

EIGHTBALL PLANNER TOOL v3.0

User manual

Version 2.7



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Preamble

We would like to thank you for using the Eightball Planner tool, version 3.0. In a short time, you will discover how easy it is to create, review and manage your planning with this planner tool.

Eightball Planner tool v3.0 is an improved version of the original planner tool, which was developed by other project groups of Saxion Software Services. This project however Eightball will be published as an open-source project. Other developers from around the world are encouraged to improve this product even further and can customize it to their own needs. As an end-user, you will be able to benefit from the enhancements made by other people.

We hope you will enjoy using this product.

The development-team of Eightball Planner tool v3.0

Enschede, June 2003

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1. Introduction

The Eightball Planner tool has been created by Saxion Software Services to create, manage and review your project planning. This manual will introduce you to this tool. It explains the installation for Eightball on Microsoft Windows and Linux-distribution operating systems. Since the program has been developed in java, it should work on most other operating systems. The manual however does not cover these other systems.

Even though the installation differs on Microsoft Windows and Linux distributions, the program itself however works the same. This will be shown in the proceeding chapters.

After installing the planner tool, we will continue to explain the functionality of Eightball. In a short time, you will learn how to work with this program. The appendixes also describe the 'Earned Value Management' feature of Eightball, the keyboard shortcuts and possible error messages and their cause.

It is assumed that you have some basic knowledge of computers. If this is not the case, we would like to refer you to the manual you have been given with your version of Microsoft Windows. Linux users can find a lot of good documentation on the Internet; some suppliers of Linux distributions also provide a manual. We have found that websites such as <http://www.google.com/linux/> and <http://www.tldp.org/> are very useful.

How to use this manual

To start working quickly with the Eightball Planner tool, we would advise you to start reading Chapter 5 'Quick guide to Eightball' of this manual, where the most important features of the Eightball Planner tool are described briefly.

Most of the times there are more ways to access the same feature in the Eightball Planner tool. The possibilities are indicated with letters. For example, to open the 'Edit Members' dialog, you have these options:

- a) Clicking on the **'Edit members'** button.
- b) The menu bar: **'Actions'** and then **'Edit Members'**.
- c) The short key Ctrl + B.

In other words, there are three different ways to access the same feature.

When you need to perform several steps, they are explained by a list of numbers. For example, to edit the information of a projectmember, you need to follow these steps:

- 1) Choose a member from the list of you would like to edit.
- 2) Type the information of the member in the dialog-box.
- 3) Press **'OK'**.

Actions you can perform by pressing the mouse or keyboard have been put in bold.

2. System requirements, contents of the package

2.1 Requirements for hard- and software

Hardware

To use the Eightball Planner tool, your computer should at least meet the following specifications:

- 166Mhz processor
- 32Mb of memory
- 1 MB of free space for Eightball Planner tool on your hard disk.
- 22 MB of free space for the Java Runtime Environment on your hard disk
- Screen resolution of 800 x 600 pixels and 256-bit colors.

Recommended is:

- 300Mhz processor
- 64Mb memory
- 1 MB of free space for Eightball Planner tool on your hard disk
- 22 MB of free space for the Java Runtime Environment on your hard disk
- Screen resolution of 1024 x 768 pixels and 16-bit colors

Software

In order to run the Eightball Planner tool v3.0, the following software must be installed on your computer to operate Eightball:

- Any Linux distribution **or** Microsoft Windows 95 / 98 / 2000 / NT / XP
- Java Runtime Environment v1.3 or greater (v1.4 recommended)

2.2 Contents of the package

The Eightball Planner tool v3.0 software package contains the following items:

- User Guide
- CD ROM containing:
 - Installation file Eightball Planner tool v3.0 for Microsoft Windows 95 / 98 / 2000 / NT / XP
 - Installation file Eightball Planner tool v3.0 for Linux
 - Java Runtime Environment 1.4
 - User Guide in PDF-format
 - Acrobat Reader

In case of missing files, please contact your supplier.

3. Installation

Installing Eightball Planner tool v3.0 on Linux requires a different installation approach compared with the installation on a Microsoft Windows operating system. Both installations will be described separately below.

3.1 Installation of Eightball Planner tool v3.0 under Linux

Before using Planner tool v3.0, Java JRE 1.4 must be installed on your computer. If JRE 1.4 is installed you can skip to "3.1.2 Installation of Eightball Planner tool v3.0 under Linux".

3.1.1 Installation of JRE1.4 under Linux

- 1) Insert the Eightball CD in your CDRom-player.
- 2) Go to the '**linux**' dir and then to the subdirectory '**jre1.4.0**'.*
- 3) Run the command './**install**' or click in some file manager on '**install**'.
- 4) Follow the instructions in the installation menu.

3.1.2 Installation of Eightball Planner tool v3.0 under Linux

- 1) Insert the Eightball CD in your CD ROM-player.
- 2) Go to the '**linux**' dir and then to the subdirectory '**eightball**'.
- 3) Run the command './**install**' or click in some file manager on '**install**'.
- 4) Follow the instructions in the installation menu.

Eightball is now installed and ready for use!

3.2 Installation under Microsoft Windows 95** / 98 / 2000 / NT / XP

Before using the Eightball Planner tool v3.0, Java JRE 1.4 must be installed on your computer. If JRE 1.4 is installed you can skip to "3.2.2 Installation of Eightball Planner tool v3.0

3.2.1 Installation of JRE1.4 under Microsoft Windows 95** / 98 / 2002 / NT / XP

- 1) Put the Eightball CD in your CD ROM-player.
- 2) When in 'My Computer' double-click on your CD-ROM station that contains the Eightball CD. E.g. For example when your CD-ROM driver is **D:** double-click on CD ROM (D:) (Compact Disc (D:)).
- 3) Double-click on the map '**windows**'.
- 4) Double-click on the map '**jre**'.*
- 5) Double-click on the '**jre1.4.exe**' application. The Java Runtime Environment installation program will be started. Follow the instructions.

* the latest version of java can always be found on the java homepage courtesy of Sun Microsystems (<http://java.sun.com/>)

** When installing Java Runtime versions higher than version 1.4 on Microsoft Windows 95 systems you may get a incompatible version warning. You should either try an older version of Java or continue, since our testing has shown that this should not cause any problems with Eightball

3.2.2 Installation of Eightball Planner tool v3.0 under Microsoft Windows 95 / 98 / 2000 / NT / XP

- 1) Create a new map on your hard drive (optional).
- 2) Put the Eightball CD in your CD ROM-player.
- 3) In Windows 9x/2k/NT Double-click on your desktop on '**My computer**'.
In Windows XP select '**My computer**' from your taskbar.
- 4) Double-click on your CD-ROM station that contains the Eightball CD. For example when your CD-ROM driver is **D:** double-click on CD ROM (D:) (Compact Disc (D:)).
- 5) Double-click on the map '**windows**'.
- 6) Double-click on '**Setup Eightball Planner tool**'.
- 7) The following screen will be displayed:



Image 1.1: Eightball Planner tool Setup Wizard

Click on '**Next**'.

8) The following screen will appear:



Image 1.2: License agreement Eightball Planner tool

Carefull read the license agreement and choose '**YES**' to continue the setup

9) The following screen will appear:



Image 1.3: Installation directory

Choose a location where you want to install Eightball Planning Tool, click on '**Browse**' if you want to specify another location. Click '**Next**' to continue.

10) Specify a foldername in the Start Menu that will be used to save the shortcuts in:

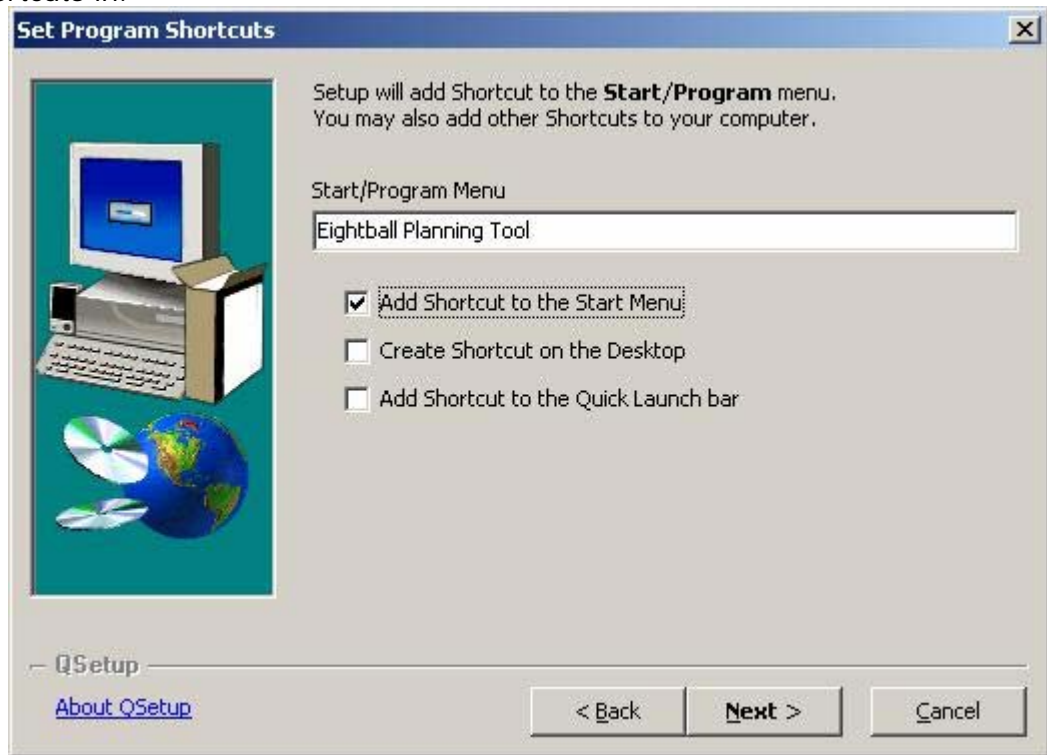


Image 1.4: Shortcuts in Start Menu

Click on '**Next**'.

11) The following screen shows a summary of the installation option. Click on '**Next**' to begin copying files.



Image 1.5: Summary of the setup configuration

12) After copying the files, the setup brings up the following dialog:



Image 1.6: Java installation question dialog

In order to get Eightball Planning Tool Working you *must* install JAVA 1.4 on your system in case JAVA 1.4 or greater isn't installed on your system.

13) Another dialog appears:



Image 1.7: Acrobat Reader installation question dialog

Adobe Acrobat Reader is needed if you want to read the userguide that end with the '.PDF' extension. If you would like to install Acrobat Reader, choose 'Yes' .

14) The program installation is finished, optional check whether you would like to launch the program after installation is complete.



Image 1.8: Setup completed

14) Click on '**Finish**' to complete the installation.

Eightball is now ready for use!

4. Execute and close Eightball Planner tool v3.0

Executing Eightball Planner tool v3.0 is different done under Linux then under Windows.

4.1 Execute Eightball Planner tool v3.0 using Linux

- 1) Locate the map in which you have installed the Eightball Planner tool.
- 2) Type './eightball', or double-click in a file manager on 'eightball' .

4.2 Execute Eightball Planner tool v3.0 using Microsoft Windows

This works for versions 95 / 98 / 2000 / NT / XP.

- 1) Locate the map in which you have installed Eightball Planner tool.
- 2) Double-click on 'eightball.bat'.

Eightball Planner tool v3.0 will now be started.

4.3 Closing Planner tool v3.0

To close Eightball Planner tool v3.0:

- a) Click on the close button [X] in the upper right of the screen.
- b) Click in the menu '**File**' and then on '**Exit**'.
- c) Use the shortcut combination Alt + F4 on your keyboard.

5. Quick guide for Eightball Planner tool v3.0

In the next few minutes, you will get familiar with the most common functions and options of Eightball Planner tool v3.0.

The program initially starts with an empty project. In the screenshot below, however, a demonstration project is loaded as an illustration.

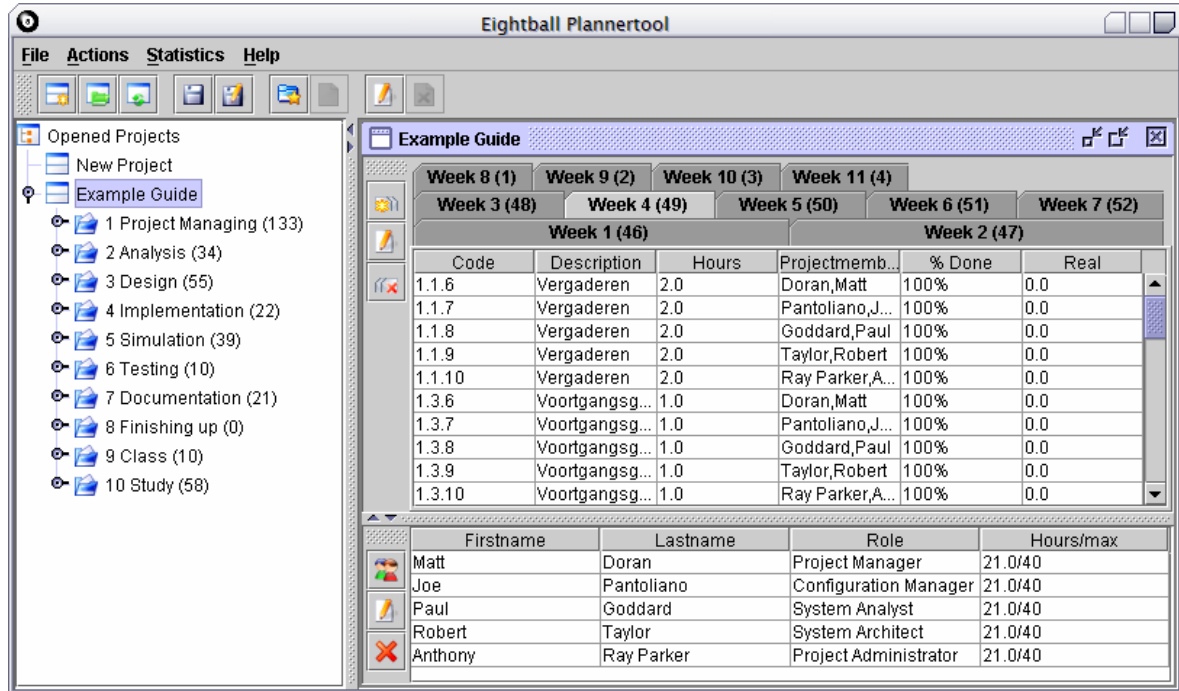


Image 2.1: Main screen

The user interface contains a tree with its projects. Projects contain tasks and activities. A window on the right represents each project in the tree. In addition, each project window contains the planned tasks in the week-overview and a list with project members.

Main tasks are shown in the tree as folders. They represent the important tasks of a project. The paper icons in the tree represent the activities that need to be done for a certain task.

To plan a task, you need to drag it from the tree to the right part of the screen, the week-overview. Here you can assign tasks to project members.

Adding a project member

Every project should have project members, so you will need to add them first. Adding a member can be done by pressing the **New Member** button, in the project-member list.

Adding a main task

To add a new task, you need to press the **New Task** button.

Adding an activity

Select the task for which you would like to create an activity. After this, press the **New Activity** button.

Adding a new week

In the Action menu select **New Week**.

Planning a activity

Select the correct week from the week-tabs in the project window. Then, drag the task from the tree to this week-overview and enter the amount of hours you would like to plan for this task. Also, assign the task to a member by selecting the member from the dropdown-list.

Resource list

The resource list displays an overview of tasks that have been planned. For each week there is an outline. To display the resource list, choose the option "**Resource list**" from the "**Overviews**" menu.

Activity List

To display an overview of planned activities, you need to press the "**Activity List**" option from the "**Overviews**" menu.

Earned Value Management

Press the "**Earned Value Management**" menu option from the "**Overviews**" menu to apply earned value management to your project. You can choose between an earned value table, earned value graph and progress-graph.

6. INPUT

This part of the User Guide will cover input in Eightball Planner tool v3.0. The following sections will be covered:

- **Projects**
 - Open project
 - Create project
- **User Interface**
- **Project members**
 - Add project member
 - Edit project member
 - Delete project member
- **Project weeks**
 - Add project weeks
 - Delete project weeks
 - Edit calendar weeks of the project
- **Main tasks**
 - Change main tasks
 - Delete main tasks
- **Activities**
 - Create activity
 - Change activity
 - Delete activity
- **Tasks**
 - Plan a task
 - Change a planned task
 - Delete a planned task

6.1 Projects

6.1.1 Open project

As soon as Eightball Planner tool v3.0 starts successfully, the following screen appears:

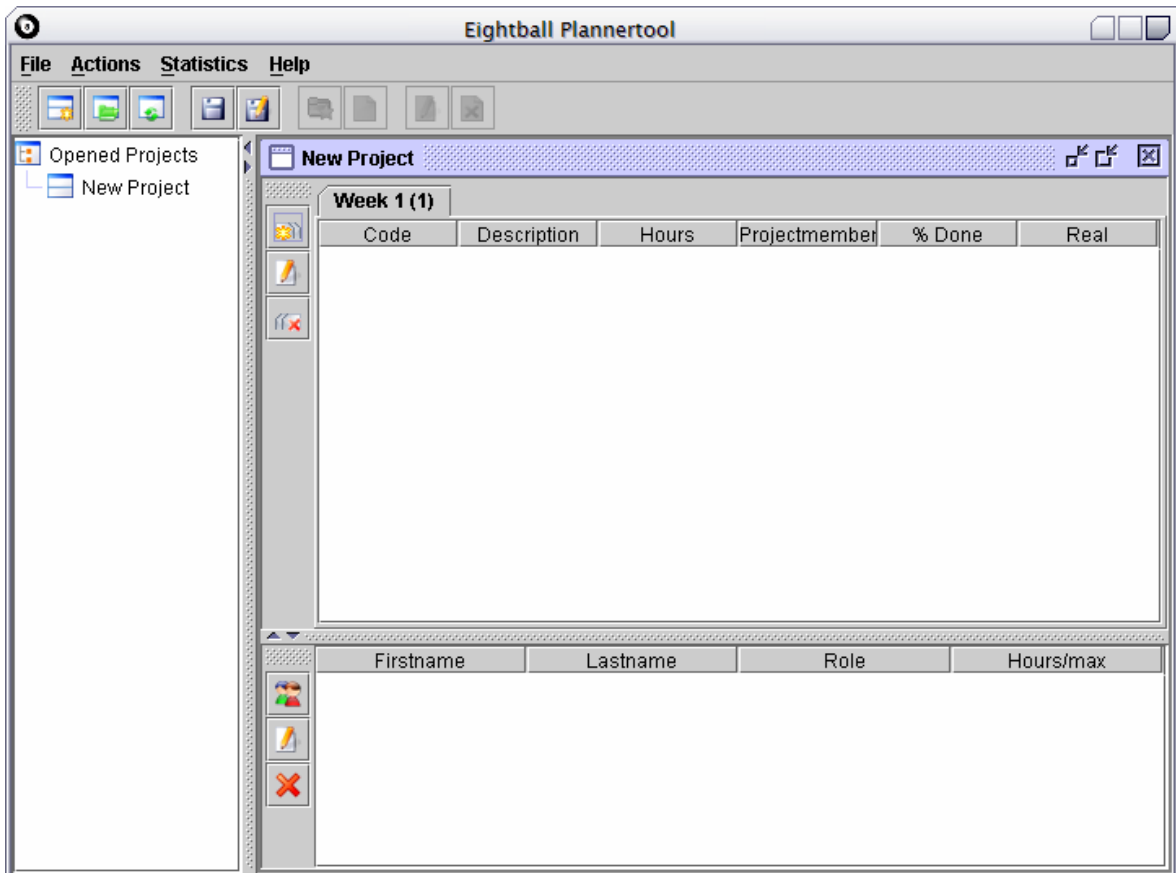



Image 3.1: Initial window

To open an existing project, choose the “**Open Project**” option from the “**File**” menu, or click the ‘open project’ button:  in the Toolbar. The project is now added to the tree with opened projects.

Please note that Eightball keeps all projects open until you close them (see 6.1.3).

Eightball also keeps track of the four projects most recently opened. You can choose them directly from the “**File**” menu.

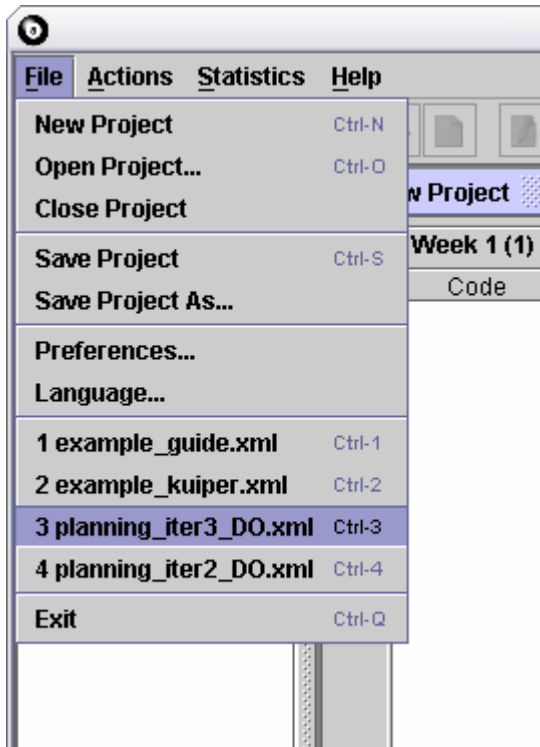




Image 3.2: Recent files

If you select one of the files from the menu, the project will open directly.

6.1.2 Creating a new project

To create a new project, select the “**New Project**” option from the “**File**” menu, or click the **New** button:  in the Toolbar. Enter a unique name for the project and press OK. The new project will be now added to the tree with opened projects.

6.1.3 Closing projects

To close a project, select it in the tree and click on “**Close project**” in the “**File**” menu, or press the close project button:  in the Toolbar. Another possibility is to right-click the project in the tree, and select the close menu option there.

6.2 User Interface

When you have created a new project (see 6.1.2) or opened an existing one (see 6.1.1), you can begin using Eightball's functions by using the user interface.

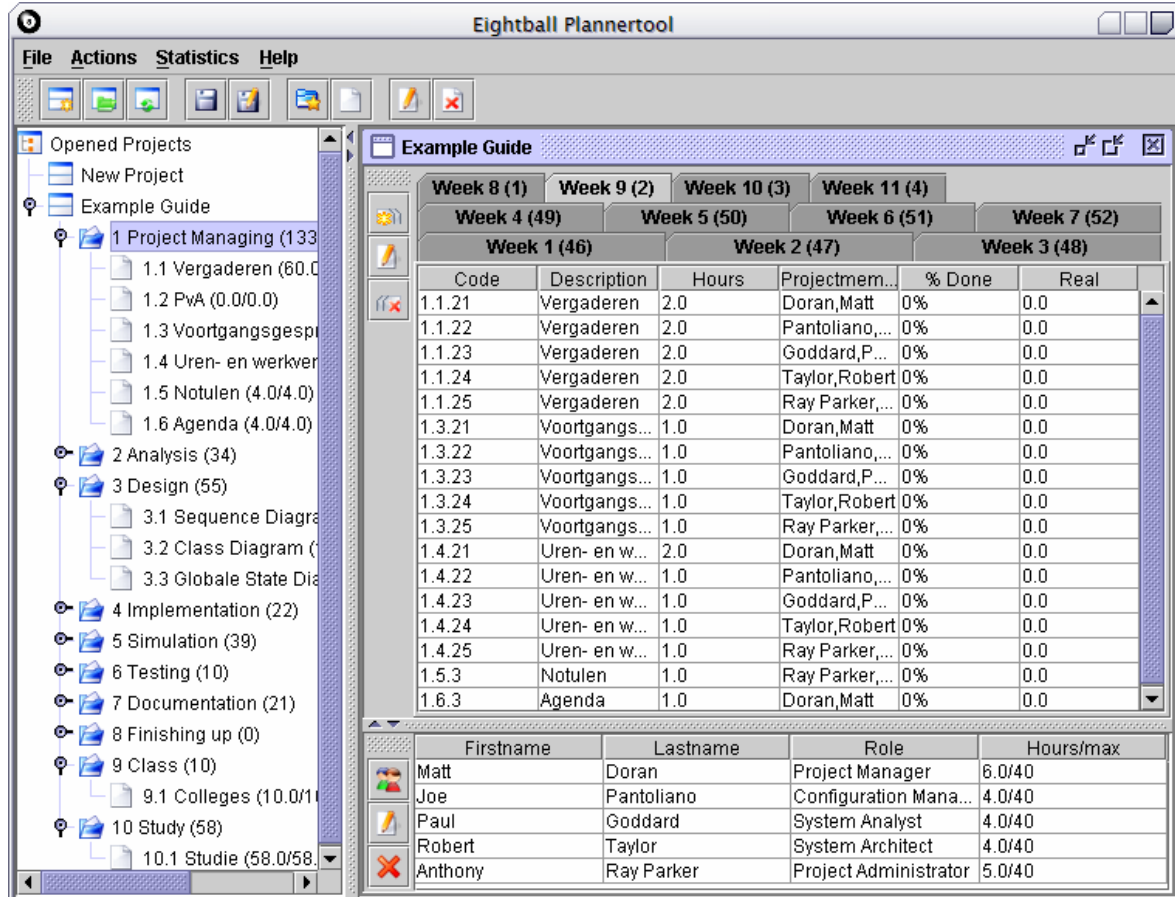


Image 3.4: Eightball user interface

The user interface is divided in a few separate areas; there is the tree view, the project windows, and the toolbar and menu bar.

The tree-view shows all projects opened, with their corresponding tasks and activities. "Tasks" describes the things that need to be done. Tasks are divided into "activities" which they can be assigned to project members.


Assigning a task can be done in the upper panel of a project window. The activities can be planned per week, and they can be assigned to a project member.

6.3 Project members

Before you can start planning your tasks, you need to insert the project members into Eightball.

6.3.1 Creating a project member

This can be done by first selecting the project you want to add members too, and then:

- a) Press the **New Member** button: , in the members-toolbar on the left of the members list.
- b) Press the **"Actions"** menu, and then **"Add Member"**.
- c) Use the shortcut combination 'Ctrl + B' on your keyboard.

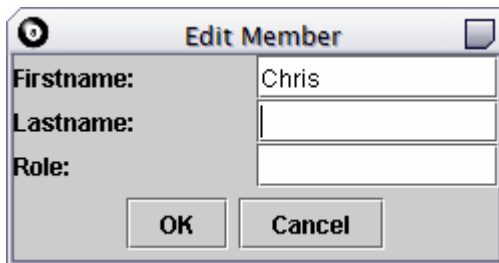



Image 3.5: Adding a new user

This screen requires you to supply the following fields:

- 1) First name
Enter the first name and possible prefixes here.
- 2) Last name
Enter the last name of the project member.
- 3) Role
Enter the role of the member, such as the "Project Leader", "Quality Manager", or "Developer".
- 4) After pressing **"OK"**, the user will be created by the program. If you made a mistake, you can close the window by pressing **"Cancel"**.

Repeat the previous steps to add other users as well.

6.3.2 Changing a project member

If you would like to change the project member's information, you need to select the member and press the **Edit Member** toolbar button: , next to the members list. A dialog will appear:

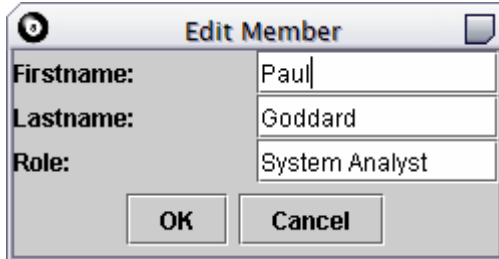



Image 3.6: Modify a member

Change the fields, and press **“OK”** afterwards.

6.3.3 Removing a member

To remove a member, you need to select the member, and press the **“Remove Member”** button: . A warning message appears, allowing you to cancel the operation.

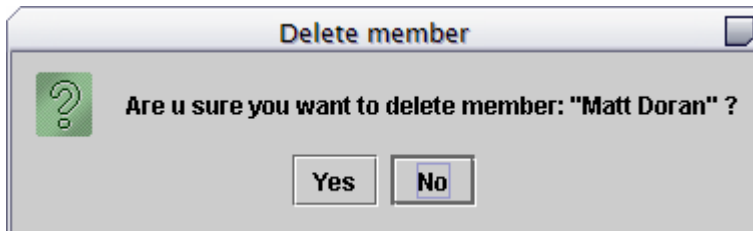


Image 3.7: Removing a member

- 1) In the tree, select the member you would like to remove.
- 2) Press **“Yes”** if you are sure.

Notice: You can only remove a project member if you did not assign any tasks to the member.

6.4 Project weeks

After creating a project, you need to add the weeks of the project lifetime. It is also easy to change the week numbering with Eightball.

6.4.1 Adding project weeks.

If you need to add another week to the project, you can select a project in the tree and choose one of these options:

- a) Press "**New Week**" from the context-menu in the week-panel.
- b) Clicking the **New Tab** button next to the week overview.
- c) The menu bar: "**Actions**", then "**New week**".
- d) Use the shortcut combination 'Ctrl + W' on your keyboard.

Repeat those steps to add other weeks as well. As you might have noticed, the program automatically updates the calendar weeks.

6.4.2 Removing weeks

It is possible to remove weeks; however, you can only remove the last week.

- 1) Click the last week you want to delete from the project.

Notice: You can only remove the last week.

- 2) Remove any of the activities from that week.


Notice: To remove a week, it may not contain any assigned tasks.

- 3) Press the **Delete** button:  in the week-overview toolbar.

The last week will be removed.

6.4.3 Changing calendar weeks

It is possible to change calendar-weeks of the project-weeks, for example because of a holiday week that should not be numbered in a project.

- 1) Click on the week you want to change.
- 2) Double-click on the tab of that week to edit it, or use the **Edit** button:  on the left. The following dialog pops up:

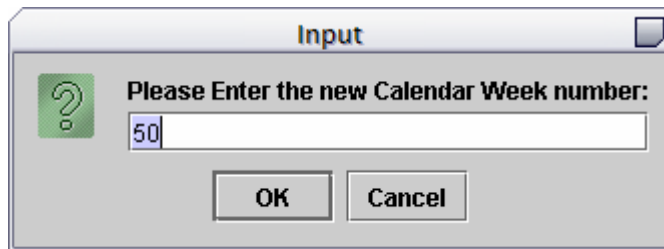


Image 3.8: Changing week number

- 3) Enter the new week number.
- 4) Press "**OK**"


The calendar week will change and the other weeks will update automatically.

6.5 Main tasks

The largest task describes the global actions to be taken in a project.

6.5.1 Creating a main task

Creating a main task can be done by selecting a project in the tree, and:

- a) Pressing the **"New Task"** button:  in the toolbar.
- b) Open the **"Actions"** menu, and choose the **"New Task"** option.
- c) Use the shortcut combination 'Ctrl + H' on your keyboard.

A dialog pops up, allowing you to give the new task a name.

6.5.2 Editing a main task name


- 1) Double click on the task you like to edit, or use the **Edit** button:  in the toolbar.



Image 3.9: Editing a task.


- 2) Enter the new name of the task.
- 3) Press **"OK"**.

The name of the task will be changed.

6.5.3 Removing a task

Notice: To remove a task, you need to remove the accompanying activities first.

To remove a task, you need to take the following steps:

- 1) Select the task you want to remove.
- 2) Press the **Del**-key on the keyboard, or the **Delete** button:  on the toolbar.
- 3) You will be prompted for confirmation.

The selected task will be removed now.

Repeat the following steps to remove other tasks as well.

6.6 Activities

You can insert activities into the main tasks.

Notice: To create an activity, you need to create at least one task. (see 6.5.1: Creating a task)

An activity describes a code, a description, and the amount of planned hours.

6.6.1 Create an activity

Select the project in the tree, and:

- Press "**New Activity**" :  from the toolbar.
- In the menu bar, press "**Actions**", and then "**New Activity**".
- Use the shortcut combination 'Ctrl + E' on your keyboard

A new task will be created.

6.6.2 Modify an activity

- Double-click on the activity you want to change, or select it and press **Edit** in the Toolbar. The following screen appears:

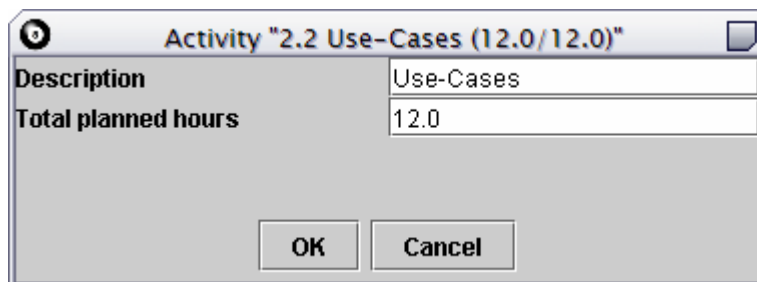


Image 3.10: Changing an activity

Description

Enter the description of the activity here.


Total hours planned

Change the number of hours planned for this activity here.

- Press "**OK**" to change the activity, and press "**Cancel**" if you do not want to make any changes.

6.6.3 Remove an activity

Notice: You can only remove an activity if it has not been assigned to a project member.

- 1) Select the activity you want to remove.
- 2) Press the **Del**-key on the keyboard, or the **Delete** button:  on the toolbar.
- 3) You will be prompted for a confirmation.

The selected activity will be removed.

6.7 Assign Tasks

After creating the project members, main tasks and activities, you can assign tasks to project members.

6.7.1 Planning a task

- 1) Select the week in which you want to plan the task in the week-overview by clicking its tab.
- 2) Select the activity you want to assign to a project member.
- 3) Drag the activity to the week-panel on the right side. The following screen appears:

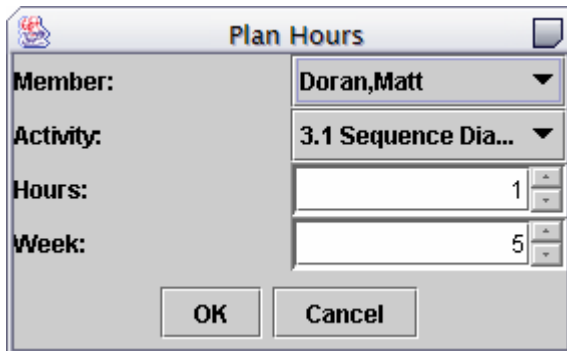


Image 3.11: Assigning activities

Number of hours

Enter the number of hours you want to assign to the member.

Project member

Select the project member from the list.

- 4) Press "**OK**" to assign the task.

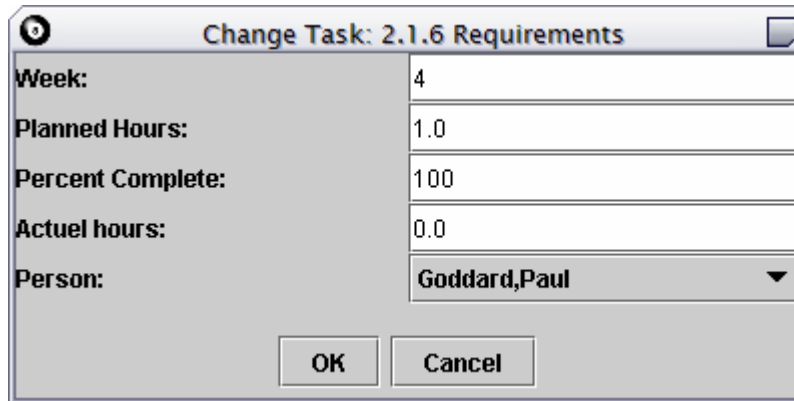
You will notice that an additional number is being added to the week.

If the activity has already been assigned to a member, its hours are added to the existing hours.

You can also drag a project member to the week overview, and choose the appropriate activity in the dialog.

6.7.2 Modify an existing task

- 1) Double-click on the task where you want to change the information. The following screen appears:



Week:	4
Planned Hours:	1.0
Percent Complete:	100
Actual hours:	0.0
Person:	Goddard,Paul ▼

OK Cancel

Image 3.12: Modify a task.

Week

Change the week of the task here.

Planned hours

Change the number of hours here.

Percent done

It is important to update this value regularly. Otherwise, the program cannot create a progress-overview, such as the "Earned Value Management" graph. These overviews are explained further on in this manual.

Real hours

Enter the actual hours of work performed for the task.

Member

Changes the member assigned to the task.

- 2) Press "**OK**" to change the task, and "**Cancel**" to close the dialog without saving your changes.

6.7.3 Removing an assigned task.

An assigned task can also be removed.

- 1) Select the task you like to remove.
- 2) Press the **Del**-key on the keyboard or use the right-click context menu and select "**Delete**".
- 3) You will be prompted for a confirmation.

The task will be removed.

7. SAVING / BACK-UP

All data will be saved in the XML 1.0 format.

7.1 Saving

To save your current planning, do the following:

Select a project in the tree, and:

- a) In the menu click on '**File**' and click '**Save**'.
- b) Use the Save button on the Toolbar.
- c) Press Ctrl + S.

7.2 Save as

When you want to save your planning with another filename, do the following:

- 1) In the menu click on '**File**' and click on '**Save As**', or use the Toolbar button: .

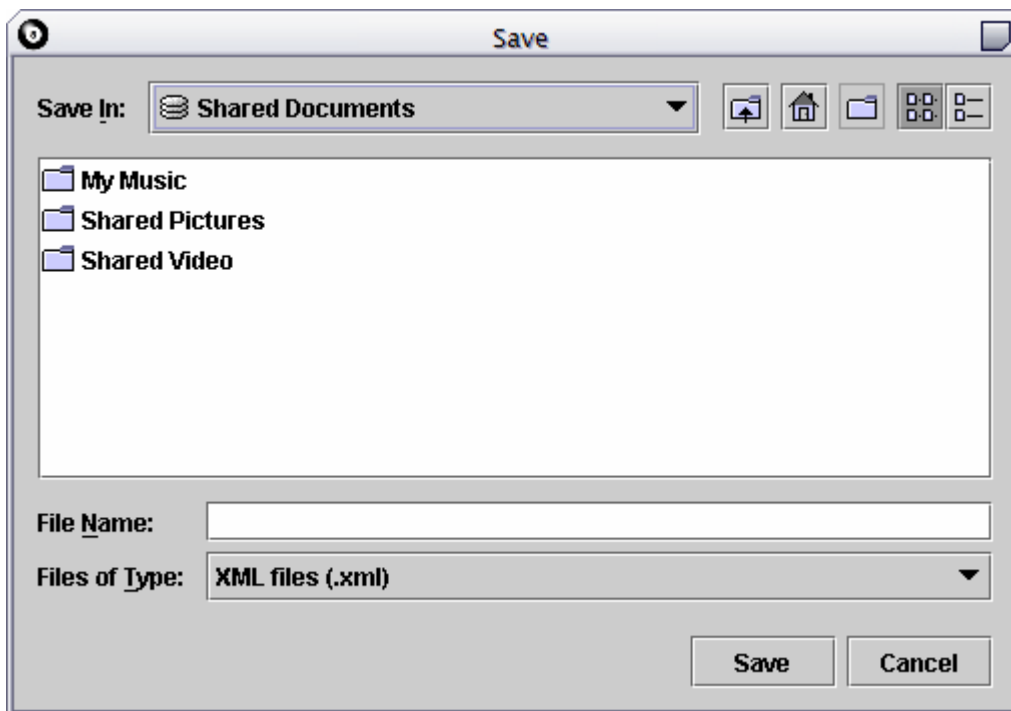


Image 4.1: Save as

- 2) Choose a map to save your file in.
- 3) Enter a name for your planning in the '**File name**' field
- 4) Click on '**Save**'

The file will be saved now.

7.3 AutoSave

Since it is not impossible that your computer crashes (especially when using Microsoft Windows) while you are working with Eightball, a feature has been built into the program that saves your planning every five minutes. A temporary file is used to store the data. These files begin with a '~' followed by the filename.

When you correctly save your planning it will overwrite your old file. (Unless you choose 'Save As')

When closed properly, eightball erases the temporary files.

If you happen to find these ~...xml files in your project directories after closing Eightball, you can safely delete them.

8. OUTPUT

The following part of this User Guide will cover output-data in Eightball Planner tool v3.0.

The following sections will be covered:

- **Resource list**
 - Print
 - Export
 - Setup
- **Activity list**
 - Print
 - Export
 - Setup
- **Earned Value Management**
 - Export

8.1 Resource list

The resource list shows an overview containing all planned tasks for each project member per week. To show the resource list, do one of the following:

- Click on the menu "**Overviews**" and then click "**Resource list**".
- Press the 'Ctrl + R' key-combination on your keyboard.

In the next window, multiple projects and members can be selected for creating a resource list. After making your selection press the 'show' button to create the resource list for the selection.

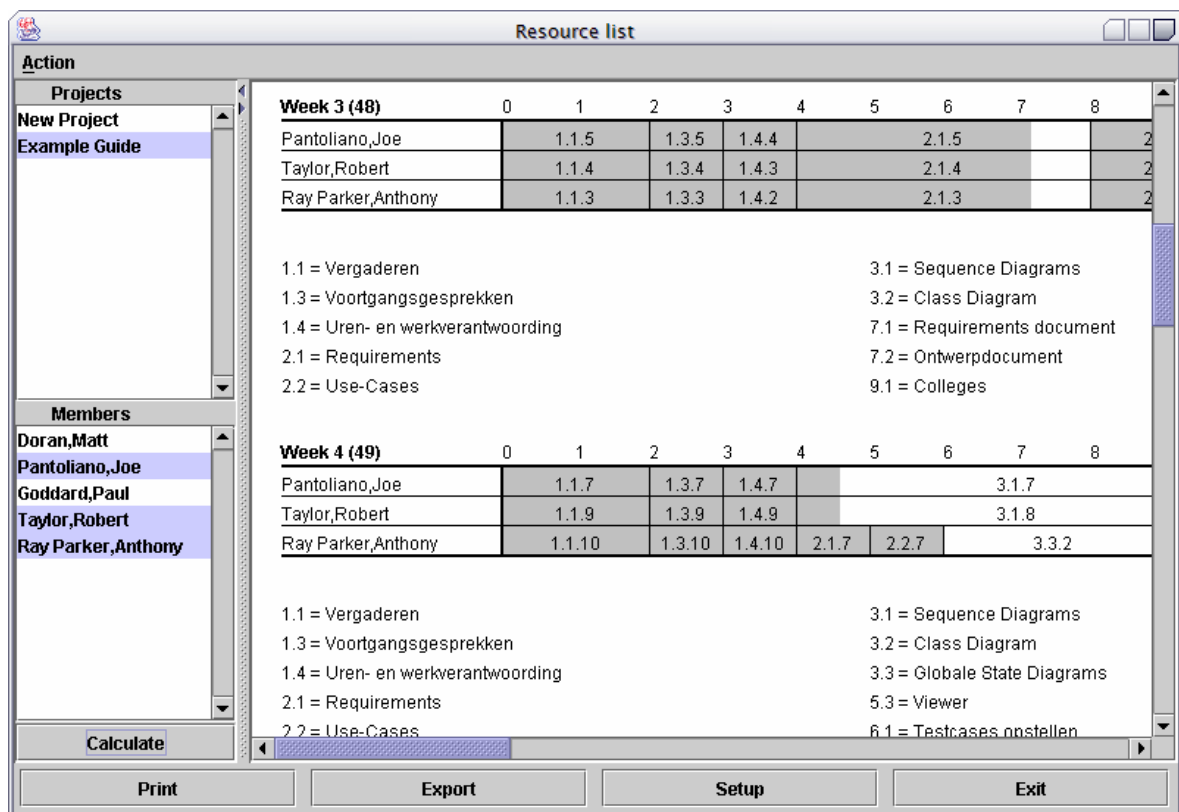


Image 5.2: Resource list

8.2.1 Print

The resource list can be printed as well. To do so, click on the "**Print**" button. A printer dialog will be presented where you can adjust your printer settings. To change your printer settings click on "**Properties**". Click on "**OK**" to print or "**Cancel**" to quit the print job.

8.2.2 Export

The resource list can be exported to a JPEG image file as follows:

- 1) Click on "**Export**".
- 2) Choose a location and specify a filename to store the overview in.

NOTE: When entering the filename you *must* type the file extension, too. Especially for Linux this is very important. If you do not do this, a new directory will be created instead of a new file.

- 3) Click on "**Save**" to store the file.

8.2.3 Setup

To change your page-setup click on the "**Setup**" button. The page layout, margins etc can be specified here. Clicking "**OK**" will store the settings.

8.3 Activity list

To get an overview of the planned tasks:

- Click in the menu "**Overviews**" and then on "**Activity list**".
- Press the 'Ctrl + T' key-combination on your keyboard.

A table containing all activities, their code, the number of planned hours, the project members that will do the activity and in which week the task will be done.

Code	Activity	Hours	Member	Week
2	Analysis			
2.1	Requirements	22.0		
2.1.1	Requirements	4.0	Matt Doran	3
2.1.2	Requirements	4.0	Paul Goddard	3
2.1.3	Requirements	4.0	Anthony Ray Parker	3
2.1.4	Requirements	4.0	Robert Taylor	3
2.1.5	Requirements	4.0	Joe Pantoliano	3
2.1.6	Requirements	1.0	Paul Goddard	4
2.1.7	Requirements	1.0	Anthony Ray Parker	4
2.2	Use-Cases	12.0		
2.2.1	Use-Cases	2.0	Matt Doran	3
2.2.2	Use-Cases	2.0	Paul Goddard	3
2.2.3	Use-Cases	2.0	Anthony Ray Parker	3
2.2.4	Use-Cases	2.0	Robert Taylor	3
2.2.5	Use-Cases	2.0	Joe Pantoliano	3
2.2.6	Use-Cases	1.0	Paul Goddard	4
2.2.7	Use-Cases	1.0	Anthony Ray Parker	4
3	Design			
3.1	Sequence Diagra...	32.0		
3.1.1	Sequence Diagra...	2.0	Matt Doran	3
3.1.2	Sequence Diagra...	2.0	Paul Goddard	3
3.1.3	Sequence Diagra...	2.0	Anthony Ray Parker	3

Image 5.3: Overview activitylist

8.3.1 Print

The activity list can be printed. To do so, click on the "**Print**" button.

A printer dialog will be presented where you can adjust your printer settings. To change your printer settings click on "**Properties**". Click on "**OK**" to print or "**Cancel**" to cancel the print job.

8.3.2 Export

The activity list can be exported to a test file:

- 1) Click on "**Export**".
- 2) Choose a location and specify a filename to store the overview.

NOTE: When entering the filename you *must* type the file extension too. Especially for Linux this is very important. If you do not do this, a new directory will be created instead of a new file.

- 3) Click on "**Save**" to store the file.

8.3.3 Setup

To change your page-setup click on the "**Setup**" button. The page layout, margins etc can be specified here. Clicking "**OK**" will store the settings.

8.4 Earned Value Management

Earned Value Management is a method to monitor project progress that has gained popularity during the last few years. Eightball Planner tool v3.0 contains functionality to manage your Earned Value. Before using the Earned Value-functions in Eightball Planner tool v3.0, one must have basic knowledge on Earned Value Management.

What is Earned Value?

Earned Value is a measure for progress. There are three basic principles of Earned Value. First an even measure is chosen for the total project progress or for just a part of a project. So we do not measure in hours, euro's and dollars but we use just hours or just dollars. In Eightball, hours will be used to measure Earned Value. Second, Earned Value is a consistent method for analyzing performance of the project. Everything will always be calculated the same way. Finally, a good estimation of the costs will be made (Performance analyses) By calculating a value, the costs progress of the project can be fairly well predicted. The value means this: The planned cost of the work that has been done.

Which values are necessary?

Earned Value knows various aspects. To work properly with each aspect, a short description will follow.

The BCWS is the 'Budgeted Cost of Work Scheduled'. It stands for the budget in (hours or in money) of the activities that are planned to be finished shortly.

ACWP is the 'Actual Cost of Work Performed'. It stands for the actual costs of activities that are completed. BCWP is the 'Budgeted Cost of Work Performed'. This is the actual Earned Value that is important. It represents the planned costs of the activities that are completed. The difference between BCWS and BCWP is that the first one represents the budget of the activities that were planned and that the second is for the budget of the activities that are finished.

Schedule Variance (SV) is the Earned Value minus the planned budget of completed work (BCWP – BCWS). Cost Variance (CV) is the Earned Value minus the actual costs (BCWP – ACWP). The Budget At Completion (BAC) is the planned cost of the total project. The Estimate At Completion (EAC) is an important factor: the expected cost of the whole project as it is at the moment can be calculated. This can be calculated in various ways. Below is the simplest formula: $EAC = ACWP + (BAC - BCWP) / (BCWP / ACWP)$. The FCST (Forecast) is an estimate of the progress of the cost during the rest of the project (until EAC).

These are all the values used within the Earned Value Management. Input is necessary in order to calculate all values. The input is relatively low: three facts are needed:

1. The planned hours (These can be specified when creating an activity) This is the BCWS value.
2. The actual hours. This can be filled in when a task is assigned to a member in a given week. The corresponding value is the ACWP.

3. The percentage of work that has been done. This value is of great importance, because the progress can be derived from this factor. (Together with BCWS and ACWP this results in the Earned Value)

What can I do with this information?

The table is given to read the exact values. The Earned Value graph shows the same information. When FCST is higher than BCWS, something is wrong: when every task is performed as scheduled, more hours will be needed to complete all tasks. When FCST reaches out further, more weeks will be necessary to complete to project.

Cost Variance shows how many person-hours are additional needed. The Schedule Variance shows delay suffered against the planning (What should have been done but has not). Budget At Completion is the total of planned hours. Estimate At Completion is the number of expected hours that the project will cost. The Estimate To Go is the number of hours till EAC. The progress graph shows in a second whether project is ahead on schedule (FCST < BCWS), on schedule (FCST = BCWS) or behind on schedule (FCST > BCWS)

For a detailed description, we would like to refer you to the appendix 'Earned Value' in this user guide.

Earned Value Management can be opened by

- a) Clicking in the menu on "**Overviews**" and then on "**Earned Value Management**".
- b) Pressing the 'Ctrl + E' key-combination on your keyboard.

A window appears which is divided in three windows. At the top of the window there are three tabs (Table, EV Graph and Progressgraph) Below that there is a list of terms. At the bottom of the window are three buttons to export information from the table or from the graphs. A different project can be selected by using the list in the left-bottom corner.

Click on the "**Earned Value Table**" tab to view the Earned Value data in a table. Four values will be presented per week (namely: BCWS, BCWP, ACWP and FCST)

For the traditional Earned Value graph you click on the "**EVGraph**" tab and for the progress graph you click on the "**ProgressGraph**" tab.

EarnedValue					
Actions					
Earned Value Tabel		Earned Value Graph		Progress Graph	
Week	BCWS	BCWP	ACWP	FCST	
1	0.0	0.0	0.0	0.0	
2	0.0	0.0	0.0	0.0	
3	103.0	81.0	7.0	9.0	
4	208.0	138.0	7.0	11.0	
5	313.0	161.0	7.0	14.0	
6	336.0	161.0	7.0	15.0	
7	336.0	161.0	7.0	15.0	
8	336.0	161.0	7.0	15.0	
9	359.0	161.0	7.0	16.0	
10	382.0	161.0	7.0	17.0	

Projects: Example Guide Iteratie 3 Iteratie 2	BCWS: ■ Budgeted Cost of Work Scheduled. BCWP: ■ Budgeted Cost of Work Performed (Earned Value). ACWP: ■ Actual Cost of Work Performed. FCST: ■ Forecast of Remaining Work. SV: -221.0 Schedule Variance. CV: 154.0 Cost Variance. BAC: 382.0 Budget At Completion. EAC: 17.0 Estimate At Completion. ETG: 10.0 Estimate To Go.
---	--

Image 5.4: Earned Value Table

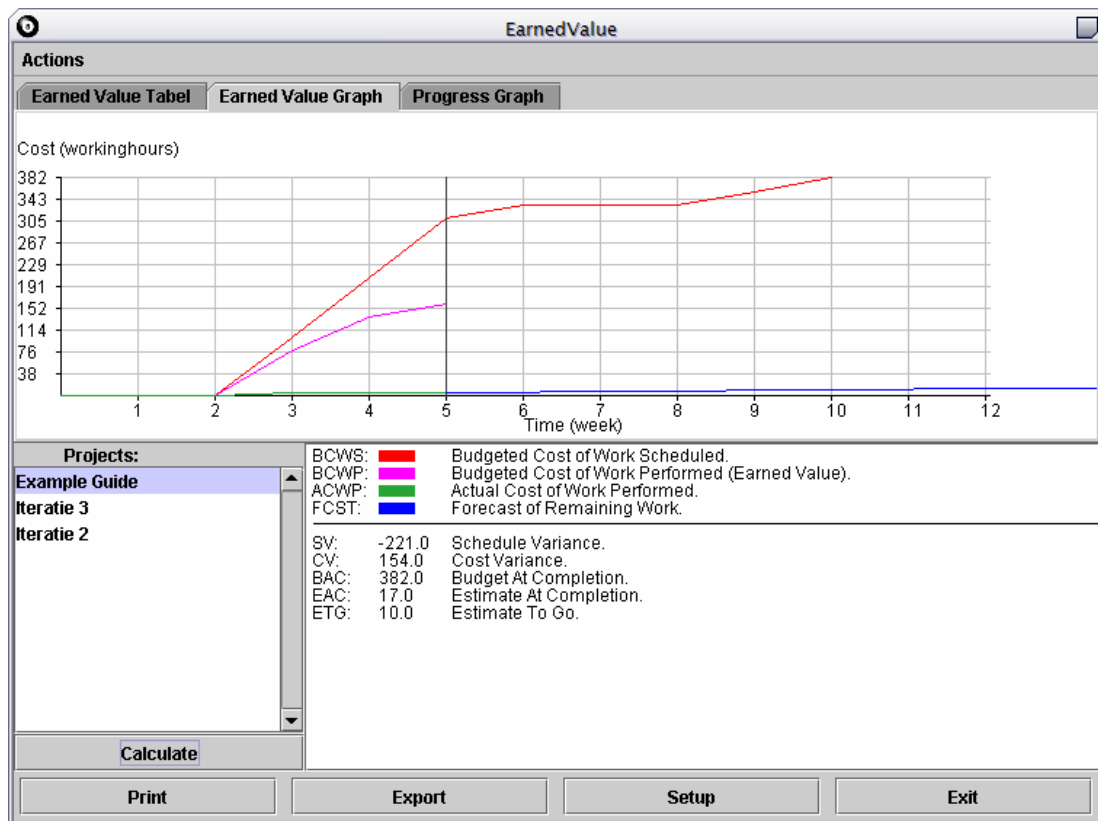


Image 5.5: Earned Value Graph

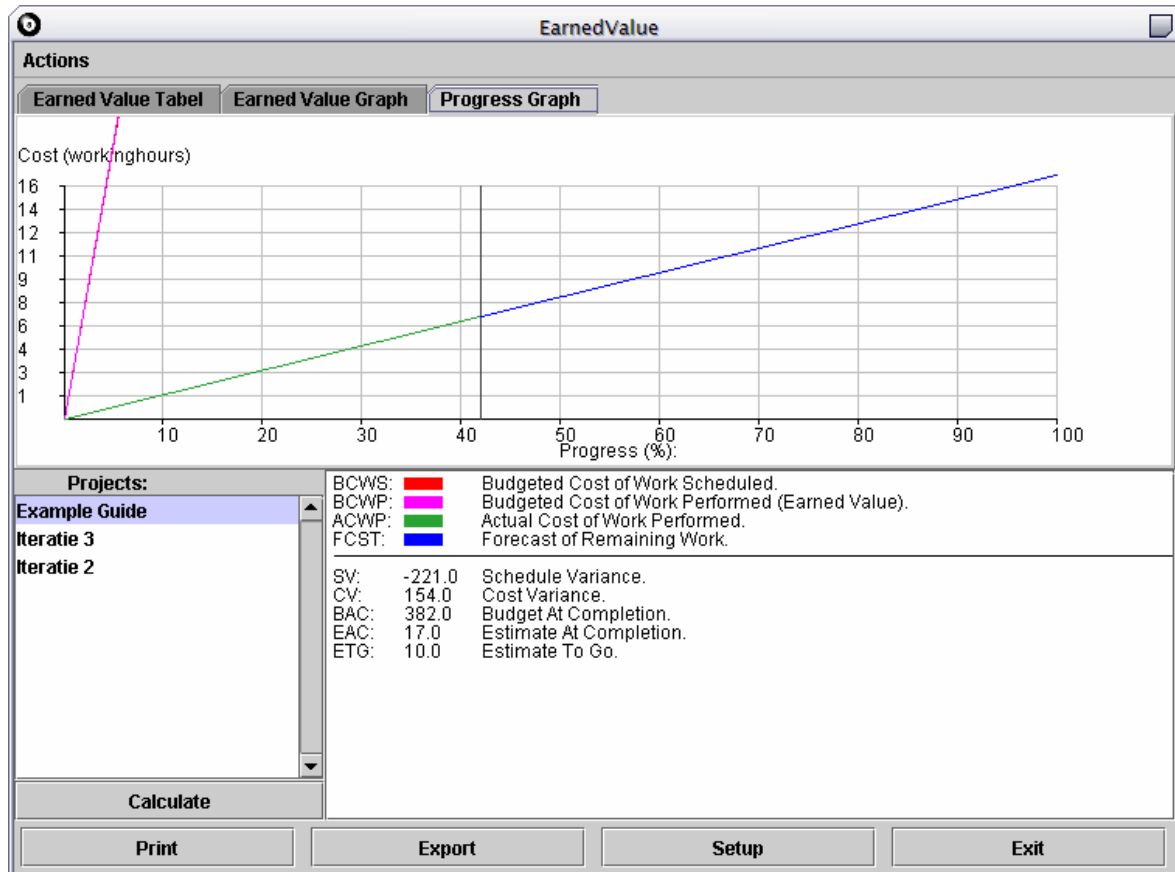


Image 5.6: Progress graph

8.4.1 Export

To export a progress graph to a text file, click on the corresponding tab. Then click on the **"Export"** button.

A window containing the directory structure of your hard disk will appear. Enter a name for the file to store the graph or table in and click on the **"Save"** button to write the file.

8.4.2 Print

The EV table/Graph can be printed. To do so, click on the **"Print"** button.

A printer dialog will be presented where you can adjust your printer settings. To change your printer settings click on **"Properties"**. Click on **"OK"** to print or **"Cancel"** to cancel the print job.

8.4.3 Setup

To change your page-setup click on the "**Setup**" button. The page layout, margins etc can be specified here. Clicking "**OK**" will save the settings.

9. PREFERENCES

Eightball has a Preference Dialog where it is possible to change some settings to your liking.

More importantly this is also the place where you can select the program's language.

9.1 General Preferences

To open the dialog, click on the menu "**File**" and then click "**Preferences**". The dialog opens with the **General** tab open.

In this window, you can change several settings. To close the dialog and apply the new changes, press **OK**. The **Cancel** button will close the dialog without changing anything.

Also there is the **Default** button, which will change all settings back to the program default's, without closing the dialog.

Here is an overview of the settings you can change:

- Show "Opened Projects" node in tree
If you uncheck this, the top tree node will be hidden. All opened projects will then not fall under another node. This only changes the display in the tree.
- Browser launch command
In the menu "**Help**" you can view the "**User Guide**". This is a HTML File, and Eightball needs the location of your webbrowser to view this Help file. You can enter this here.

9.2 Language Packs

Eightball comes default with two languages: English and Dutch.
You can select either, which will change all texts in the program to that language.

Language packs are placed in the "language" directory of Eightball Plannertool.
Eightball will detect them automatically, and show an appropriate icon if one is available.

To select another language for the program, open the "**File**" menu and select "**Language**". The Preferences Dialog pops up, with the Language tab open.

In this you can select the new language, and click OK if you want to use it.
Note that Eightball must be restarted before the new language will be used. Until that time, the old language is still in use and will be selected.

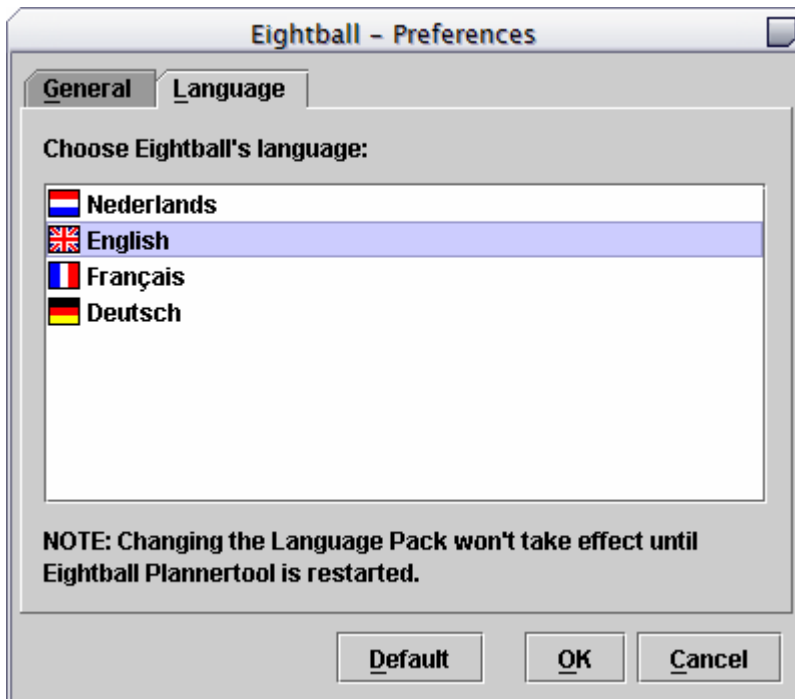


Image 6.1: Language packs.

Appendix A: Earned Value Management

We would like to refer you to the [wilkins_art.pdf](#) file for a detailed explanation on Earned Value Management. This file is in the same directory as this User Guide.

Original source: www.acq.osd.mil/pm/paperpres/wilkins_art.pdf

Disclaimer notice from original website:

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Appendix B: Error messages

While working with Eightball it is possible that you encounter some error messages. The various error messages, causes and solutions will be discussed below.

Main tasks

MESSAGE	CAUSE	SOLUTION
Cannot remove main task, it still contains activities.	The main task contains activities.	Remove all activities within main task
No description specified	The user did not enter a description for the main task.	Enter a description

Tasks

MESSAGE	CAUSE	SOLUTION
Week must be an integer	Wrong input in week number field	Fill in a correct (whole) number like 2, or 46
Percentage must be an integer	Wrong input in percentage field	Fill in a correct (whole) number like 2, or 46
Planned hours must be a valid number	Wrong input in planned hours-field	Fill in a correct (whole) number like 2, or 46
Actual hours must be a valid number	Wrong input in real hours field	Fill in a correct (whole) number like 2, or 46
Incorrect week number entered	An incorrect number has been entered like < 1	Enter a number between 1 and the total number of weeks
Incorrect percentage entered	An incorrect percentage has been entered	Enter a number between 0 and 100
Incorrect number of hours	The planned hours is less than 1	Enter a number > 1
Incorrect number of weeks entered	Number of actual hours is negative	Enter a positive value
Entered hours exceed the planned hours for this activity	The available hours for this activity is < then the hours planned	a) Change the total planned hours of the activity b) Reduce the planned hours
This task has already been worked on. Set percentage and actual hours to 0 to remove task	Cannot remove tasks that has been worked on already	Set percentage and actual hours to 0
Cannot plan tasks when no project members available	No project members have been entered yet	Add at least one project member

Activities

MESSAGE	CAUSE	SOLUTION
The planned hours entered are negative, or smaller than hours planned	a) Entered hours are negative (<1) b) Entered hours are less than hours already planned for all tasks within activity	a) Enter a positive value b1) Increase planned hours b2) Decrease planned hours for tasks within activity
Time has been spent on tasks within selected activity; Cannot remove	Time has been spent on tasks within activity	a) Remove all tasks within activity b) Set progress and actual hours of all tasks within activity to 0
No main tasks selected. Click on a main task to select.	User tries to add an activity while no main task is selected.	Select a main task to add activities into
No description given.	The user did not enter a description	Enter a description
Planned hours entered incorrectly	The user did not enter any planned hours	Enter a valid number of hours.

Weeks

MESSAGE	CAUSE	SOLUTION
Week number must be an integer	The user entered decimal number	Enter a whole number
Entered week number < 1 or > 52	User entered an invalid calendar week	Enter a number between 1 and 52
No week specified	The user did not enter a week	Enter a week
Only the last week can be removed	The user tries to remove a week that is not the latest week of the project.	Try to remove the last week
Cannot remove week X. There are still activities in this week.	The week to be removed contains tasks	Remove all tasks from week.

Users

MESSAGE	CAUSE	SOLUTION
Enter a first name	No first name entered	Enter a first name
Enter a last name	No last name entered	Enter a last name
User already exists	A user has been added to the project already with the current first name and last name	Enter another combination for the first name and last name
Cannot remove project member when assigned to task(s)	A user cannot be removed when tasks are assigned to the user	Remove all tasks assigned to this user

Common

MESSAGE	CAUSE	SOLUTION
No tasks entered yet	User tries to open Earned Value Management while no tasks have been entered	Enter a few tasks first
No task progress yet	User tries to open Earned Value Management while no progress for tasks have been entered	Enter a progress percentage for a task.

Appendix C: Definitions

Shortkey Keyboard shortcut	A combination of keys on your keyboard to quickly start a function, instead of clicking its button or using the menu. For example Ctrl + B could be a shortkey, by pressing B while holding Ctrl.
Dialog	A small window, usually meant for displaying info or other smaller functions.
Java Runtime Environment	The engine needed to run Eightball. There are more programs that use this same engine.
PDF	A format commonly used to store documentation, i.e. manuals. PDF's can be viewed with special programs, like the free Acrobat Reader.
Tree	In Eightball the projects with its tasks are represented as a tree structure in the left part of the window. The tree starts out with a root ("opened projects"), which contains nodes ("projects", "tasks"). Nodes can be expanded and collapsed.
Main tasks Main groups Tasks	These are groups that contain several activities. For example, a task can be " 1. Testing ". It then can have several appropriate activities like " 1.1. Creating test cases " and " 1.2. Executing test cases ". Each project can have several Tasks. Also see <i>Activities</i> .
Activities	These are the actions to take to complete a task. In the tree structure, they fall under the Tasks. Also see <i>Tasks</i> .
Projects	They contain several Tasks, as well as Members. Tasks can be planned by assigning them to specific members. In Eightball, you can save projects and open several at the same time.
Resource list	The resource list displays an overview of tasks that have been planned. For each week there is an outline.
Activity list	This displays an overview of planned activities.
Recent files	The last 4 opened files appear in the File menu, and can be clicked to open them.
Members Project member	Each project contains its Members. Tasks can be assigned to Members.
Project lifetime	Duration of the project.
Week overview	Displays the planned activities per week (Tasks assigned to Members).
XML	A standard for storing information. Eightball uses XML to save its projects.
Earned Value Management	This is an excessive subject, we like you to refer to <i>Chapter 8.4</i> and <i>Appendix A</i> for more information.
GNU	GNU is a way of dealing with open-source programs. Eightball has chosen to use this license. We like you to refer to <i>Appendix F</i> for more information.

Appendix D: Keyboard Shortcuts

File menu

New...	Ctrl + N
Open...	Ctrl + O
Save	Ctrl + S
Recent opened file 1	Ctrl + 1
Recent opened file 2	Ctrl + 3
Recent opened file 3	Ctrl + 2
Recent opened file 4	Ctrl + 4

Actions menu

New maintask	Ctrl + H
New activity	Ctrl + E
New week	Ctrl + W
Edit projectmembers	Ctrl + L

Overviews menu

Resourcelist	Ctrl + R
Activitylist	Ctrl + T
Earned Value Management	Ctrl + E
Projectmembers overview	Ctrl + L

Help

Info	Ctrl + I
------	----------

Appendix E: Imagelist

Image 1.1: Eightball Planner tool Setup Wizard
Image 1.2: License agreement Eightball Planner tool
Image 1.3: Installation directory
Image 1.4: Shortcuts in Start Menu
Image 1.5: Summary of the setup configuration
Image 1.6: Java installation question dialog
Image 1.7: Acrobat Reader installation question dialog
Image 1.8: Setup completed

Image 2.1: Main screen

Image 3.1: Initial window
Image 3.2: Recent files
Image 3.4: Eightball user interface
Image 3.5: Adding a new user
Image 3.6: Modify a member
Image 3.7: Removing a member
Image 3.8: Changing week number
Image 3.9: Editing a task
Image 3.10: Changing an activity
Image 3.11: Assigning activities
Image 3.12: Modify a task

Image 4.1: Save as

Image 5.1: Overview project members
Image 5.2: Resource planning
Image 5.3: Overview activity list
Image 5.4: Earned Value Table
Image 5.5: Earned Value Graph
Image 5.6: Progress graph

Image 6.1: Language packs

Appendix F: GNU Free Documentation License

Version 1.2, November 2002

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