project.

Cut The selected object (e.g an activity, a group, or a resource) is copied to the clipboard and cut out of the project. It is possible to insert the information into another section of the project, another project, or into another application. The previous contents of the clipboard are overwritten.

Copy The selected object (e.g an activity, a group, or a resource) is copied to the clipboard. It is possible to insert the information into another section of the project, another projects or into another application. The previous contents of the clipboard are overwritten.

Copy as Rich Text Unlike "Copy," where all the information is copied into the clipboard as pure text, the feature "Copy as Rich Text" includes all the available formatting information. This function is useful when the contents of the clipboard are to be inserted in an application, which accepts RTF formatted text (e.g. TextEdit, Apple Mail in HTML mode or MS Excel).

Paste When an object (e.g an activity, a group, or a resource) is stored on the clipboard, it can be pasted into the position where the cursor is currently located. The contents of the clipboard remain unmodified.

Paste Contents When the clipboard contains information regarding an activity, it can be important that only certain information is transferred when pasting. For this reason a dialogue is displayed that asks for the information that should be transferred.

Delete Deletes the selected object.

Select All All objects are selected in the area where the cursor is located.

Find This option places the cursor in the search field of the current main view. It is now possible to enter the key word to start your search. Consult Search to learn more.

Find Elements This option places the cursor in the search field of the Element view. It is now possible to enter the key word to start your search. Consult Search to learn more.

Indent This option indents the selected activity. If other sub-activities are contained, they will be automatically indented. Merlin checks after each action, if it is possible to increase the indent. If it cannot, this option is not carried out

Outdent This option outdents the selected activity. If other sub-activities are contained, they will be automatically outdented. Merlin checks after each action, if it is possible to outdent any further. If it cannot, this option is not carried out.

Collapse All To get an overview of all the groups and activities in the first level, select this option. The groups are now displayed as bars instead of brackets in the Gantt chart.

Expand All To view all the details in the groups and activities in your project, select this option. The groups are now expanded and displayed as brackets in the Gantt chart.

Hide All Assignments In Merlin, assignments are displayed in individual rows below the activities. To hide these assignment rows select this option.

Show All Assignments In Merlin, assignments are displayed in individual rows below the activities. To show these assignment rows, select this option.

Show Outline In the submenu you can select to which level of the outline you would like Merlin to expand your project.

Freeze Sort Order When the numbering in the # column does not correspond to the sorting by date (or other desired value), sort the view according to the desired column (e.g. Start) and then select this function. The numbering of the # column is restored according to the selected column and fixed as an active column. Only after this can the order of the activities be manually sorted in the Activity view.

Make Milestone To change an activity into a milestone, select this command.

Link Activities When at least two activities or groups are selected in the main view and they can be logically linked to each other, select from the submenu the type of link you would like to create for the selected activities.

Assignments In the submenu you will find all the resources contained in your project. When you have an activity selected, simply select this option and the resource in the submenu. The resource is added to (or removed from) the activity as an assignment.

Remove All Assignments All assignments allocated to the highlighted activities will be deleted.

Completion In the submenu you will find the percent values of completion, which can be assigned to any selected activity.

Resource Leveling Please consult the resource leveling section for more information.

Special Characters If you would like to enter special characters into a text field, it is possible to call up a palette of characters which can be easily added to the text field.

Insert Menu

Activity Inserts a new activity below a selected activity or group.

Milestone Inserts a milestone below the selected activity.

Sub-Activity Transforms selected activity into a group and creates a new activity within this group.

Successor Activity Creates a new activity below the selected activity or a group, which is immediately linked to the selected activity with an "End-Start" relationship.

Predecessor Activity This function creates a new activity above the selected activity or a group, which is immediately linked to the selected activity with an "End-Start" relationship.

Aunt Activity Creates a new activity above the selected group.

Assignment Inserts a new row below the selected activity. In this field you can now enter your resource. Using the arrow next to this field, a list of all the resources already available in your project will be displayed. Each resource can only be selected once per activity.

Resource This function creates creates new person or material resources for your project. A field is created in the resources list where you may enter the name of the new resource. The Inspector switches to the Resource Info Inspector. You can enter there further details regarding the resource.

Resoure Group Inserts a new Resource Group.

Element Provides a sub menu for elements insertion to the currently selected activity. Menu items of this sub menu:

- **Choose** Opens the Elements selection dialog.

- **Checklist** A new Checklist Element is immediately created.

- **File** A new File Element is immediately created.

- **Event** A new Event Element is immediately created.

- **Information** A new Information Element is immediately created.

- **Issue** A new Issue Element is immediately created.

- **Risk** A new Risk Element is immediately created.

Project... Opens a selection dialogue from which a Merlin file can be selected. The desired file is inserted under the selected activity as a linked project. More Info…

View Menu

Activities View Switches main view to the Activities view.

Netplan View Switches main view to the Netplan view.

Resources Switches main view to the Resource view.

Utilization View Switches main view to the Utilization view.

Show/Hide View Options Toggles the display of current view options. More Info….

Show/hide Element View Options Toggles the display of the Element View view options. More Info….

Zoom In Gantt chart time line is enlarged in the Activities, and Utilization views. In the Netplan, zoom behaves in a more traditional manner.

Zoom Out Gantt chart time line reduced in the Activities, and Utilization views. In the Netplan, zoom behaves in a more traditional manner.

Show Current Date This option centers the graphic portion of the activity or utilization views of the current data.

Limit Date Range... Limit the date range of the current project. More Info ….

Hide/Show Toolbar Toggles the display of the toolbar.

Customize Toolbar... Customize the toolbar.

Window Menu

Minimize Minimize the active window to the dock.

Minimize All Minimize all active windows to the dock.

Zoom Toggles between the maximize and minimize zoom states.

Bring All To Front Brings all active windows to the front.

New Window Creates a new window of the current active project. More windows can be created by selecting this menu entry again.

Hide/Show Inspector Toggles the display of the inspector in the active window.

Hide/Show Elements Toggles the display of Element View.

Hide/Show Library Toggles the display of the library dialog. More Info….

Show Resource Well Shows the resource well in the active view. If the Inspector is hidden, it will be hidden as well.

Show Scheduling Conflicts Shows the Scheduling Conflicts in the bottom right corner of Merlin's window. If the Inspector is hidden, it will be hidden as well. More Info….

Workspaces Access default and saved workspaces from the submenu. More Info….

Save Workspace Saves your selected view as a workspace. More Info….

Edit Workspaces Displays the workspaces dialog allowing you to edit your workspaces settings. More Info….

Current Open Project List Here you will find all the current active projects and their windows. Clicking on a specific entry will bring it to the front.

Help Menu

Merlin Help Access Merlin reference here.

Merlin Tutorial This option accesses a PDF document, which will help familiarize you with Merlin

Merlin on the Web This will forward you to the website www.projectwizards.net/en/. In the support area of the website you will find a growing number of articles that will provide further help.

Create Support Profile This function has been implemented to support the Merlin Support Team. Selecting this option will generate an archive with different files. These files contain the configuration of your Mac OS X and the computer. This file is not automatically sent to the Support Team, but saved in a location according to your choice. You can send this file to the Merlin Team by attaching it to an email and sending it to en-support@merlin2.net.

Appendix

- Merlin Shortcuts (hotkeys)
- Additional Information on the Internet
- Acknowledgements
- Merlin AppleScript support

Paths for Merlin files

General information

While using Merlin 2 various files will get created on specified paths in the file system. Here you find their possible locations:

~/Library/Application Support/Merlin/Library/	Library contents
~/Library/Application Support/Merlin/Licenses/	License files
~/Library/Application Support/Merlin/Project Templates/	Project templates
~/Library/Application Support/Merlin/Reports/	Report templates
~/Library/Application Support/Merlin/Searches/	Saved advanced searches
~/Library/Application Support/Merlin/Workspaces/	Customized Workspaces

Special feature of the license files

Should you drag & drop a license file onto Merlin's application icon or in the Licenses tab of the Merlin's Preferences, Merlin will always install them in the License path of the current user:

- **~/Library/Application Support/Merlin/Licenses**

If needed you can move the license files manually in one of the following paths:

- **For all user on this Mac OS X**
  /Library/Application Support/Merlin/Licenses/
- **For all user in the network**
  /Network/Library/Application Support/Merlin/Licenses/

AppleScript

Every project manager knows how tedious it can be to carry out routine jobs. Furthermore, many project managers also have their individual procedures, which may change from project to project, on their agendas. For this reason we have implemented AppleScript in Merlin.

AppleScript is used to write script files, which automate actions of the computer and the applications used on the computers.

How to find Merlin applescript commands (dictionary)

This will allow you to discover the level of AppleScript support Merlin has.

1. Open the "Script Editor" application found in "Applications/AppleScript/" folder
2. Select "File - Open Dictionary…"
3. Select Merlin from the list of applications
4. Dictionary browser window will show you Merlin suite of AppleScript commands and functions

---

Unfortunately we are not able to give you programming instructions for AppleScript. We have however, collected a list of links from the internet that you might find helpful.

- 'Scripting and Automation' at Apple
- Applescript at Wikipedia
- 'About AppleScript' at the Mac OS X Reference Library
- 'Scripting with AppleScript' at the Mac OS X Reference Library

Visual Dictionary

Item	Meaning
	As late as possible is set in the given start date
	As soon as possible is set in the given end date
	Calendar entries are set
	Conflict
	Time/Date constraint
	Notes is not empty
	Attached element
	Warning
	Checklist element
	Event element
	File element
	Information element
	Issue element
	Risk element
Activity 1 — 3 days / Activity 2 — 3 days	Start-Start dependency
Activity 1 — 3 days / Activity 2 — 4 days	Start-Finish dependency
Activity 1 — 3 days / Activity 2 — 1 week	Finish-Finish dependency
Activity 1 — 3 days / Activity 2 — 3 days	Finish-Start dependency
	Resource was added from Mac OS X Address book
	Resource was added from MS Entourage
	Resource is an equipment
	Resource is a company
	Resource is a material
	Resource is a person
3 days ?	Activity is complete
3 days ?	Activity to start in the future
3 days ?	Activity was started, but is behind schedule
3 days ?	Activity is in progress either ahead of schedule or on time

3 days ?	Activity is late and hasn't started yet

Keyboard Short Cuts

Symbol	Meaning
⌘	Command
⌥	ALT
^	Control
⇧	Shift

Menu	Command	Shortcut
Merlin	Preferences…	⌘,
Merlin	Hide Merlin	⌘H
Merlin	Hide Others	⌥⌘H
Merlin	Quit Merlin	⌘Q
File	New Project…	⇧⌘N
File	New Empty Project	⌥⌘N
File	Combine Projects…	⌥⌘N
File	New Report	⇧⌘R
File	Open…	⌘O
File	Close	⌘W
File	Save	⌘S
File	Save As…	⇧⌘S
File	Save As Template	⇧⌘T
File	Export	⇧⌘E
File	Publish	⇧⌘P
File	Project Settings…	⌘;
File	WBS Code Definition…	⇧⌘W
File	Print…	⌘P
Edit	Undo	⌘Z
Edit	Redo	⇧⌘Z
Edit	Cut	⌘X
Edit	Copy	⌘C
Edit	Copy as Rich Text	⇧⌘C
Edit	Paste	⌘V
Edit	Paste Content...	⇧⌘V
Edit	Delete	*delete. (⌫)*
Edit	Select All	⌘A
Edit	Search	⌘F
Edit	Find Elements	⌥⌘F
Edit	Indent	⌘→

Edit	Outdent	⌘←
Edit	Collapse All	⌘↑
Edit	Expand All	⌘↓
Edit	Hide All Assignments	⇧⌘↑
Edit	Show All Assignments	⇧⌘↓
Edit	Show Outline ▶ Level 1	^⌥⌘1
Edit	Show Outline ▶ Level 2	^⌥⌘2
Edit	Show Outline ▶ Level 3	^⌥⌘3
Edit	Show Outline ▶ Level 4	^⌥⌘4
Edit	Show Outline ▶ Level 5	^⌥⌘5
Edit	Show Outline ▶ Level 6	^⌥⌘6
Edit	Show Outline ▶ Level 7	^⌥⌘7
Edit	Show Outline ▶ Level 8	^⌥⌘8
Edit	Show Outline ▶ Level 9	^⌥⌘9
Edit	Freeze Sort Order	^⌘F
Edit	Make Milestone	^⌘M
Edit	Link Activities ▶ Finish-Start	^⌘L
Edit	Completion ▶ 100%	^⌘C
Edit	Resource Leveling ▶ Leveling Settings…	^⌘E
Edit	Resource Leveling ▶ Level All	^⌘R
Edit	Resource Leveling ▶ Reset All	^⌘U
Edit	Resource Leveling ▶ Level Selection	⌥⌘R
Edit	Resource Leveling ▶ Reset Selection	⌥⌘U
Edit	Special Characters…	⌥⌘T
Insert	Activity	⌘N
Insert	Milestone	⌥⌘M
Insert	Sub-Activity	⌥⌘G
Insert	Successor Activity	⌥⌘S
Insert	Predecessor Activity	⌥⌘P
Insert	Aunt Activity	⌥⇧⌘A
Insert	Assignment	⌥⌘A
Insert	Resource	⌘R
Insert	Element ▶ Choose…	⌘E
Insert	Element ▶ Event	⌥⌘1
Insert	Element ▶ File	⌥⌘2
Insert	Element ▶ Information	⌥⌘3
Insert	Element ▶ Issue	⌥⌘4
Insert	Element ▶ Risk	⌥⌘5
Insert	Element ▶ Checklist	⌥⌘6
Insert	Project	⌥⌘L

View	Activities View	⌘1
View	Netplan View	⌘2
View	Resource View	⌘3
View	Utilization View	⌘4
View	Show/Hide View Options	⌘J
View	Show/Hide Element View options	⇧⌘J
View	Zoom In	⌘+
View	Zoom Out	⌘-
View	Show Current Date	⌘D
Window	Minimize	⌘M
Window	Hide/Show Inspector	F1
Window	Hide/Show Elements	F2
Window	Hide/Show Library	F3
Window	Show Resource Well	F4
Window	Show Scheduling Conflict	F5
Window	Workspaces ▶ [List of Workspaces]	^⌘1 - ^⌘0
Window	Save Workspaces…	^⌘S
Window	Edit Workspaces	^⌘W
Help	Merlin Help	⌘?

Web Module Short Cuts

The following table lists all the shortcut keys Merlin Web Module supports per browser.

Command	Shortcut	Firefox 2+ (Mac OS X)	Firefox 3 (MS Windows)	Safari 3+ (Mac OS X)	Internet Explorer 7(1)
Save	Alt+S	x		x	x
Print	Alt+P	x	x	x	x
Undo	Alt+Z	x	x	x	x
Redo	Shift+Alt+Z	x	x	x	x
Delete	Backspace	x		x	x
Select All	Alt+A	x	x	x	x
Indent	Alt+Right	x	x	x	x
Outdent	Alt+Left	x	x	x	x
Collapse All	Alt+Up	x	x	x	x
Expand All	Alt+Down	x	x	x	x
Hide All Assignments	Shift+Alt+Up	x	x	x	x
Show All Assignments	Shift+Alt+Down	x	x	x	x
Level 1	Shift+Alt+1	x	x	x	x
Level 2	Shift+Alt+2	x	x		x
Level 3	Shift+Alt+3	x	x		x
Level 4	Shift+Alt+4	x	x	x	x
Level 5	Shift+Alt+5	x	x	x	x
Level 6	Shift+Alt+6	x	x		x
Level 7	Shift+Alt+7	x	x		x
Level 8	Shift+Alt+8	x	x		x
Level 9	Shift+Alt+9	x	x		x
Freeze Sort Order	Shift+Alt+F	x	x	x	x
Make Milestone	Shift+Alt+ctrl+M	x	x	x	x
Activity	Alt+N		x	x	x
Milestone	Alt+M	x	x	x	
Sub-Activity	Shift+Alt+G	x	x	x	x
Successor Activity	Shift+Alt+S	x	x	x	x
Predecessor Activity	Shift+Alt+P	x	x	x	x
Aunt Activity	Shift+Alt+Ctrl+A	x	x	x	x
Assignment	Shift+Alt+A	x	x	x	x
Activities View	Alt+1	x	x	x	x

Resources View	Alt+2	x	x	x	x
Utilization View	Alt+3	x	x	x	x
Zoom In	Shift+Alt+Ctrl+Up	x	x	x	x
Zoom Out	Shift+Alt+Ctrl+Down	x	x	x	x
Merlin Help	Alt+H	x	x	x	x

1: You can use MS Internet Explorer 8 using IE 7 compatibility settings.

Web Module Usability Considerations

Background

Merlin 2 has the ability, using the Web Module addon, to publish Merlin project files onto the web hence allowing users, on other platforms, to collaborate on Merlin files using a simple web browser.

Every effort was taken to make Merlin Web Module look and behave similarly to the native Merlin application. However, certain usability issues need to be considered when accessing project file using a web browser.

- The Inspector is not yet implemented in this release of the Web Module
- Elements are not yet implemented in this relaese of the Web Module
- Net Plan is not yet implemented in this release of the Web Module
- Drag & Drop is not supported in the Gantt chart
- The short cuts in the Web Module vary from the native Merlin UI and depend on the browser used

Additional Information on the Internet

Merlin Links

1. Frequently Asked Questions
2. Merlin Google User Group

Project Management Practices and Methodologies

1. List of project management topics on Wikipedia
2. The TenStep Project Management Process
3. An Introduction to Prince 2
4. Project Management Institute

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ProjectWizards delivers the software to the licensee free of defects of quality and any other faults. Deficiencies which lead to an irrelevant decrease in the use of the software remain out of consideration. Function's damnifications caused by the customer's hardware and software environment, faulty operation, external defective

data, malfunctions in computer networks or other reasons resulting from the customer's risk range are no deficiency. ProjectWizards shall not warrant for software modified by the licensee, except the licensee satisfactory shows that the modification is not causal for the deficiency. ProjectWizards gives warranties for defects of quality by post compliance namely to its choice by means of correction or compensation delivery. In particular, the post compliance can be the delivery of a new program version or that ProjectWizards is showing how to avoid the effects of the deficiencies. A new program version also has to be accepted by the licensee if this would cause an acceptable effort for adaption.

The post compliance in case of defects of other faults is made by ProjectWizards making available a legally unobjectionable usability of the software to the customer. Hereby, ProjectWizards may exchange the concerned software against an equal software corresponding to the terms of the contract if this is acceptable for the licensee. If licensee is charged with the infringement of third party rights licensee shall immediately inform ProjectWizards about this allegation. ProjectWizards will dispute or settle the claim on its own choice and in accordance with the licensee. The licensee may not accept claims of a third party. ProjectWizards disputes the claims of a third party at its own expense and indemnifies the licensee from all costs and damages caused by the dispute of the claim unless they are due to a nonfeasance licensee's behaviour.

5. Liability.

No matter for which legal reason (i. e. breach of duty, tort), ProjectWizards does only make up for damages or in vain expenses only on the following scale:

- in case of wrongful intent as well as in case of issuing a guarantee regarding the agreed condition for the full amount;
- in case of gross negligence to the tune of the typical or foreseeable damage, which should be prevented by the due diligence;
- in all other cases only if the contractual essential duties have been neglected and in case of default namely on indemnity of the typical or foreseeable damage limited to maximum € 10.000,00 each damage event or to € 20.000,00 for all damage events occurring from this contractual relationship;
- the legal liability in case of personal injury and according to the product liability act stay unaffected. The object of joint responsibility is open to ProjectWizards;
- in case of the loss of data is only liable for the damage which occur even if the customer has made a duly data backup.

6. Limitation of actions.

Claims of the licensee because of defects of quality an other faults become time-barred within one year after delivery. If the fault consists of a right of a third party because of which the software might be demanded for the legal status of limitations do apply. In case of wrongful intent or gross negligent breach of duty the legal status of limitations do apply.

7. Data Protection.

Hereby, the licensee is informed that ProjectWizards collect, save, process his data and in as much as necessary forward his data to a third party in the necessary scale for the contract's execution and on the basis of the regulation of privacy.

8. Retailer.

We sell our SOFTWAREPRODUCT to retailers only for the purpose of reselling or distributing the software to end users, according to this agreement. A special agreement is required in order to be allowed to sell the SOFTWAREPRODUCT to end-users.

9. Final provisions.

Any changes or amendments to this agreement must be in writing. The contracting partners do fulfil this prerequisite also by sending documents as text especially via fax or email unless it is not differently determined for single declarations.

If one or more provisions of this agreement should be or become invalid or unenforceable, the balance of the agreement shall remain unaffected thereby and remain in full force and effect. In this event, the parties shall substitute the invalid or unenforceable provision by a valid one which as closely as possible achieves the economic purpose of the invalid or unenforceable provision. The same applies in case of any omission in this agreement.

This agreement shall be governed by and construed in accordance with the laws of the Federal Republic of Germany, excluding the application of the CISG-rules.

Court of jurisdiction for all disputes is Osnabrück, if the customer is merchant or if its domicile / branch is abroad.

Melle, Germany, in August 2007